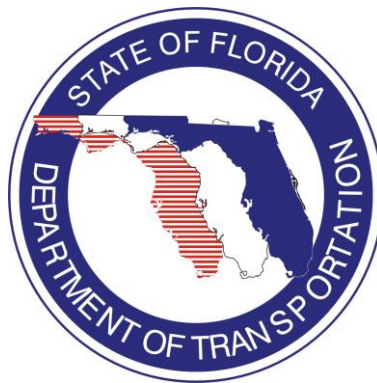


Wetland Evaluation Report

SR 33 Project Development and Environment Study From Old Combee Road to North of Tomkow Road Polk County, Florida

Financial Project ID# 430185-1-22-01
ETDM Number: 13188

Prepared for:



Florida Department of Transportation

District One

801 N. Broadway Avenue
Bartow, Florida 33830-3809

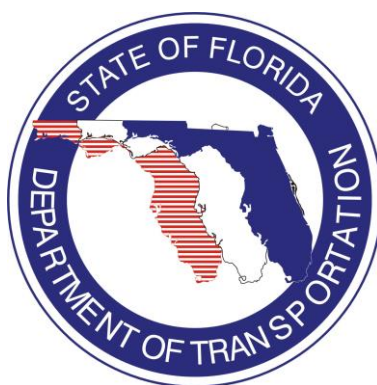
December 2013

Wetland Evaluation Report

SR 33 Project Development and Environment Study From Old Combee Road to North of Tomkow Road Polk County, Florida

Financial Project ID# 430185-1-22-01
ETDM Number: 13188

Prepared for:



Florida Department of Transportation District One

801 N. Broadway Avenue
Bartow, Florida 33830-3809

Prepared by:

Inwood Consulting Engineers, Inc.

3000 Dovers Drive, Suite 200
Oviedo, FL 32765

A handwritten signature in blue ink, appearing to read "Nathan E. Chambers", is written over a horizontal line.

Nathan E. Chambers

Executive Summary

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to evaluate the proposed widening of State Road (SR) 33 from Old Combee Road to 1,500 feet north of Tomkow Road from two lanes to four lanes, a distance of approximately 4.3 miles, in Polk County, Florida. In addition, the PD&E will evaluate ultimate improvements to the SR 33 interchange with Interstate 4 (I-4). The PD&E Study is evaluating engineering and environmental data, and documents information that will aid FDOT and the Federal Highway Administration (FHWA) in determining the type, preliminary design, and location of the proposed improvements, and will also examine the feasibility of the no-build alternative. The study was conducted in order to meet the requirements of the National Environmental Policy Act (NEPA) and other related federal and state laws, rules, and regulations.

The purpose of this project is to identify an environmentally sensitive preferred alternative for the future expansion of SR 33. Project needs include linking Lakeland and I-4, increasing capacity along SR 33 to meet project future demand, and improving roadway deficiencies. The project landscape is predominantly developed, consisting of residential and commercial parcels. Undeveloped upland parcels, pastures, and wetland habitats are also adjacent to the project corridor. The proposed roadway widening will occur within the existing FDOT right-of-way, which is composed entirely of existing transportation, roadside swales, and remnant wetland areas.

The purpose of the Wetland Evaluation Report (WER) is to document and describe existing wetland communities found within the study area, analyze proposed impacts to these communities, and document potential mitigation options to compensate for unavoidable, adverse impacts to wetland functions.

The proposed roadway typical section is a suburban typical section that would accommodate two 12-foot travel lanes in each direction, separated by a 30-foot median. The improvements also include a 4-foot inside paved shoulder, and a 5-foot outside paved shoulder in each direction. A 10-foot multi-use path is proposed along the south side of SR 33, between Old Combee Road and University Boulevard. Six (6) proposed stormwater ponds will provide water quality treatment for the proposed roadway improvements. Two variations of the typical section are being considered within the existing 200 ft. right-of-way: (1) full reconstruction of the roadway, and (2) a pavement savings concept that will save the existing roadway to serve as half of the future 4-lane roadway. Improvements to the SR 33 and I-4 interchange are also required in order to meet current design standards. Interchange configuration options include a diamond and diverging diamond interchange. Each of these options was also analyzed

with and without retaining walls. Additional right-of-way will be required for each interchange option unless retaining walls are constructed to eliminate slope tie-downs outside of the existing right-of-way.

Both build alternatives will likely result in disturbance to 100% of the habitats within the right-of-way. Wetland and surface water habitats were encountered throughout the right-of-way, and impacts to wetlands and surface waters will result from either of the build alternatives. Wetland habitats identified within the study area include: stream and lake swamps, cypress, wetland forested mixed, freshwater marshes, wet prairies, emergent aquatic vegetation, and intermittent ponds.

Both mainline build alternatives will result in 4.67 acres of impacts to wetlands within the right-of-way. The no-build alternative would result in no additional wetland/surface water impacts. Direct wetland impacts associated with the interchange improvements are estimated to be 10.54 acres for the diamond and diverging diamond, with retaining walls; 12.45 acres for the diverging diamond interchange, without walls; and 13.12 acres for the diamond interchange, without walls. The Uniform Mitigation Assessment Methodology (UMAM) was utilized to determine the functional losses associated with the unavoidable impacts to wetlands and surface waters. All affected wetlands within the project area are of moderate to low quality. Functional losses resulting from the project were calculated to be 1.85 functional units for the SR 33 mainline widening, and between 5.07 and 6.31 functional units for the analyzed interchange alternatives.

Both the Southwest Florida Water Management District (SWFWMD) and the United States Army Corps of Engineers (USACOE) were notified of the project through the Efficient Transportation Decision Making Process (ETDM, Project #13188). Both agencies acknowledged the presence of wetlands within the project corridor, and that FDOT will need to demonstrate avoidance and minimization of wetland impacts, and provide appropriate mitigation to offset unavoidable adverse impacts to wetlands.

The FDOT is committed to the following measures to address wetland impacts for this project.

- Continued coordination with the appropriate regulatory agencies will occur through the PD&E process and later, during design and permitting.
- Best Management Practices will be incorporated during design and construction to minimize secondary impacts to wetlands resulting from construction activities.
- Impacts to wetlands along the edges of the existing roadway facility may be unavoidable, and require mitigation. Compensatory mitigation for wetland impacts associated with this project will be compensated for pursuant to Part IV, § 373, F.S. and 33 U.S.C. 1344.

It has been determined that there are no practicable alternatives to the proposed construction in wetlands that can address the needs of each of the build alternatives. Mitigation will be provided to compensate for the loss of wetland function as required by the SWFWMD and USACOE.

Table of Contents

1.0	Introduction	1
1.1	Description of the Proposed Action	1
1.2	Project Purpose and Need	1
1.3	Project Alternatives	4
1.3.1	Corridor Analysis	4
1.3.2	No-Build Alternative	4
1.3.3	Transportation Systems Management & Operations Alternative ...	5
1.3.4	Multimodal Alternatives.....	5
1.3.5	Mainline Build Alternatives.....	5
1.3.5.1	Alternative 1 – Pavement Savings.....	5
1.3.5.2	Alternative 2 – Full Reconstruction.....	6
1.3.6	Interchange Build Alternatives	6
2.0	Wetland Evaluation Methods and Materials.....	7
2.1	Preliminary Data Collection	7
2.2	Field Survey	8
3.0	Project Corridor Description.....	9
3.1	Existing Soils Conditions	9
3.2	Existing Vegetative Communities and Land Uses	9
3.2.1	Urban and Built-Up	14
3.2.2	Other Upland Land Uses and Cover Types	14
3.3	Wetlands and Surface Waters.....	19
4.0	Potential Wetland and Surface Water Impacts	34
4.1	Potential Impact Areas	34
4.1.1	No-Build Alternative	34
4.1.2	Build Alternatives	34
4.1.2.1	Segment 1	35
4.1.2.2	Segment 2	35
4.1.3	Methodology of Pond Determination.....	35
4.1.4	Proposed Stormwater Ponds	36
5.0	Wetland Assessment.....	45
5.1	UMAM.....	45
5.2	Avoidance and Minimization.....	47
5.3	Secondary and Cumulative Impacts.....	47
6.0	Reviewing Regulatory Agencies.....	49
6.1	Conceptual Mitigation Plan.....	50
7.0	Commitments.....	52
8.0	References	53

APPENDICES

Appendix A – Photographs

Appendix B – UMAM Analysis

Appendix C – ETDM Summary Report

Appendix D – Agency Coordination

List of Figures

Figure 1 – Location Map.....2

Figure 2 – USGS Quad Map3

Figure 3a – NRCS Soils Map 10

Figure 3b – NRCS Soils Map 11

Figure 3c – NRCS Soils Map..... 12

Figure 3d – NRCS Soils Map 13

Figure 4a – FLUCFCS Map..... 15

Figure 4b – FLUCFCS Map..... 16

Figure 4c – FLUCFCS Map 17

Figure 4d – FLUCFCS Map..... 18

Figure 5a – Wetlands & Surface Waters Map.....23

Figure 5b – Wetlands & Surface Waters Map.....24

Figure 5c – Wetlands & Surface Waters Map25

Figure 5d – Wetlands & Surface Waters Map.....26

Figure 6a – Proposed Pond Locations37

Figure 6b – Proposed Pond Locations38

Figure 6c – Proposed Pond Locations.....39

Figure 6d – Proposed Pond Locations40

Figure 6e – Proposed Pond Locations41

Figure 6f – Proposed Pond Locations42

Section 1.0

Introduction

1.1 Description of the Proposed Action

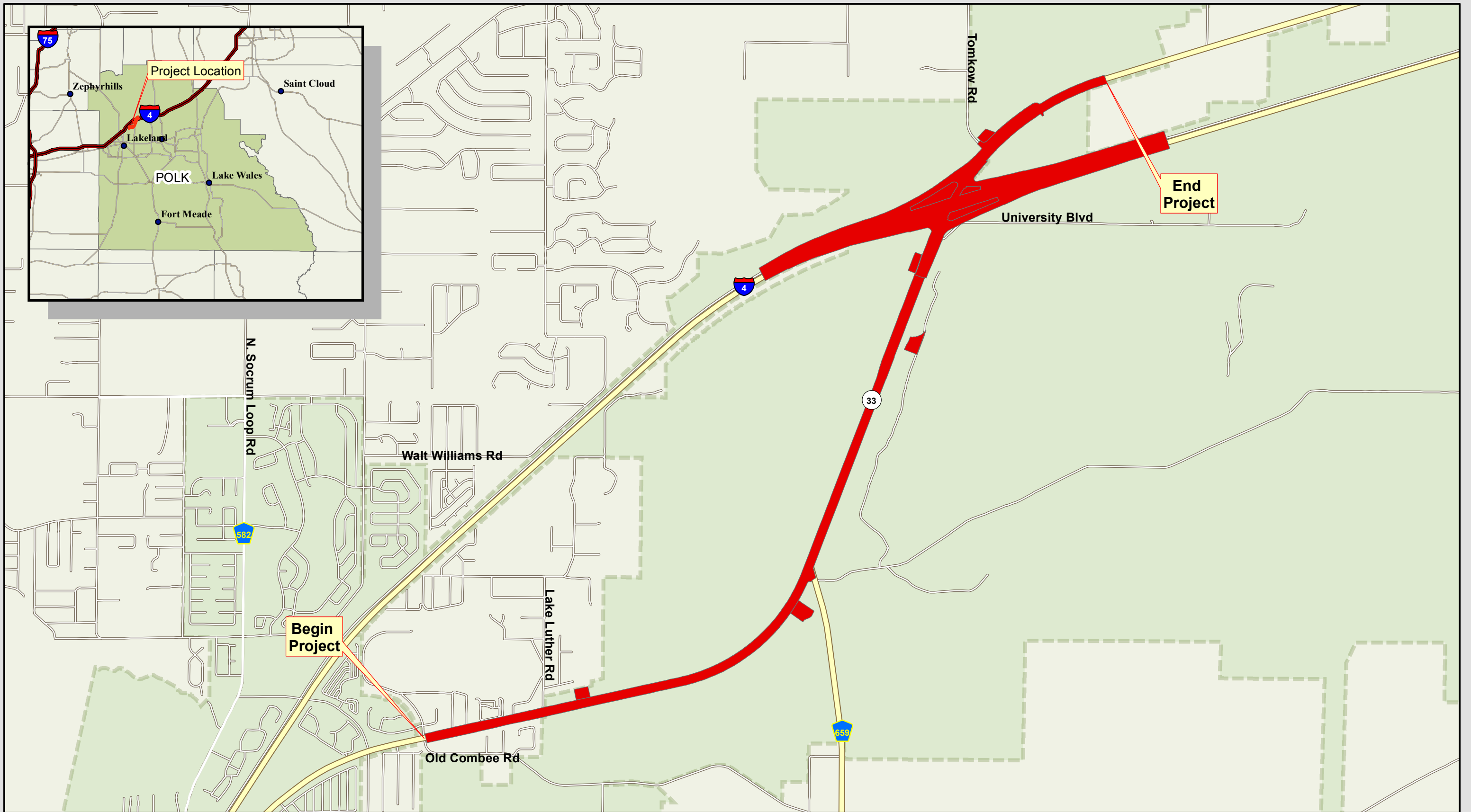
The Florida Department of Transportation, District One, is conducting a Project Development and Environment (PD&E) Study regarding the proposed widening of State Road (SR) 33 in Polk County. The limits of this project on SR 33 are from Old Combee Road to north of Tomkow Road, which is a distance of approximately 4.3 miles. The location and limits of this study are shown in the project location map provided as Figure 1. A USGS 1:24K Quadrangle Map is also provided as Figure 2.

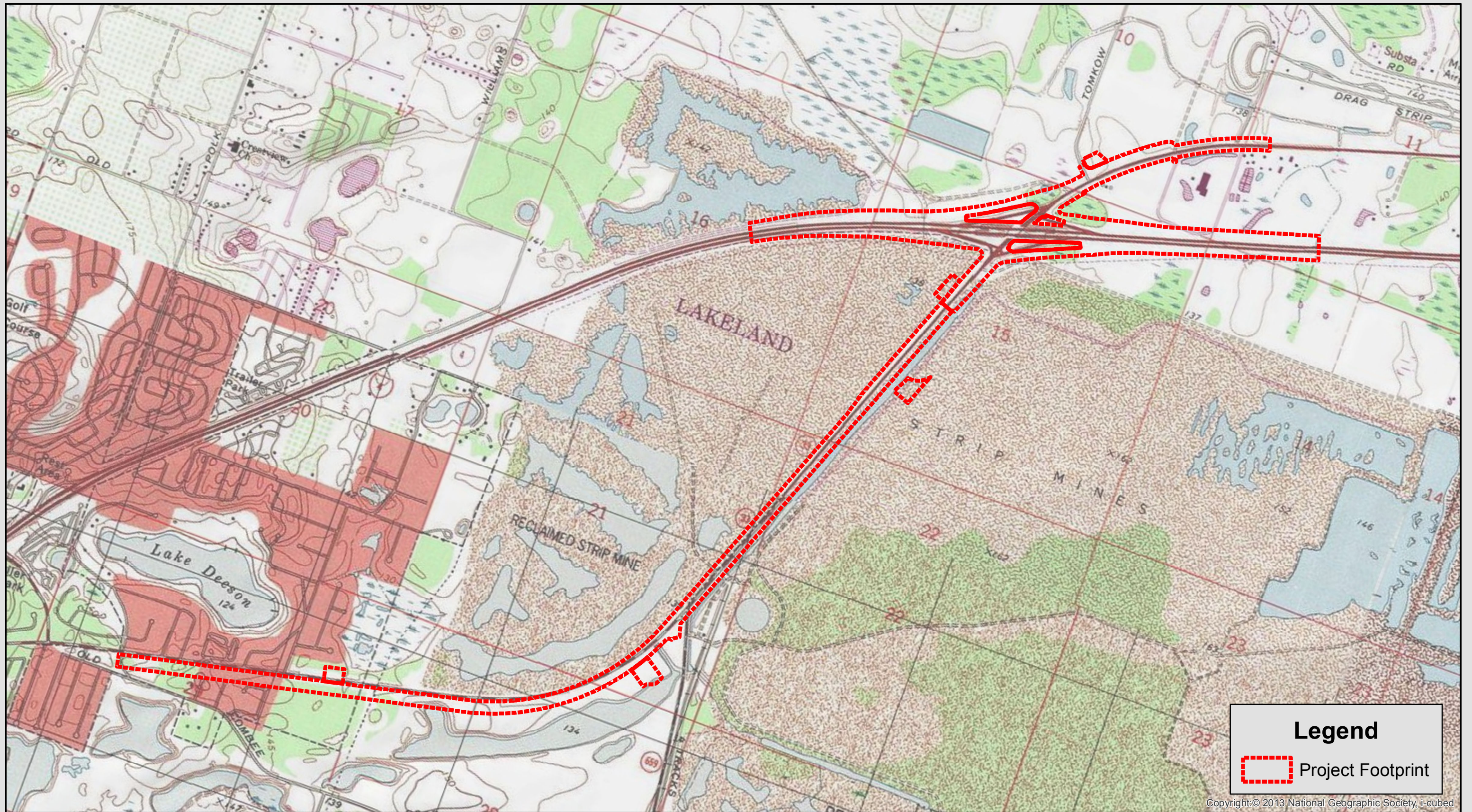
The recommended action includes capacity improvements consisting of widening SR 33 from a two-lane undivided roadway to a four-lane divided roadway. Reconstruction of the SR 33 interchange with I-4 is also proposed. The interchange improvements will involve replacing the I-4 bridges over SR 33 and reconstructing portions of I-4 approaching the interchange.

1.2 Project Purpose and Need

The purpose of this study is to identify an environmentally sensitive preferred alternative for the future expansion of SR 33 from Old Combee Road to north of Tomkow Road in Polk County. The need to widen SR 33 from two to four lanes within the project limits is based on several factors. First, SR 33 serves as a primary north-south connection between the city of Lakeland and Interstate 4 (I-4). The project will improve the functional viability of SR 33 as a local and regional travel alternative to I-4. SR 33 provides connectivity to University Boulevard, which serves the planned Williams DRI, Polk Commerce Center DRI and the future Florida Polytechnic University campus. University Boulevard and SR 33 will serve as the most direct link between these new residential and commercial centers and north and central Lakeland. This project provides increased capacity along SR 33 to meet the projected future travel demand.

Improvements to the SR 33 interchange with I-4 are also required. Currently, I-4 crosses over SR 33 with two parallel, three-lane bridges. There are deficiencies with the existing interchange. First, the existing vertical clearance over SR 33 does not meet the minimum required 16.5 feet of clearance and is as low as 14.75 feet. Maintaining this substandard vertical clearance would require the approval of a design exception, which will not be approved by the Federal Highway Administration. Second, the pier footings have less than the minimum required depth of cover of three feet with cover depths as shallow as 1.892 feet. The horizontal clearance between the center pier and the immediate piers will not accommodate the proposed four lane roadway. Finally, the existing k-values for the crest





Copyright © 2013 National Geographic Society, i-cubed



Florida Department of Transportation
DISTRICT 1

SR 33 PD&E Study from Old Combee Road to North of Tomkow Road
 FPID 430185-1-22-01
 Polk County, Florida

USGS Quad Map

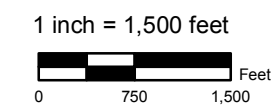


Figure 2

and sag vertical curves on I-4 approaching SR 33 are appropriate for 55 mph and 60 mph design speeds, not for the 70 mph design speed required for the interstate.

1.3 Project Alternatives

The objective of the alternative analysis process is to identify technically and environmentally sound alternatives, which provide a safe transportation facility that meets the needs of the project, is acceptable to the community, minimizes impacts on the environment, and is cost-effective. The process results in the selection of a Preferred Alternative, which can be advanced to the design phase. This section summarizes alternatives considered in this PD&E Study.

In conducting the alternatives analysis, a broad range of typical section and alignment alternatives were first identified to meet the capacity needs. These alternatives were developed with consideration of future traffic needs and through input from the public, input from local governments, and from standard engineering practice, including compliance with requirements of the Americans with Disabilities Act (ADA).

1.3.1 Corridor Analysis

The objective of the corridor analysis process is to identify viable corridors in which technically and environmentally sound alignment alternatives can be developed. Constructing a new roadway in a corridor outside of the existing SR 33 corridor would result in significant environmental impacts, relocations, and an overall cost that would be prohibitive. Based on the analysis of the study area, the existing SR 33 corridor is the only viable corridor for the proposed improvements.

1.3.2 No-Build Alternative

The No-Build Alternative assumes that the two main existing lanes would remain on SR 33 from Old Combee Road to north of Tomkow Road through the design year 2036.

Certain advantages would be associated with the implementation of the No-Build Alternative, including:

- No design or construction costs;
- No inconvenience to the traveling public and property owners during construction;
- No impacts to utilities; and
- Reduced impacts to the adjacent natural, physical and human environment.

The potential disadvantages of the No-Build Alternative include:

- Increase in traffic congestion and user costs due to increased travel times;
- Increase in crash potential due to congestion;
- Incompatibility with the future goals of Polk County;

-
- Increase in emergency vehicle response time; and
 - Increase in vehicle emission pollutants due to increased traffic congestion.

The No-Build Alternative will remain under consideration throughout the alternatives analysis and evaluation process.

1.3.3 Transportation Systems Management and Operations Alternative

Transportation Systems Management and Operations (TSMO) alternatives involve improvements designed to maximize the utilization and efficiency of the existing facility through improved system and demand management. The various TSMO options generally include traffic signal and intersection improvements, access management, and transit improvements. The additional capacity required to meet the projected traffic volumes along SR 33 in the design year cannot be provided solely through the implementation of the TSMO improvements. However, the TSMO strategy of access management is included as part of the build alternatives for the corridor.

1.3.4 Multimodal Alternatives

Based on the projected traffic demand, there are no stand-alone multimodal alternatives that would meet the purpose and need for the project. However, multimodal accommodations have been coordinated with this project. Lakeland Area Mass Transit District's Citrus Connection, Route 3 includes a portion of SR 33 up to Old Combee Road. The segment of SR 33 from Old Combee Road to University Boulevard is identified as a Long-Term Potential Transit Oriented Corridor in the City of Lakeland's Comprehensive Plan.

As part of the proposed roadway improvements, pedestrians and bicyclists will be accommodated through the area. Currently, no bicycle lanes or sidewalks exist on SR 33 within the project limits. All build alternatives will provide a continuous five-foot sidewalk on the west side of the road through the project limits and on the east side of the road from University Boulevard to north of Tomkow Road. A ten-foot multi-use path will be provided along the east side of SR 33 from the beginning of the project to University Boulevard, where it will connect to the multi-use path along University Boulevard. Pedestrian features will be designed and constructed in accordance with applicable accessibility standards. All build alternatives considered for this project will provide bicycle accommodations.

1.3.5 Mainline Build Alternatives

Two mainline alignment alternative, both with the same roadway typical section, were developed to meet the needs of this project and were evaluated.

1.3.5.1 Alternative 1 – Pavement Savings

Alternative 1 is a concept to save the existing roadway to serve as half of the future four-lane roadway. The roadway typical section is a suburban typical section that would include two

12-foot travel lanes in each direction separated by a 30-foot median. The proposed improvements also include a four-foot inside paved shoulder and a five-foot outside paved shoulder in each direction. An open drainage system will collect stormwater runoff and convey it to offsite ponds and/or linear ponds. A 10-foot wide multi-use path is proposed along the south side of the road between Old Combee Road and University Boulevard. A five-foot sidewalk is planned along the north side of the road throughout the project limits and along the south side of the road from University Boulevard to north of Tomkow Road. This typical section can be constructed within the existing 200 feet of right-of-way. The design speed for this typical section is 55 miles per hour.

1.3.5.2 Alternative 2 – Full Reconstruction

Alternative 2 includes full reconstruction of the roadway. The roadway typical section is a suburban typical section that would include two 12-foot travel lanes in each direction separated by a 30-foot median. The proposed improvements also include a four-foot inside paved shoulder and a five-foot outside paved shoulder in each direction. An open drainage system will collect stormwater runoff and convey it to offsite ponds and/or linear ponds. A 10-foot wide multi-use path is proposed along the south side of the road between Old Combee Road and University Boulevard. A five-foot sidewalk is planned along the north side of the road throughout the project limits and along the south side of the road from University Boulevard to north of Tomkow Road. This typical section can be constructed within the existing 200 feet of ROW. The design speed for this typical section is 55 mph.

1.3.6 Interchange Build Alternatives

The two interchange build alternatives for the SR 33 project include a diamond and a diverging diamond at the SR 33/I-4 interchange. Two variations of these interchange configurations were also considered. These include the use of retaining walls, or grading to the natural ground elevation. The use of retaining walls will allow both the diamond and diverging diamond configurations to remain within the existing limited access right-of-way. If no retaining walls are utilized along the proposed on-ramps, additional right-of-way will be required.

Section 2.0

Wetland Evaluation Methods and Materials

2.1 Preliminary Data Collection

Prior to conducting a field review, a literature review was performed in order to determine the location and extent of potential wetlands and surface waters within the project corridor from Old Combee Road to north of Tomkow Road, in Polk County. Project biologists consulted standard Florida references to gain insight on the characteristics of the existing wetland habitats. Literature reviewed included the USDA-Soils Conservation Service Soil Survey of Polk County, Florida (1990); USFWS National Wetland Inventory (NWI) maps; United States Geological Survey (USGS) 7.5 minute quadrangle maps; site-specific infrared (2004) and natural color aerial photographs (2011); and land use and land cover maps (SWFWMD 2010).

In accordance with Executive Order 11990, Protection of Wetlands, and the FDOT PD&E Manual Part 2 Chapter 18, the extent and type of wetlands within the project area were documented. Wetlands are defined by the US Army Corps of Engineers (USACOE) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under natural conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (USACOE 1987). Potential wetland impacts were identified through a review of the above-referenced data and field reviews of the project corridor.

Using information obtained from the literature review as a guide, field reviews were conducted on January 23 and January 31, 2013 in order to verify the approximated extent of wetland boundaries and characterize habitat within the project corridor. Community composition was noted for each wetland to include type, vegetative composition and stratification, and hydric characteristics. Each wetland within the project corridor was identified in the field using the delineation methods described in the US Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) coupled with the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (USACOE 2008), and Florida statewide unified wetland delineation methodology as adopted by the Florida Department of Environmental Protection (FDEP) and the Water Management Districts in The Florida Wetlands Delineation Manual (Gilbert, *et al.* 1995).

2.2 Field Survey

The project corridor includes approximately 4.3 linear miles of right-of-way and six preferred stormwater pond locations. Field surveys of the project and all pond sites were conducted by an experienced wetland biologist on January 23 and January 31, 2013. Prior to the field surveys, a base map of the study area was developed from aerial photographs. Pedestrian transects were established on either side of the existing roadway running perpendicular to the roadway throughout the undeveloped portions of the project corridor. Additional pedestrian transects were established within proposed pond site alternatives.

The extent of wetlands and surface waters were documented using a Trimble GPS coupled with Environmental Science Research Institute's (ESRI) ArcPad 10.0 mobile GIS software and aerial photo interpretation based on the findings of the initial data collection efforts. Other survey documentation recorded in the field included the date, vegetation and habitat descriptions, and photographs. Representative photographs have been provided as Appendix A. Modifications of the Southwest Florida Water Management District 2010 land use and land cover habitat classifications were made using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) (FDOT 1991), as a result of the field reconnaissance.

Section 3.0

Project Corridor Description

3.1 Existing Soils Conditions

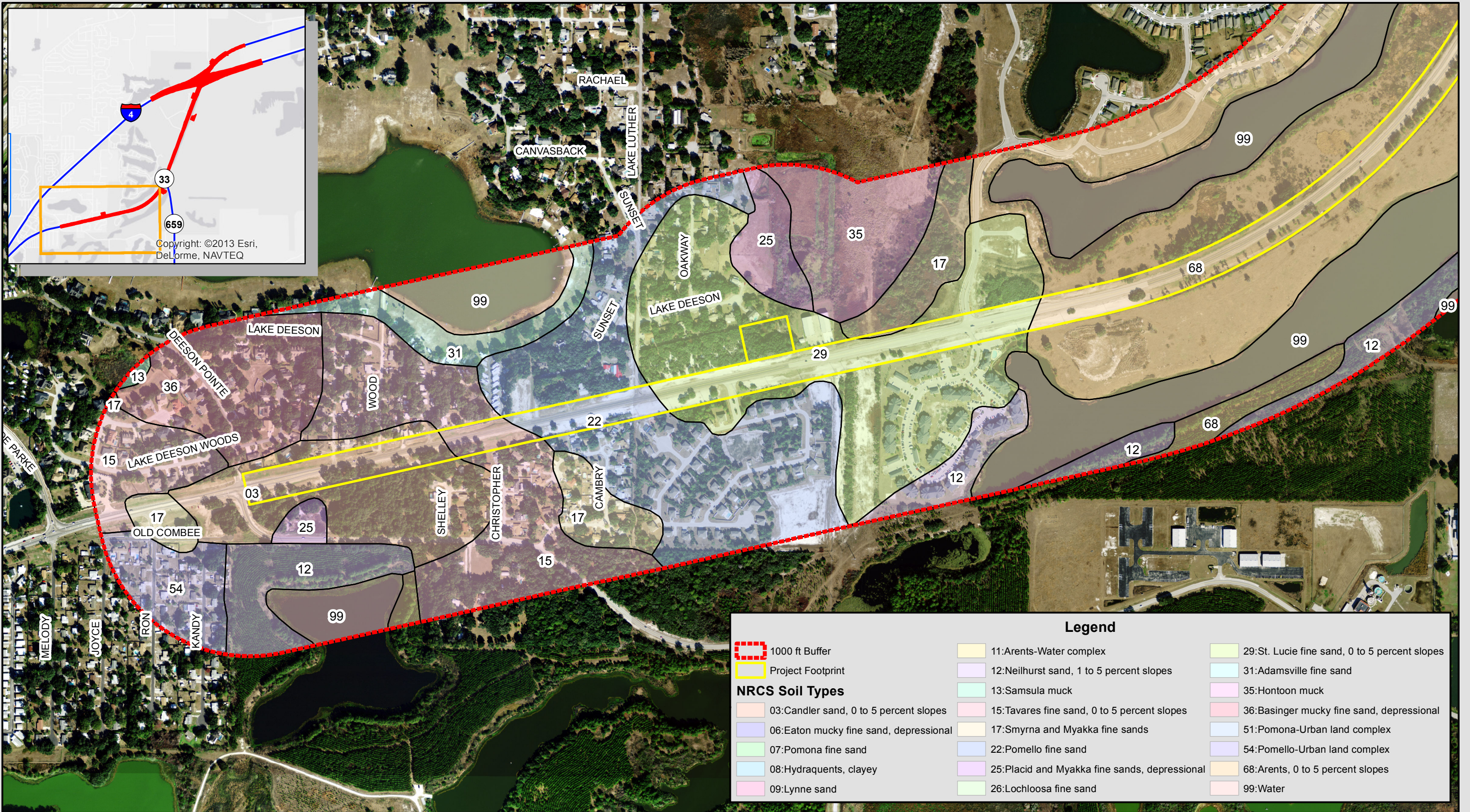
The proposed project corridor and pond sites are located within 21 different soil types according to the NRCS SCS Soil Survey of Polk County, Florida (1990). Soil types mapped within the project corridor and associated pond site alternatives are included in Table 1 below. Please refer to the Soils Map, Figures 3a-3d below, for the distribution of each soil type within the project corridor.

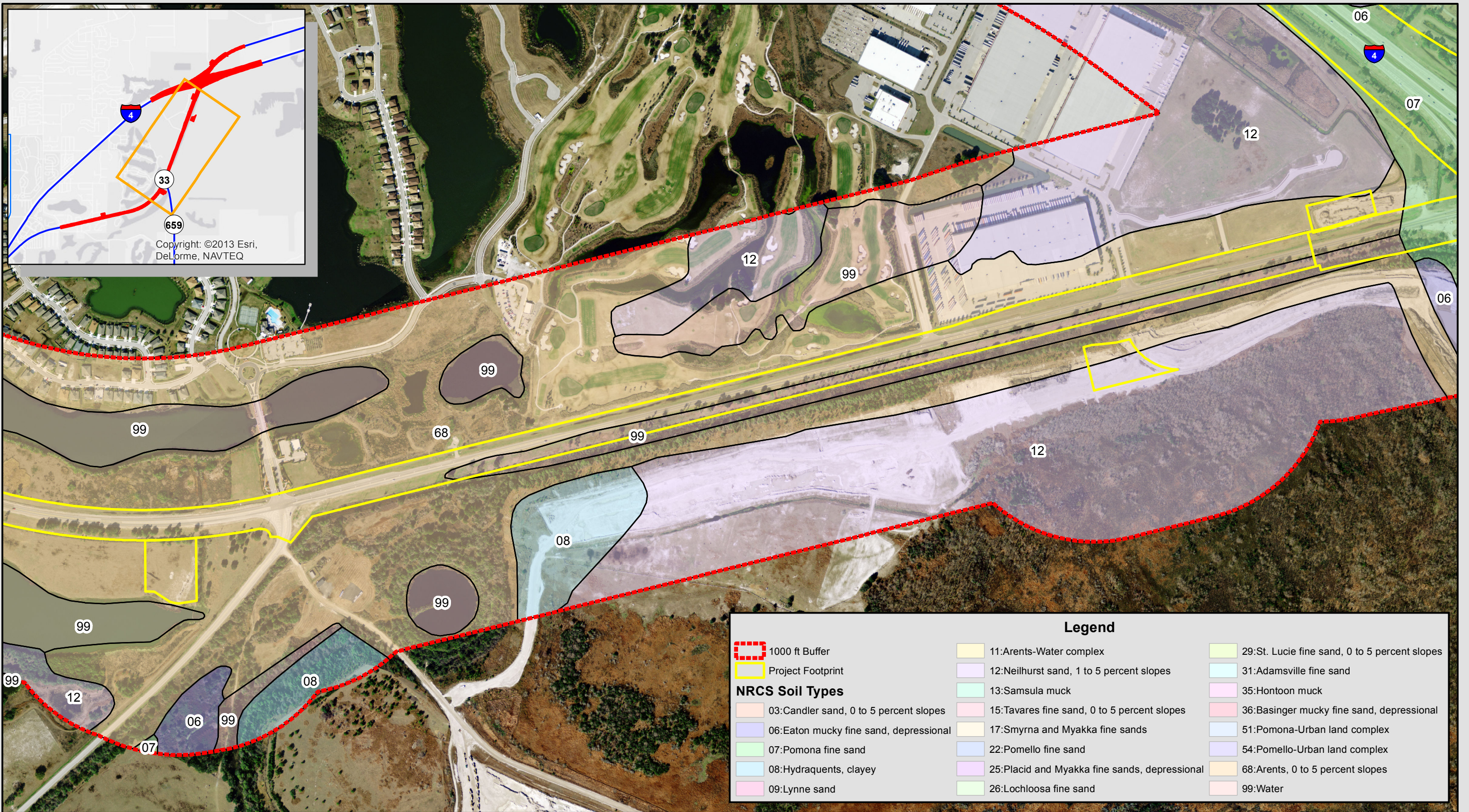
Table 1. NRCS SCS Mapped Soils within and Adjacent to the Project Corridor

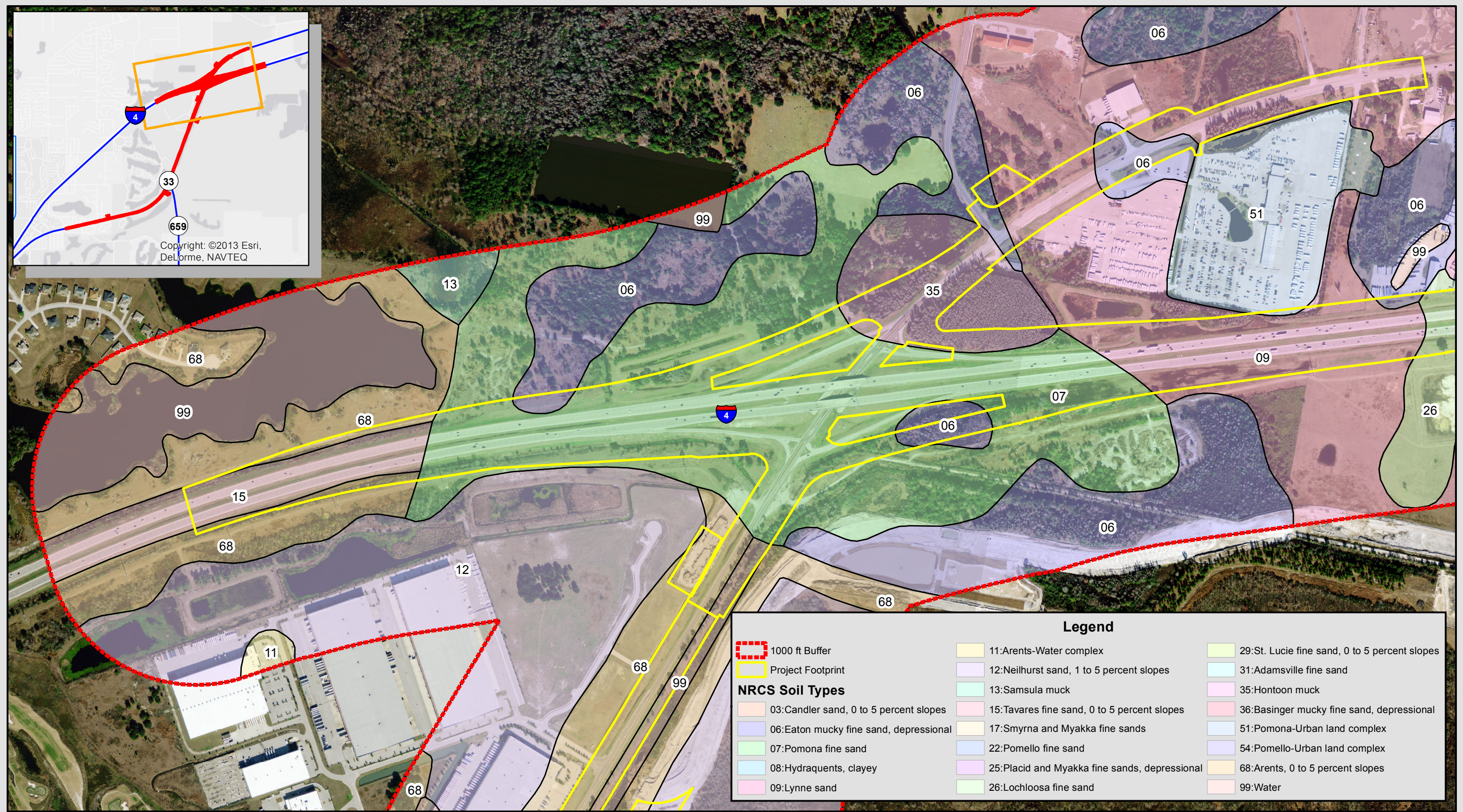
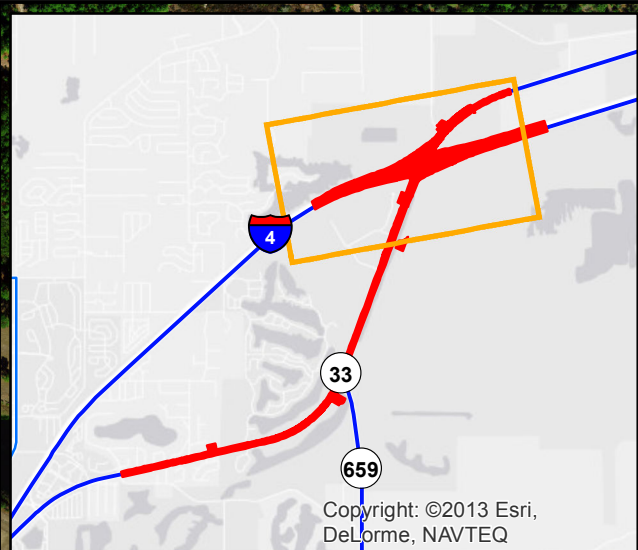
Map Label	Soil Name	Hydrologic Group	High Water Table	
			Depth below surface (in)	Months
3	Candler sand, 0 to 5 percent slopes	A	>80	-
6	Eaton mucky fine sand, depressional	C/D	0	Jun-Feb
7	Pomona fine sand	A/D	6-18	Jun-Oct
8	Hydraquents, clayey	D	0	Jan-Dec
9	Lynne sand	C/D	6-18	Jun-Oct
11	Arents-Water complex	A	>80	-
12	Neilhurst sand, 1 to 5 percent slopes	A	>80	-
13	Samsula muck	A/D	0	Jan-Dec
15	Tavares fine sand, 0 to 5 percent slopes	A	42-72	Jun-Dec
17	Smyrna and Myakka fine sands	A/D	6-18	Jun-Oct
22	Pomello fine sand	A	24-42	Jul-Nov
25	Placid and Myakka fine sands, depressional	A/D	0	Jun-Mar
26	Lochloosa fine sand	C	30-60	Jul-Oct
29	St. Lucie fine sand, 0 to 5 percent slopes	A	>80	-
31	Adamsville fine sand	A	24-42	Jun-Nov
35	Hontoon muck	A/D	0	Jan-Dec
36	Basinger mucky fine sand, depressional	A/D	0	Jun-Feb
51	Pomona-Urban land complex	A/D	6-18	Jun-Oct
54	Pomello-Urban land complex	A	24-42	Jul-Nov
68	Arents, 0 to 5 percent slopes	A	24-48	Jun-Nov
99	Water	N/A	N/A	N/A

3.2 Existing Vegetative Communities and Land Uses

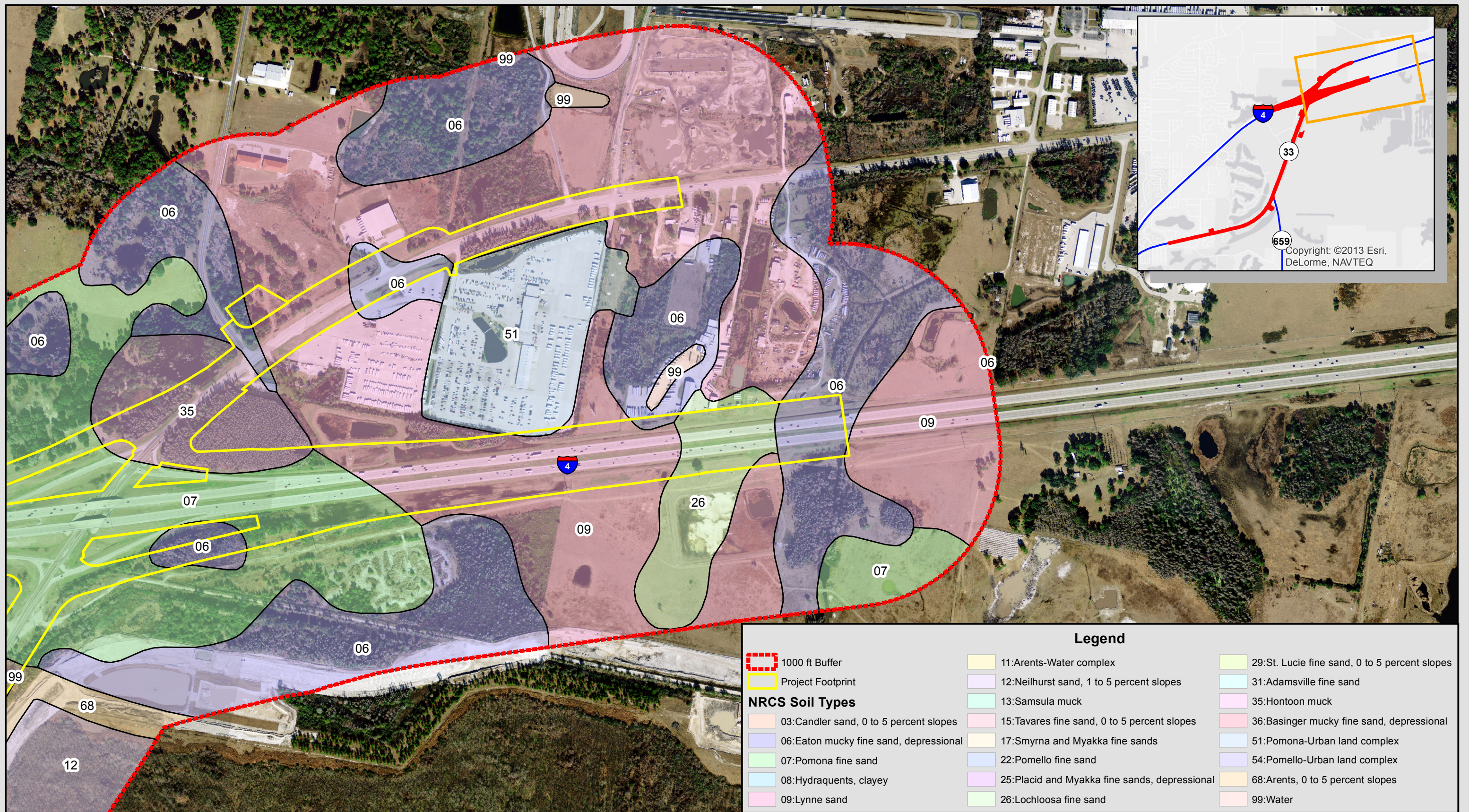
The vegetative communities and existing land uses within the project corridor were characterized and classified using aerial photographs, habitat and land cover maps, and field reviews. A land use map depicting developed and natural lands both adjacent to and in close







Legend		
	1000 ft Buffer	
	Project Footprint	
NRCS Soil Types		
	03:Candler sand, 0 to 5 percent slopes	
	06:Eaton mucky fine sand, depressional	
	07:Pomona fine sand	
	08:Hydraquents, clayey	
	09:Lynne sand	
	11:Arents-Water complex	
	12:Neilhurst sand, 1 to 5 percent slopes	
	13:Samsula muck	
	15:Tavares fine sand, 0 to 5 percent slopes	
	17:Smyrna and Myakka fine sands	
	22:Pomello fine sand	
	25:Placid and Myakka fine sands, depressional	
	26:Lochloosa fine sand	
	29:St. Lucie fine sand, 0 to 5 percent slopes	
	31:Adamsville fine sand	
	35:Hontoon muck	
	36:Basinger mucky fine sand, depressional	
	51:Pomona-Urban land complex	
	54:Pomello-Urban land complex	
	68:Arents, 0 to 5 percent slopes	
	99:Water	



proximity of the project corridor and proposed pond sites has been included as Figures 4a-4d below.

The project corridor is located within the limits of historic strip mining operations, and as such, few unaltered, natural communities exist. Land uses within the corridor consist of residential, agricultural, industrial, and commercial; and community/cover types include forested and non-forested wetlands, surface waters, forested uplands, and rangeland.

During field surveys, habitat and land use/land cover types were mapped using the FLUCFCS. Figures 4a-4d below depict the locations of the various Level III FLUCFCS types within the project corridor. Below is a short description of the urban and upland land uses, cover, and habitat types found within the project corridor.

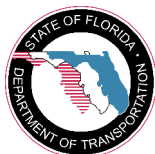
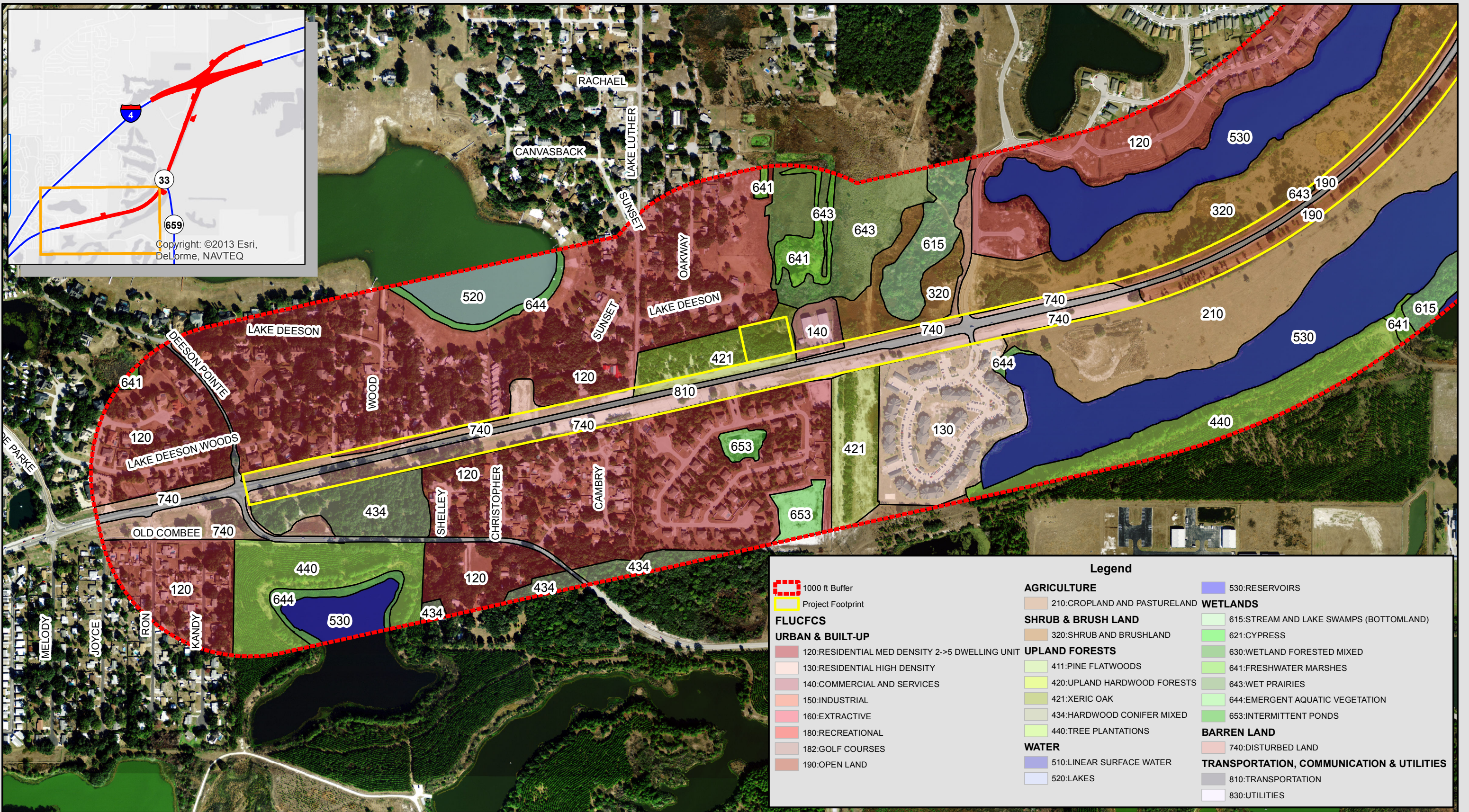
3.2.1 Urban and Built-Up (FLUCFCS 100)

Land uses within the urban and built-up classification consist of “areas of intensive use with much of the land occupied by man-made structures. Included in this category are cities, towns, villages, strip developments along highways such as those occupied by malls, shopping centers, industrial and commercial complexes and institutions that may, in some instances, be isolated from urban areas.” (FLUCFCS, 1991).

Within the project corridor, identified urban land uses include: Medium-Density Residential (FLUCFCS 120), High-Density Residential (FLUCFCS 130), Commercial and Services (FLUCFCS 140), Industrial (FLUCFCS 150), Extractive (FLUCFCS 160), Recreational (FLUCFCS 180), Golf Courses (FLUCFCS 182), and Open Land (FLUCFCS 190).

3.2.2 Other Upland Land Uses and Cover Types

Upland land uses include both native habitats, barren land, as well as agricultural and transportation/utilities land uses. Within the project corridor, identified upland land uses include: Cropland and Pastureland (FLUCFCS 210), Shrub and Brushland (FLUCFCS 320), Pine Flatwoods (FLUCFCS 411), Upland Hardwood Forests (FLUCFCS 420), Xeric Oak (FLUCFCS 421), Hardwood-Conifer Mixed (FLUCFCS 434), Tree Plantations (FLUCFCS 440), Disturbed Land (FLUCFCS 740), Transportation (FLUCFCS 810), and Utilities (FLUCFCS 830).



Florida Department of Transportation
DISTRICT 1

SR 33 PD&E Study from Old Combee Road to North of Tomkow Road

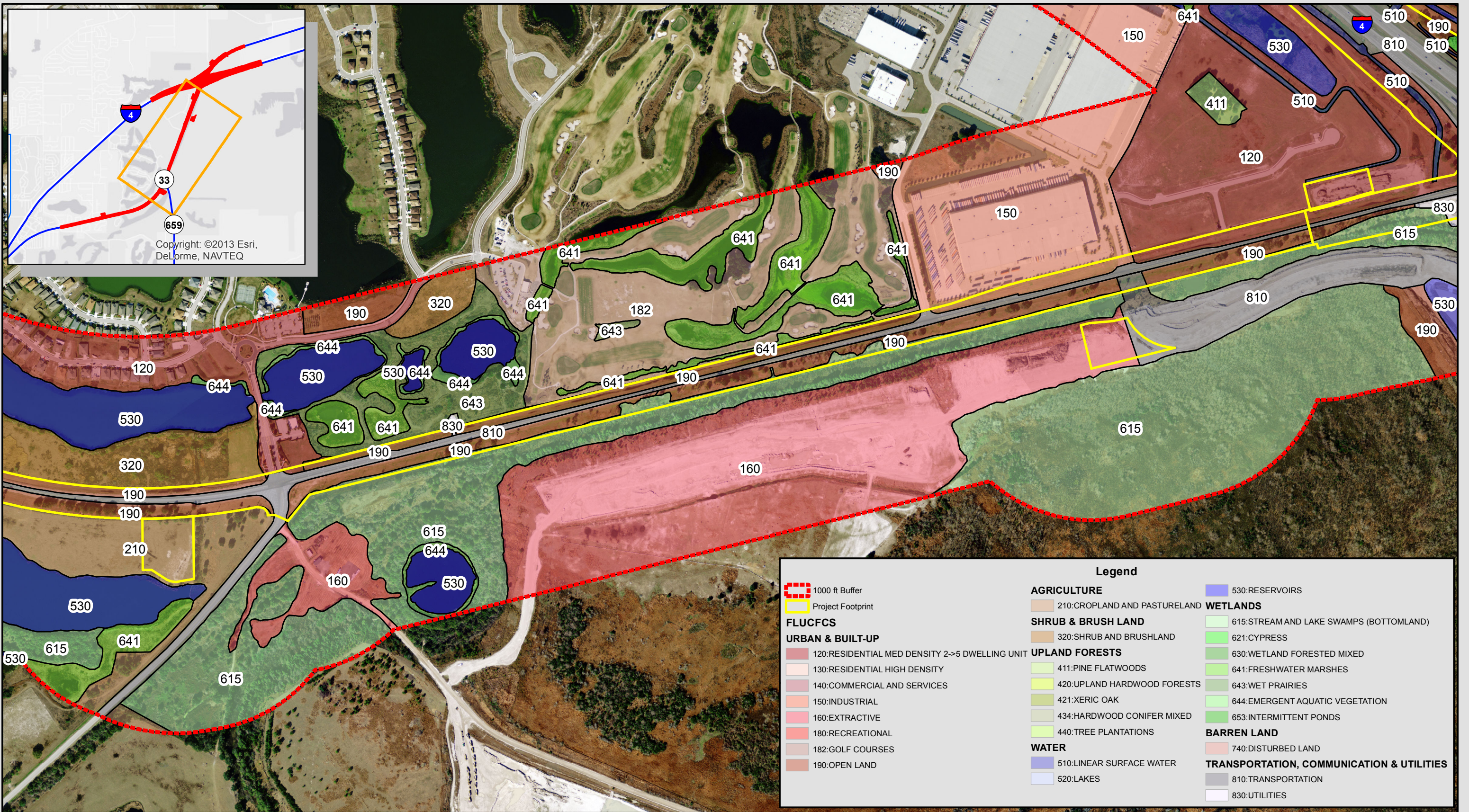
FPID 430185-1-22-01
Polk County, Florida

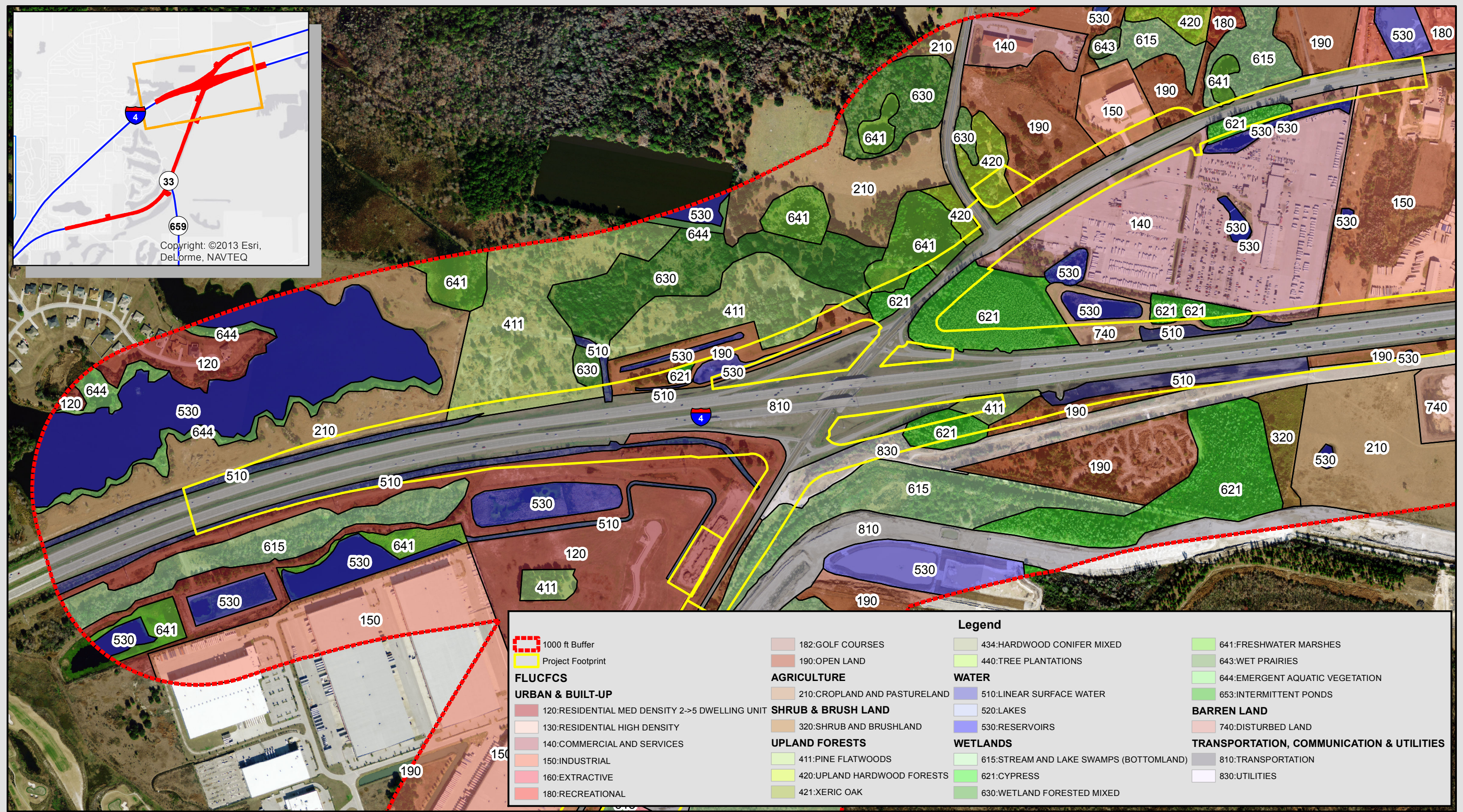
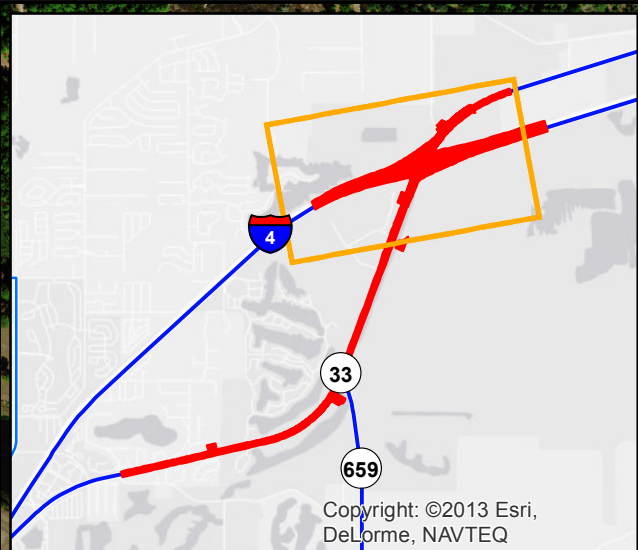
FLUCFCS Map

1 inch = 600 feet
0 300 600 Feet

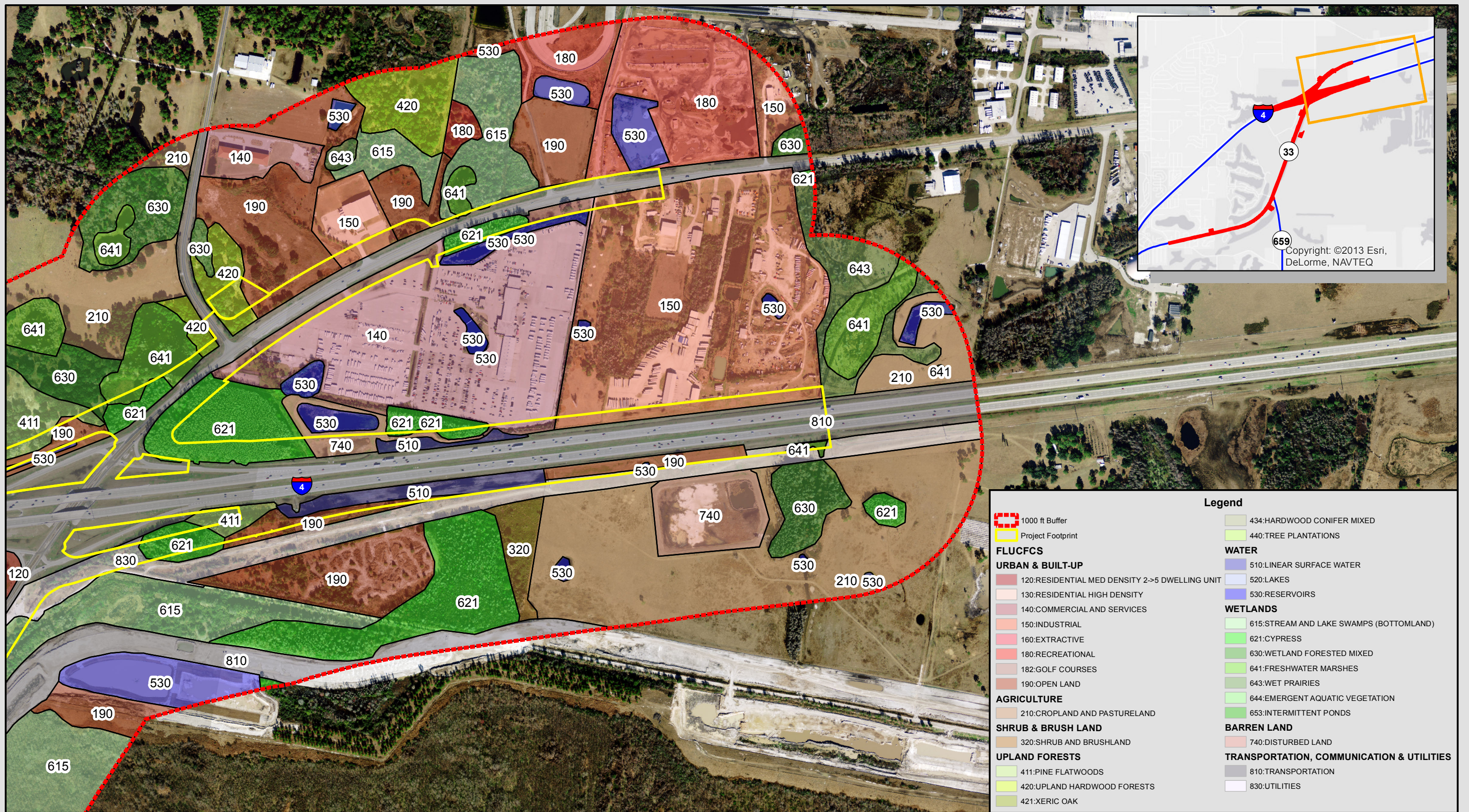


Figure 4a





Legend	
1000 ft Buffer	182: GOLF COURSES
Project Footprint	190: OPEN LAND
FLUCFCS	AGRICULTURE
URBAN & BUILT-UP	210: CROPLAND AND PASTURELAND
120: RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	SHRUB & BRUSH LAND
130: RESIDENTIAL HIGH DENSITY	320: SHRUB AND BRUSHLAND
140: COMMERCIAL AND SERVICES	UPLAND FORESTS
150: INDUSTRIAL	411: PINE FLATWOODS
160: EXTRACTIVE	420: UPLAND HARDWOOD FORESTS
180: RECREATIONAL	421: XERIC OAK
	WATER
	434: HARDWOOD CONIFER MIXED
	440: TREE PLANTATIONS
	510: LINEAR SURFACE WATER
	520: LAKES
	530: RESERVOIRS
	WETLANDS
	615: STREAM AND LAKE SWAMPS (BOTTOMLAND)
	621: CYPRESS
	630: WETLAND FORESTED MIXED
	641: FRESHWATER MARSHES
	643: WET PRAIRIES
	644: EMERGENT AQUATIC VEGETATION
	653: INTERMITTENT PONDS
	BARREN LAND
	740: DISTURBED LAND
	TRANSPORTATION, COMMUNICATION & UTILITIES
	810: TRANSPORTATION
	830: UTILITIES



3.3 Wetlands and Surface Waters

Wetlands and surface waters documented within the project corridor were identified using a combination of literature and data searches coupled with field reviews conducted by experienced Florida biologists on January 23 and January 31, 2013. Data and literature sources used to develop field maps and preliminary wetland location maps consisted of the U.S. Fish and Wildlife Service's National Wetlands Inventory (NWI), the NRCS digital soils data for Polk County, and the 2010 Land Use/Land Cover maps for Polk County obtained from the SWFWMD.

During field reviews, observed wetland indicators were noted and subsequently used to update existing land use and land cover GIS layers obtained from the SWFWMD. Indicators most commonly noted were buttressing of trees, organic soil nodules or streaking in the A horizon in soils previously mapped as non-hydric, and vegetation most commonly associated with wetlands dominating the understory and groundcover. Areas exhibiting wetland characteristics consistent with those identified in the U.S. Army Corps of Engineers Wetlands Delineation Manual and the Florida Wetland Delineation Manual were mapped as wetlands in the updated FLUCFCS Map (Figures 4a-4c). Please refer to Figures 5a-5d for the locations of wetlands within the project corridor.

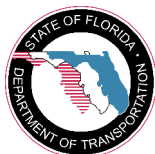
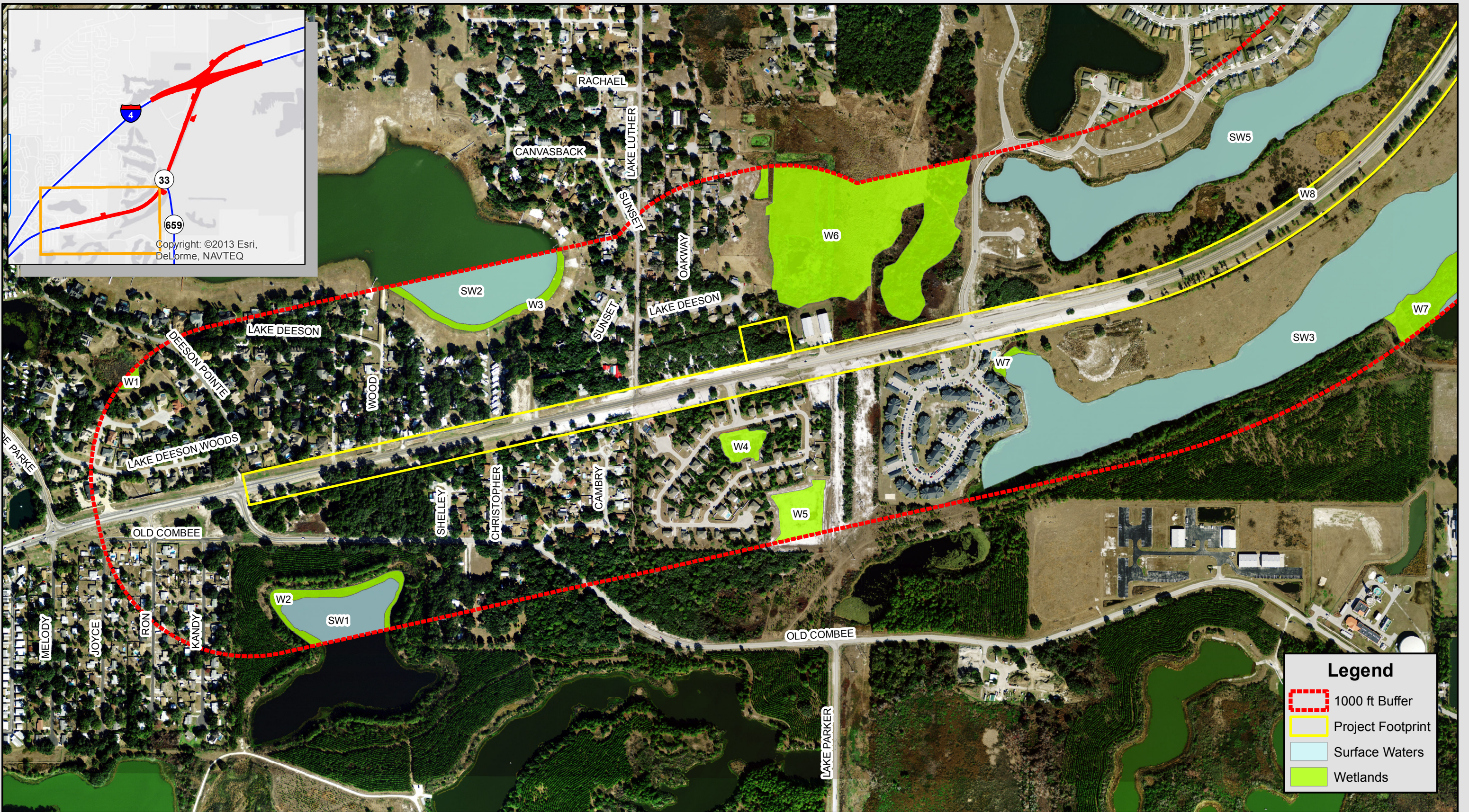
Thirty-eight (38) wetlands and thirty-eight (38) surface waters were identified within the project corridor. Please refer to Table 2 below for the wetland/surface water numbers, FLUCFCS classification, FLUCFCS description, NWI classification, and NWI description. The FLUCFCS and NWI classifications are based on the results of the literature/data search and subsequent field reviews. Additionally, each wetland that may be affected by construction of the proposed project is described in accordance with Section 18-2.3 of the PD&E Manual, following Table 2. These wetlands and surface waters that will be directly impacted by the proposed project are highlighted in Table 2.

Table 2. Wetland Descriptions

Wetland/ Surface Water Number	FLUCFCS Classification	FLUCFCS Description	USFWS NWI Classification	NWI Description
WETLANDS				
W1	641	Freshwater Marsh	PAB3F	Palustrine, Aquatic Bed, Rooted Vascular, Semi-permanently flooded
W2	644	Emergent Aquatic Vegetation	PUBH	Palustrine, Unconsolidated Bottom, Permanently Flooded
W3	644	Emergent Aquatic Vegetation	L1UBH, L2AB3H	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Littoral, Aquatic Bed, Rooted Vascular
W4	653	Intermittent Ponds	None	None
W5	653	Intermittent Ponds	None	None
W6	615, 641, 643	Stream and Lake Swamps (Bottomland), Freshwater Marsh, Wet Prairie	PEM1F, PAB3Hx, PEM1C	Palustrine, Emergent, Persistent, Semi-Permanently Flooded; Palustrine, Aquatic Bed, Rooted Vascular, Permanently Flooded; Palustrine, Emergent, Persistent, Seasonally Flooded
W7	615, 641, 644	Stream and Lake Swamps (Bottomland), Freshwater Marsh, Emergent Aquatic Vegetation	L1UBH	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded
W8	643	Wet Prairie	None	None
W9	615	Stream and Lake Swamps (Bottomland)	PAB4Hx, PSS1Fx	Palustrine, Aquatic Bed, Floating Vascular, Permanently Flooded, Excavated; Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Semi-Permanently Flooded, Excavated
W10	644	Emergent Aquatic Vegetation	L1UBHx	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Excavated
W11	615, 644	Stream and Lake Swamps (Bottomland); Emergent Aquatic Vegetation	PUBHh	Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded
W12	641	Freshwater Marsh	L1UBHx, PUBHx, PEM1Fx	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Excavated; Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated; Palustrine, Emergent, Persistent, Semi-Permanently Flooded, Excavated
W13	641	Freshwater Marsh	PEM1Fx	Palustrine, Emergent, Persistent, Semi-Permanently Flooded, Excavated
W14	643	Wet Prairies	None	None
W15	615	Stream and Lake Swamps (Bottomland)	L2USAs, PSS1Ax	Lacustrine, Littoral, Unconsolidated Shore, Temporarily Flooded, Spoil; Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Temporarily Flooded, Excavated
W16	615, 621	Stream and Lake Swamps (Bottomland), Cypress	L1UBHx, PFO2F, PSS1/3C	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Excavated; Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded; Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Broad-Leaved Evergreen, Seasonally Flooded;
W17	621	Cypress	PFO2F	Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded

Wetland/ Surface Water Number	FLUCFCS Classification	FLUCFCS Description	USFWS NWI Classification	NWI Description
W18	621	Cypress	PFO2F	Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded
W19	641	Freshwater Marsh	None	None
W20	615	Stream and Lake Swamps (Bottomland)	PEM1Fx	Palustrine, Emergent, Persistent, Semi-Permanently Flooded, Excavated
W21	641	Freshwater Marsh	None	None
W22	644	Emergent Aquatic Vegetation	L1UBHx	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Excavated
W23	641	Freshwater Marsh	PEM1F	Palustrine, Emergent, Persistent, Semi-Permanently Flooded
W24	621, 630, 641, 644	Cypress, Wetland Forested Mixed, Freshwater Marsh, Emergent Aquatic Vegetation	PSS1C, PEM1F, PFO2F	Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Seasonally Flooded; Palustrine, Emergent, Persistent, Semi-Permanently Flooded; Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded
W25	621	Cypress	PSS1C	Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Seasonally Flooded
W26	621	Cypress	PFO2F	Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded
W27	621	Cypress	PFO2F	Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded
W28	621	Cypress	PFO2F, PSS3C	Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded; Palustrine, Scrub-Shrub, Broad-Leaved Evergreen, Seasonally Flooded
W29	630, 641	Wetland Forested Mixed, Freshwater Marsh	PEM1C	Palustrine, Emergent, Persistent, Seasonally Flooded
W30	630	Wetland Forested Mixed	PEM1C	Palustrine, Emergent, Persistent, Seasonally Flooded
W31	621	Cypress	P2FO2F	Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded
W32	621	Cypress	None	None
W33	615, 641	Stream and Lake Swamps (Bottomland), Freshwater Marsh	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
W34	615, 643	Stream and Lake Swamps (Bottomland), Freshwater Marsh	None	None
W35	615, 621, 641, 643	Stream and Lake Swamps (Bottomland), Cypress, Freshwater Marsh, Wet Prairie	None	None
W36	630	Wetland Forested Mixed	None	None
W37	641	Freshwater Marsh	None	None
W38	641	Freshwater Marsh	None	None
SURFACE WATERS				
SW1	530	Reservoirs	PUBH	Palustrine, Unconsolidated Bottom, Permanently Flooded
SW2	520	Lakes	L1UBH	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded
SW3	530	Reservoirs	L1UBH	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded

Wetland/ Surface Water Number	FLUCFCS Classification	FLUCFCS Description	USFWS NWI Classification	NWI Description
SW4	530	Reservoirs	PUBH	Palustrine, Unconsolidated Bottom, Permanently Flooded
SW5	530	Reservoirs	L1UBHx	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Excavated
SW6	530	Reservoirs	L1UBHx	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Excavated
SW7	530	Reservoirs	PUBHh	Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded
SW8	530	Reservoirs	N/A	N/A
SW9	530	Reservoirs	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
SW10	530	Reservoirs	None	None
SW11	530	Reservoirs	None	None
SW12	530	Reservoirs	None	None
SW13	510	Linear Surface Water	None	None
SW14	530	Reservoirs	None	None
SW15	510	Linear Surface Water	None	None
SW16	510	Linear Surface Water	None	None
SW17	530	Reservoirs	L1UBHx	Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Excavated
SW18	510	Linear Surface Water	None	None
SW19	510	Linear Surface Water	None	None
SW20	530	Reservoirs	None	None
SW21	530	Reservoirs	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
SW22	530	Reservoirs	PFO2F	Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded
SW23	510	Linear Surface Water	None	None
SW24	530	Reservoirs	None	None
SW25	510	Linear Surface Water	PFO2F	Palustrine, Forested, Needle-Leaved Deciduous, Semi-Permanently Flooded
SW26	530	Reservoirs	None	None
SW27	530	Reservoirs	None	None
SW28	530	Reservoirs	None	None
SW29	530	Reservoirs	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
SW30	530	Reservoirs	None	None
SW31	530	Reservoirs	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
SW32	530	Reservoirs	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
SW33	530	Reservoirs	None	None
SW34	530	Reservoirs	None	None
SW35	530	Reservoirs	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
SW36	530	Reservoirs	None	None
SW37	530	Reservoirs	None	None
SW38	530	Reservoirs	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated



Florida Department of Transportation
DISTRICT 1

SR 33 PD&E Study from Old Combee Road to North of Tomkow Road
FPID 430185-1-22-01
Polk County, Florida

Wetlands & Surface Waters Map

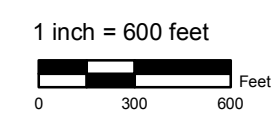
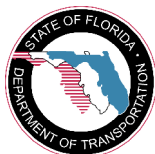


Figure 5a

Legend

- 1000 ft Buffer
- Project Footprint
- Surface Waters
- Wetlands



Florida Department
of Transportation
DISTRICT 1

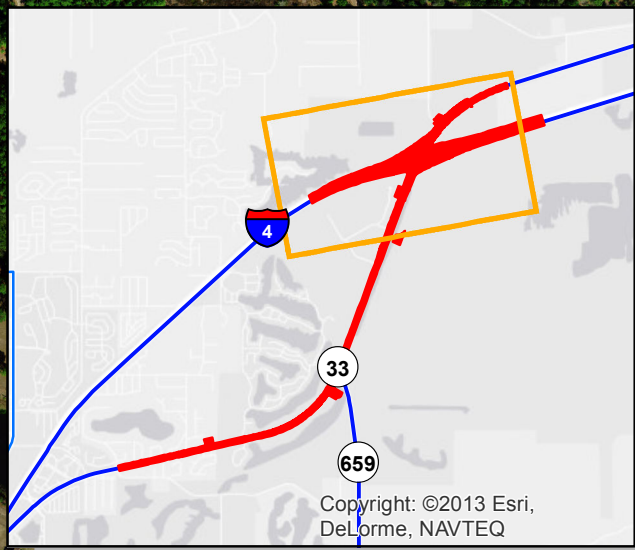
SR 33 PD&E Study from Old Combee Road to North of Tomkow Road
 FPID 430185-1-22-01
 Polk County, Florida

*Wetlands & Surface
Waters Map*

1 inch = 600 feet
 0 300 600 Feet



**Figure
5b**



Legend

- 1000 ft Buffer
- Project Footprint
- Surface Waters
- Wetlands

Florida Department of Transportation
DISTRICT 1

SR 33 PD&E Study from Old Combee Road to North of Tomkow Road
 FPID 430185-1-22-01
 Polk County, Florida

Wetlands & Surface Waters Map

1 inch = 600 feet

Figure 5c



Wetland W8

FLUCFCS Code: 643 – Wet Prairies

NWI Classification – N/A

Wetland W8 is located along the north side of SR 33 midway between Huron Way and Village Lakes Boulevard. This isolated, herbaceous wetland occurs entirely within the SR 33 right-of-way.

Dominant groundcover vegetation within the wetland includes maidencane (*Panicum hemitomon*), pennywort (*Hydrocotyle umbellata*), soft rush (*Juncus effusus*), chalky bluestem (*Andropogon glomeratus*), and pickerel weed (*Pontederia cordata*). Some shrubs line the northern boundary of the wetland, along the edge of the FDOT-maintained right-of-way. Shrub species include immature Brazilian pepper (*Schinus terebinthifolius*), elderberry (*Sambucus canadensis*), Peruvian primrose willow (*Ludwigia peruviana*), wax myrtle (*Myrica cerifera*), and St. John's wort (*Hypericum sp.*).

This wetland will be considered jurisdictional by the SWFWMD, although due to the small size (approximately 0.07 acre) and isolated nature of wetland W8, mitigation for impacts resulting from the widening of SR 33 will likely not be required. Wetland W8 will likely not be considered jurisdictional by the USACOE.

Wetland W11

FLUCFCS Code: 615 – Stream and Lake Swamps (Bottomland)

NWI Classification – PUBHh

Wetland W11 is located along the south side of SR 33 between CR 33A (N. Combee Road) and University Boulevard. The wetland is portion of a larger offsite system that was subject to extensive historic strip mining. The onsite portions of this wetland contain herbaceous, shrub/scrub, and forested components.

Canopy species within the forested portions of W11 include bald cypress (*Taxodium distichum*), red maple (*Acer rubrum*), slash pine (*Pinus elliottii*), and laurel oak (*Quercus laurifolia*). The shrub-dominated portions, which are restricted to the edges of the mowed FDOT right-of-way, contain Brazilian pepper, Carolina willow (*Salix caroliniana*), elderberry, Peruvian primrose willow, grapevine (*Vitis rotundifolia*), wax myrtle, and cattails (*Typha sp.*). The groundcover is dominated by maidencane, soft rush, bahia grass (*Paspalum notatum*), St. John's wort, chalky bluestem, dog fennel (*Eupatorium capillifolium*), and white-top sedge (*Rhynchospora colorata*). This wetland will be considered jurisdictional by both the SWFWMD and USACOE.

Wetland W16

FLUCFCS Code: 615 – Stream and Lake Swamps (Bottomland)

NWI Classification – L1UBHx, PFO2F, PSS1/3C

Wetland W16 is located along the south side of SR 33, between University Boulevard and Interstate 4. This wetland is a remnant portion of a larger offsite system that historically included wetland W11. Wetland W16 was severed from W11 and the offsite system by the construction of University Boulevard.

The vegetation in this wetland is consistent with that in wetland W11. Tree species include bald cypress, red maple, slash pine, laurel oak, Brazilian pepper, and Carolina willow. Shrub species include elderberry, Peruvian primrose willow, wax myrtle, and cattails. Grapevine also comprises a notable portion of the shrub layer. Groundcover species include maidencane, soft rush, bahia grass, St. John's wort, chalky bluestem, dog fennel, and white-top sedge. Wetland W16 will be considered jurisdictional by both the SWFWMD and USACOE.

Wetland W18

FLUCFCS Code: 621 – Cypress

NWI Classification – PFO2F

Wetland W18 is located east of SR 33, and immediately south of the eastbound I-4 on-ramp. The wetland was historically part of a larger cypress system that has been fragmented and impacted by historic strip mining, and the construction of I-4 and SR 33.

Dominant canopy species include bald cypress, red maple, and sweetgum (*Liquidambar styraciflua*). Understory species include wax myrtle, Carolina willow, Peruvian primrose willow, elderberry, and Brazilian pepper. The groundcover within wetland W18 is dominated by swamp fern (*Blechnum serrulatum*), Virginia chain fern (*Woodwardia virginica*), wild taro (*Colocasia esculenta*), pickerelweed, soft rush, St. John's wort, pennywort, and cinnamon fern (*Osmunda cinnamomea*). Due to its adjacency to existing wet swales, which maintain hydrologic connectivity to downstream wetlands, it will be considered jurisdictional by both the SWFWMD and USACOE.

Wetland W24

FLUCFCS Code: 630 – Wetland Forested Mixed

FLUCFCS Code: 641 – Freshwater Marshes

NWI Classification – PSS1C, PEM1F, PFO2F

Wetland W24 is located along the north side of SR 33, immediately north of the I-4 interchange. This wetland represents a remnant portion of the same historic wetland system

that included wetlands W18 and W25. It is surrounded on the north and west by agricultural lands that include pastures and pine flatwoods habitats. The majority of the portions of W24 that occur within the FDOT right-of-way are forested, however a small portion of W24 includes the fringes of a depressional, herbaceous marsh.

Dominant vegetation is consistent with W18 and includes bald cypress, red maple, sweetgum, wax myrtle, Carolina willow, Peruvian primrose willow, elderberry, Brazilian pepper, swamp fern, Virginia chain fern, wild taro, pickerelweed, soft rush, St. John's wort, pennywort, and cinnamon fern. The herbaceous portion of W24 are dominated by maidencane, soft rush, pickerelweed, and Peruvian primrose willow. Hydrologic connectivity to downstream wetlands is maintained by a series of agricultural ditches. This wetland will be considered jurisdictional to both the SWFWMD and the USACOE.

Wetland W25

FLUCFCS Code: 621 – Cypress

NWI Classification – PSS1C

Wetland W25 is located west of SR 33, immediately north of the I-4 westbound on-ramp. This isolated, forested wetland is surrounded by existing roadside swales, a manmade stormwater pond, and a small forested upland area.

The canopy within this small cypress dome is dominated by bald cypress. Understory species include swamp fern, chain fern, maidencane, dog fennel, soft rush, and St. John's wort. The wetland will be considered jurisdictional by the SWFWMD, however, due to its small, less than 0.5-acre size and isolated nature, mitigation for impacts to wetland W25 may not be required. Due to its adjacency to wet roadside swales, and potential hydrologic connectivity to a large drainage ditch, located to the west, this wetland will likely be considered jurisdictional by the USACOE.

Wetland W26

FLUCFCS Code: 621 – Cypress

NWI Classification – PFO2F

Wetland W26 is located in the northeast quadrant of the SR 33/I-4 interchange. It is bound on the north by existing industrial development, and on the east by an existing stormwater management facility and berm. This wetland was historically a part of the same wetland that included W18 and W24, but was severed by the construction of I-4 and SR 33.

Dominant vegetation is consistent with the vegetation found in wetlands W18 and W24, and includes bald cypress, red maple, sweetgum, wax myrtle, Carolina willow, Peruvian primrose willow, elderberry, Brazilian pepper, swamp fern, Virginia chain fern, wild taro, pickerelweed,

soft rush, St. John's wort, pennywort, and cinnamon fern. Wetland W26 will be considered jurisdictional by the SWFWMD. Due to its adjacency to wet roadside swales, and potential hydrologic connectivity to downstream wetlands, W26 may also be considered jurisdictional by the USACOE.

Wetland W27

FLUCFCS Code: 621 – Cypress

NWI Classification – PFO2F

Wetland W27 is located east of SR 33, immediately north of I-4. The wetland is bound to the west, south, and east by an existing stormwater management facility and berm, and to the north by an existing industrial facility. Wetland W27 was likely part of the same historic wetland that included W18, W24, and W26, but was severed by the construction of SR 33, I-4, and the adjacent stormwater management facility.

Dominant vegetation is consistent with the vegetation found in wetlands W18, W24, and W26; and includes bald cypress, red maple, sweetgum, wax myrtle, Carolina willow, Peruvian primrose willow, elderberry, Brazilian pepper, swamp fern, Virginia chain fern, wild taro, pickerelweed, soft rush, St. John's wort, pennywort, and cinnamon fern. Wetland W27 will be considered jurisdictional by the SWFWMD. Due to its adjacency to wet roadside swales, and potential hydrologic connectivity to downstream wetlands, W27 may also be considered jurisdictional by the USACOE.

Wetland W32

FLUCFCS Code: 621 – Cypress

NWI Classification – N/A

Wetland W32 is located along the south side of SR 33, slightly west of the entrance to the Lakeland Motorsports Park, within the northern portion of the project corridor. This wetland was part of a larger forested wetland that extends offsite to the north, but was severed by the historic construction of SR 33. Hydrologic connectivity to this historic downstream wetland is maintained by a cross-drain under SR 33.

Dominant vegetation within wetland W32 includes bald cypress, red maple, wax myrtle, Brazilian pepper, grapevine, and poison ivy (*Toxicodendron radicans*). Due to hydrologic connectivity being maintained under SR 33, the wetland will likely be considered jurisdictional by both the SWFWMD and the USACOE.

Wetland W33

FLUCFCS Code: 615 – Stream and Lake Swamps (Bottomland)

FLUCFCS Code: 621 – Cypress

NWI Classification – PUBHx

Wetland W33 is located along the north side of SR 33, slightly west of the entrance to the Lakeland Motorsports Park. The wetland is part of a larger offsite system that extends north beyond the right-of-way. Hydrologic connectivity to downstream wetlands is maintained by an existing drainage ditch.

Dominant vegetation within this wetland includes red maple, Carolina willow, Brazilian pepper, laurel oak, grapevine, salt bush, and dog fennel. Wetland W33 will be considered jurisdictional by the SJRWMD, as well as the USACOE, due to its hydrologic connectivity to downstream wetlands.

Surface Water SW15

FLUCFCS Code: 510 – Linear Surface Water

NWI Classification – N/A

Surface water SW15 is located to the west of SR 33, along the south right-of-way of I-4. This manmade surface water functions as a roadside drainage swale for the eastbound lanes of I-4. Vegetation within this ditch includes maidencane, soft rush, pickerelweed, and cattails. Although this surface water will be considered jurisdictional by both the SWFWMD and the USACOE, due to its manmade origin, mitigation for impacts will likely not be required.

Surface Water SW16

FLUCFCS Code: 510 – Linear Surface Water

NWI Classification – N/A

Surface water SW16 is located to the west of SR 33, along the north right-of-way of I-4. This manmade surface water functions as a roadside drainage swale for the westbound lanes of I-4. Vegetation within this ditch includes maidencane, soft rush, pickerelweed, and cattails. Although this surface water will be considered jurisdictional by both the SWFWMD and the USACOE, due to its manmade origin, mitigation for impacts will likely not be required.

Surface Water SW18

FLUCFCS Code: 510 – Linear Surface Water

NWI Classification – N/A

Surface water SW18 is located to the west of SR 33, along the north right-of-way of I-4. This large drainage ditch carries stormwater from the travel lanes of I-4 through an offsite wetland

system, located to the north. Vegetation within the ditch includes maidencane, duckweed (*Lemna sp.*), and water grass (*Hydrochloa carolinensis*). Although the surface water will be considered jurisdictional by the SWFWMD and the USACOE, due to its manmade origin, mitigation for impacts will likely not be required.

Surface Water SW20

FLUCFCS Code: 510 – Linear Surface Water

FLUCFCS Code: 530 – Reservoirs

NWI Classification – N/A

Surface water SW20 is located in the northwest quadrant of the SR 33/I-4 interchange. It is a manmade, stormwater management facility associated with I-4. Vegetation consists of regularly mowed/maintained herbaceous species. As SW20 is a manmade stormwater management facility, mitigation will not be required for any construction related impacts.

Surface Water SW23

FLUCFCS Code: 510 – Linear Surface Water

NWI Classification – N/A

Surface water SW23 is located east of SR 33, along the south right-of-way of I-4. This shallow, manmade swale collects stormwater runoff from the eastbound lanes of I-4. Vegetation consists of mowed/maintained herbaceous species. Due to the manmade origin of SW23, mitigation will likely not be required for any construction related impacts.

Surface Water SW25

FLUCFCS Code: 510 – Linear Surface Water

NWI Classification – PFO2F

Surface water SW25 is located along the north right-of-way of I-4, immediately east of the westbound SR 33 off-ramp. This area functions as a roadside stormwater treatment swale. Vegetation consists of mowed/maintained herbaceous species. Due to the manmade origin of SW 25, mitigation will likely not be required for any construction related impacts.

Surface Water SW26

FLUCFCS Code: 530 – Reservoirs

NWI Classification – N/A

Surface water SW26 is located east of SR 33, and south of I-4, within an existing pasture area. This manmade surface water functions as a cattle watering pond, and due to heavy grazing by cattle, contains no notable emergent vegetation. As this is a manmade surface

water, constructed in uplands as part of the adjacent cattle operation, no mitigation will be required for any construction related impacts.

Section 4.0

Potential Wetland and Surface Water Impacts

4.1 Potential Impact Areas

The project corridor consists primarily of residential, extractive, recreational, transportation, and utilities land uses. Cover types within the project corridor include both natural and disturbed upland and wetland habitats, as well as natural and manmade surface waters. Natural habitats found within the project corridor include shrub and brushland, pine flatwoods, upland hardwood forests, xeric oak, hardwood conifer mixed, lakes, stream and lake swamps (bottomland), cypress, wetland forested mixed, freshwater marshes, wet prairies, and emergent aquatic vegetation. Residential communities are located within the extreme southern extent of the project corridor; while recreational, industrial, and extractive land uses comprise the central portions of the project corridor. The majority of natural habitats occur within the northern portions of the project corridor.

Each of the proposed Build Alternatives will result in impacts to the majority of the right-of-way and all of the pond sites. The exception is wetland W38, which occurs at the extreme eastern terminus of the I-4 improvements, where the project will tie-in to the existing travel lanes. Wetland and surface water impacts will be revised during the design phase of the project once the exact limits of construction are defined.

4.1.1 No-Build Alternative

The No-Build Alternative would not involve new construction, but would involve the continued, normal maintenance of SR 33. This alternative would maintain the roadway in its existing operating condition and maintain existing typical sections. Implementing the No-Build Alternative would result in no direct impacts to wetlands or surface waters.

4.1.2 Build Alternatives

Both of the Build Alternatives (full reconstruction and partial reconstruction) will result in impacts to 100% of the wetlands and surface waters within the mainline right-of-way of SR 33 in Segments 1 and 2. Segment 2 includes the I-4 interchange improvements, for which four build alternatives are being considered. The following provides a summary of potential wetland and surface water impacts within each project Segment. Segment 1 includes the SR 33 improvements, south of the I-4 interchange. Segment 2 includes the SR 33/I-4 interchange improvements, as well as the SR 33 widening that is proposed north of I-4.

4.1.2.1 Segment 1

Both build alternatives for Segment 1 will result in impacts to 100% of the wetlands within the SR 33 right-of-way. This includes 3.12 acres of impacts to wetlands W8, W11, and portions of W16. The functional losses associated with the proposed impacts are discussed in Section 5 of this report.

4.1.2.2 Segment 2

Segment 2 includes four Interchange Build Alternatives defined as follows:

1. Diamond interchange with retaining walls
2. Diverging diamond interchange with retaining walls
3. Diamond interchange without retaining walls
4. Diverging diamond interchange without retaining walls

All of the proposed Interchange Build alternatives will result in impacts to wetlands W16, W18, W24, W26 and W27; as well as surface waters SW15, SW16, SW18, SW20, SW23, SW25, and SW26. Alternatives 1 and 2 restrict impacts to the existing right-of-way, and result in the least impact to wetlands (10.54 acres) and surface waters (10.55 acres). Alternative 3 and 4 both require additional right-of-way. Alternative 3 will result in approximately 12.45 acres of impacts to wetlands, and 12.19 acres of impacts to surface waters. The wetland and surface water impacts associated with Alternative 4 are approximately 13.12 acres and 12.19 acres respectively.

Both build alternatives for Segment 2 will result in impacts to 100% of the wetlands within the SR 33 right-of-way, where widening is proposed north of I-4. This includes impacts to wetlands W32 (1.49 acres) and W33 (0.06 acre). The functional losses associated with the proposed Segment 2 impacts are discussed in Section 5 of this report.

4.1.3 Methodology of Pond Determination

Two stormwater treatment systems are being considered. These include linear stormwater treatment ponds within the existing road right-of-way, and offsite stormwater ponds. Based on the available information, only the hydraulically feasible and environmentally permissible offsite pond sites are considered. Alternative pond sites are analyzed and evaluated for the following parameters:

-
- Hydrologic and hydraulic factors such as existing ground elevation, soil types, estimated seasonal high water table established by a review of the USDA NRCS soils and geotechnical investigations, stormwater conveyance feasibility, allowable hydraulic grade line, and basin outfalls;
 - Environmental resource impacts including wetlands and threatened or endangered species;
 - Floodplain impacts;
 - Major utility conflict potential;
 - Estimated right-of-way acquisition;
 - Impacts to cultural resources; and
 - Hazardous materials and contamination

4.1.4 Proposed Stormwater Ponds

Field assessments of each proposed pond site were performed. Existing habitats at each site were evaluated for vegetative structure and the presence of wetland or surface water areas that would be considered jurisdictional by state or federal agencies. A description of each pond site is provided below. The Pond Siting Report will have a detailed analysis of the proposed ponds.

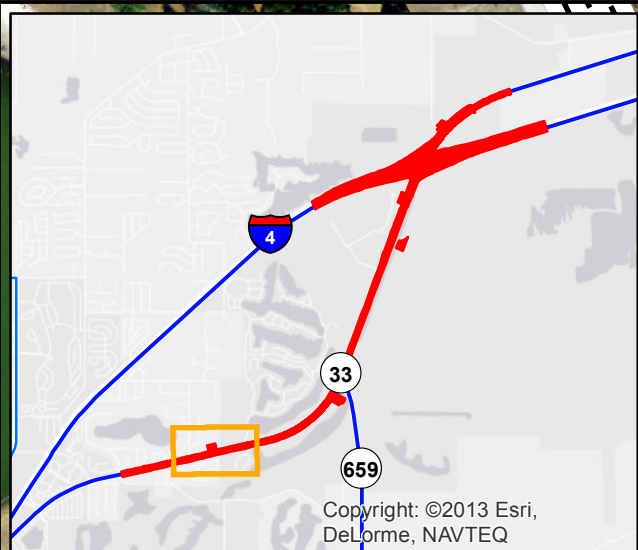
Please refer to Figures 6a-6f For the location of each proposed stormwater pond within the project corridor.

Basin 1

Basin 1 begins at Station 278+42 and continues east of Huron Way at Station 320+00. Residential areas comprise the predominant land use within this basin. The preferred pond alternative for this basin is located within an area classified as xeric oak. Vegetation within this pond site is dominated by xeric upland species. No wetlands are located within or immediately adjacent to this pond site, and no wetland impacts will result from construction of Pond 1.

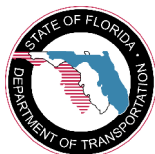
Basin 2

Basin 2 begins east of Huron Way at station 320+00 and continues northeast to Station 394+55. Land use adjacent to the roadway within Basin 2 is dominated largely by improved pasture and other shrubs and brushland. The preferred pond alternative is located within an area of improved pastures, slightly south of the SR 33/CR 659 intersection. Vegetation within this pond site consists predominantly of bahia grass, and other upland pasture species. No



Legend

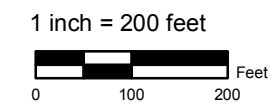
- Pond Site
- Road Right-of-Way



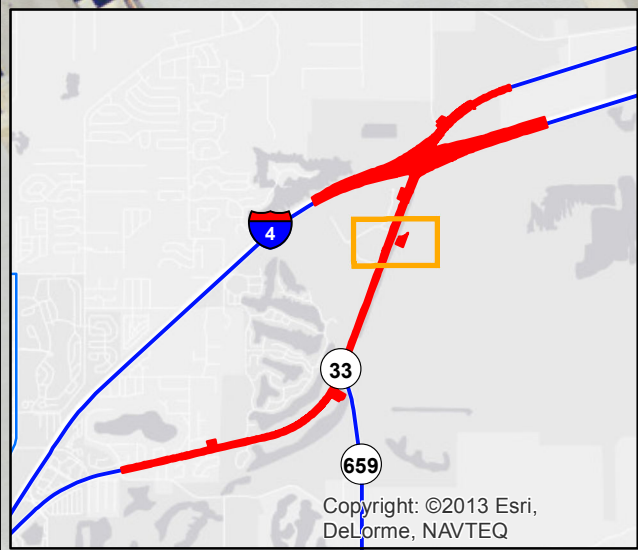
Florida Department
of Transportation
DISTRICT 1

SR 33 PD&E Study from Old Combee Road to North of Tomkow Road
 FPID 430185-1-22-01
 Polk County, Florida

*Proposed Pond
Locations*

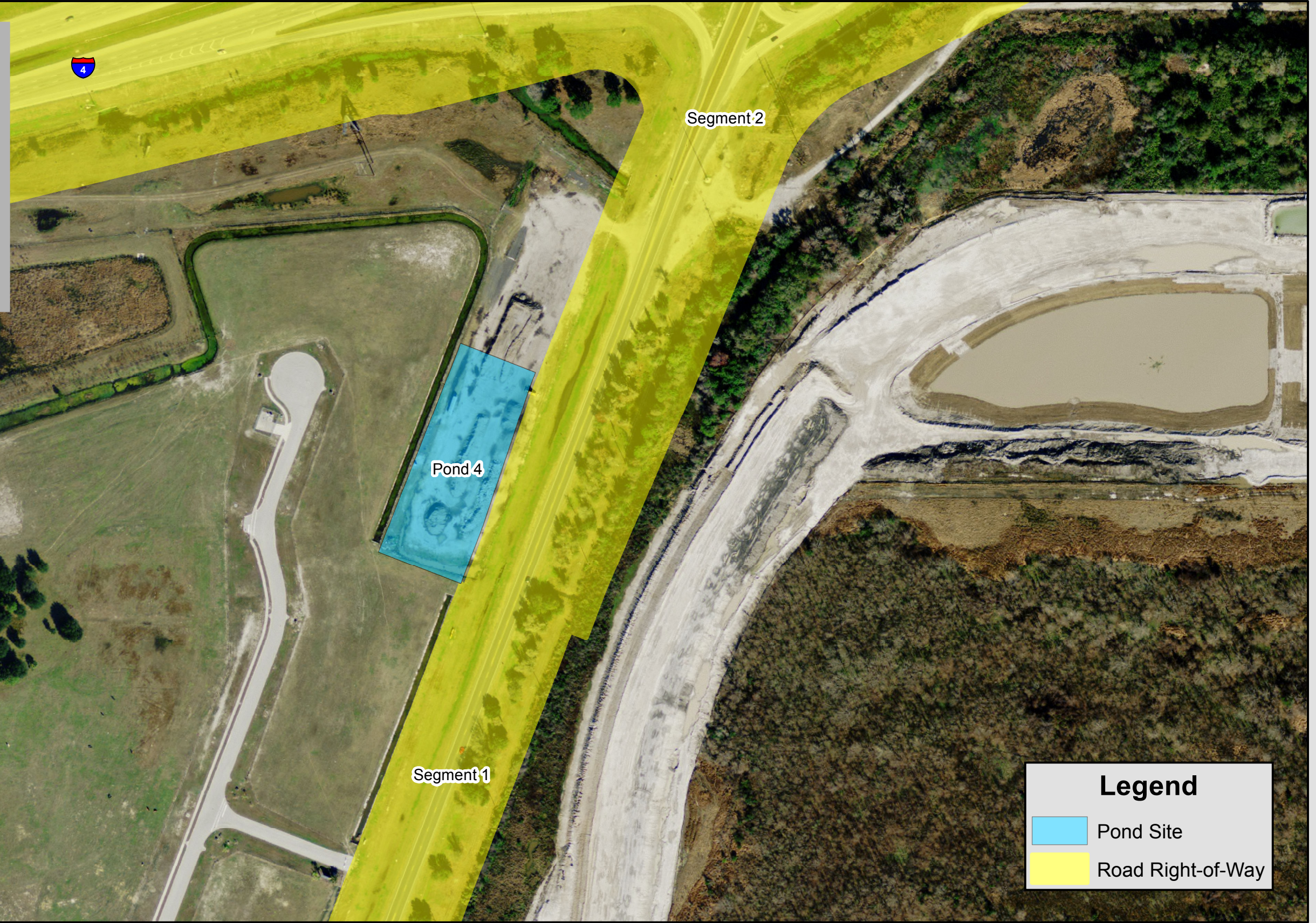
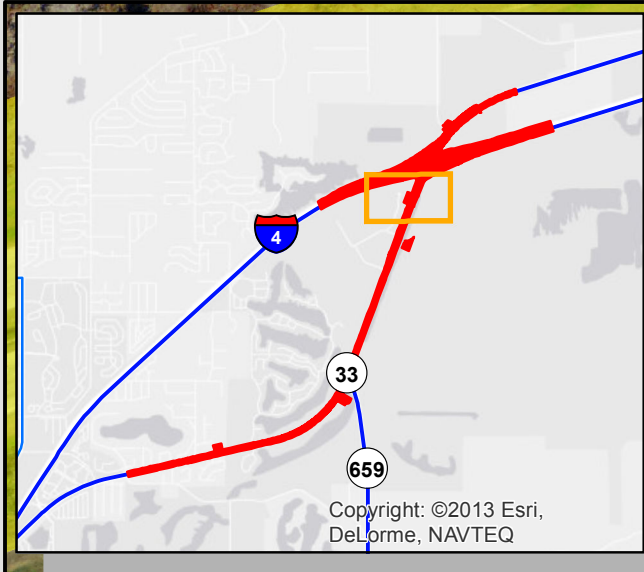


**Figure
6b**



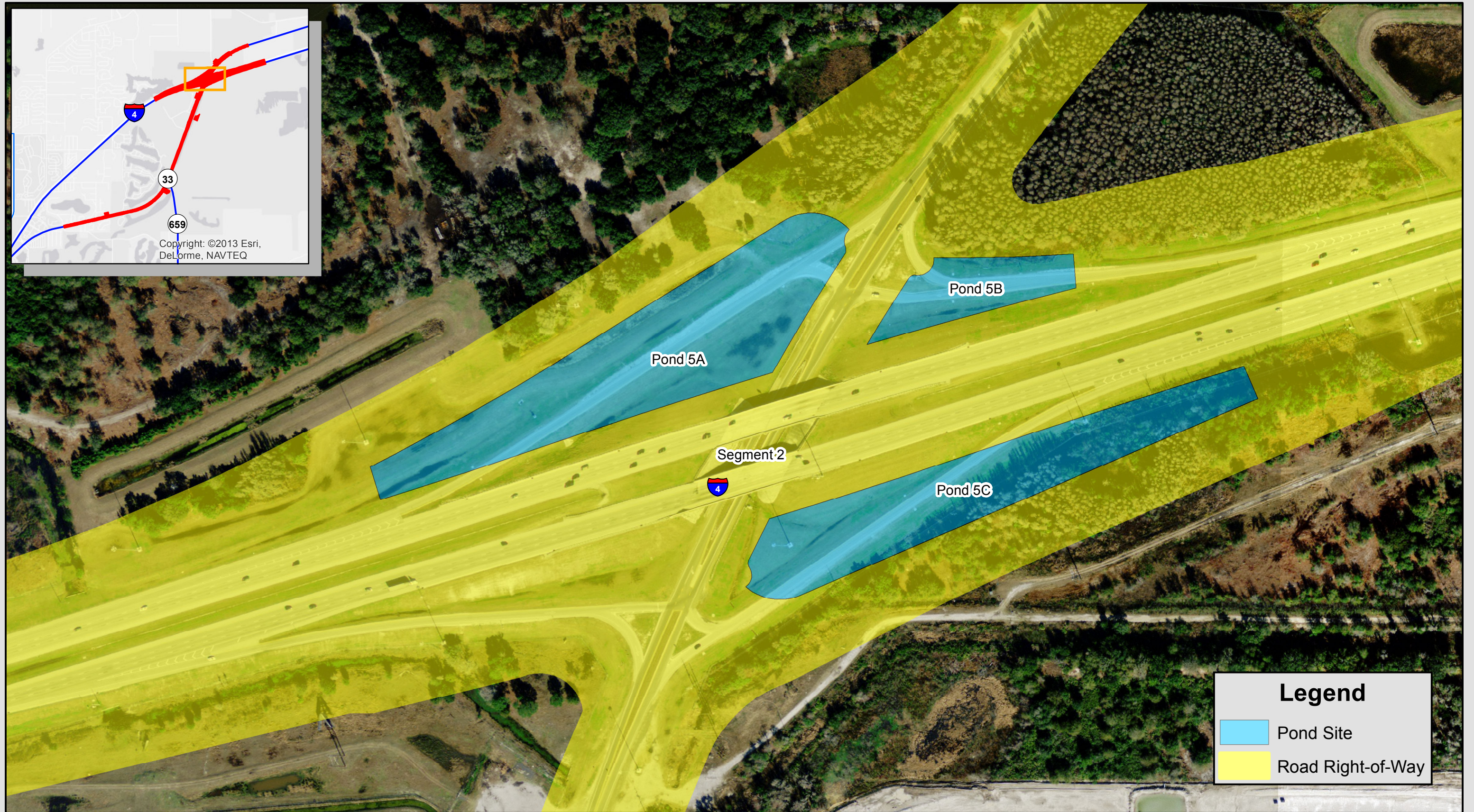
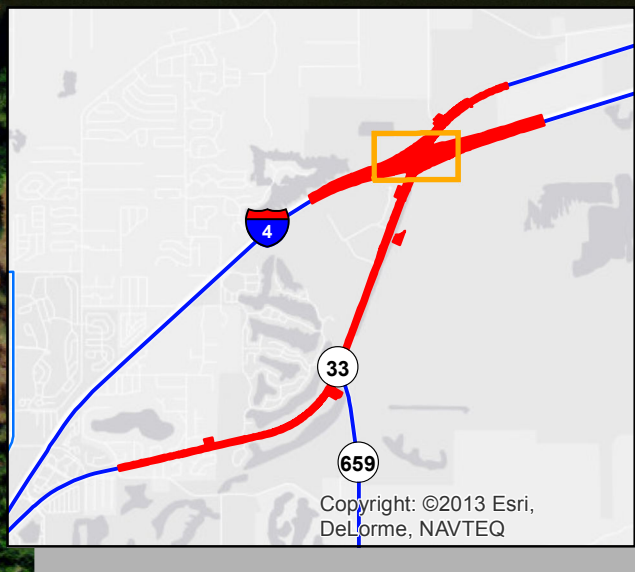
Legend

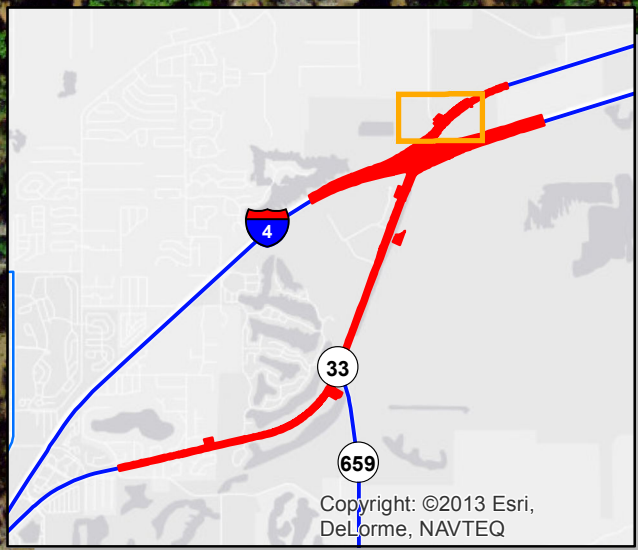
- Pond Site
- Road Right-of-Way



Legend

- Pond Site
- Road Right-of-Way





Legend

- Pond Site
- Road Right-of-Way

wetlands are located within this pond site, and no wetland impacts will result from construction of Pond 2.

Basin 3

Basin 3 begins at Station 394+55 and continues north to University Boulevard at Station 418+75. Land use within this basin includes open land, forested wetlands, herbaceous wetlands, golf courses, and extractive. The preferred pond alternative for Basin 3 is located within disturbed lands associated with the adjacent strip-mining operation. No wetlands are located within the Pond 3 site, and no wetland impacts will result from the construction of this preferred stormwater pond.

Basin 4

Basin 4 begins at University Boulevard and continues to an existing cross-drain located at Station 440+00. Land use within this basin consists largely of industrial, transportation, and forested wetlands. The preferred pond alternative for Basin 4 is located within a developed commercial/industrial park immediately west of SR 33. The pond site is characterized as cleared/graded uplands that are regularly maintained by mowing. No wetlands are located within Pond 4, and no wetland impacts will result from the development of this pond site.

Basin 5

Basin 5 begins at Station 440+00 and continues north to a cross-drain located at Station 460+00. This basin includes the SR 33/I-4 interchange. Land use within this basin consists largely of transportation, although some forested wetlands and surface waters are also present. The preferred pond alternative for this basin includes the use of the proposed interchange infield areas. The construction of this preferred pond will result in minor impacts to wetlands W18 and W26, and surface water SW20. The impacted wetlands, however, will be fragmented by the proposed interchange improvements. Due to the small size of the wetlands remaining within the infield areas following redesign of the interchange, mitigation for a complete loss of function will be provided for these areas regardless of whether Ponds 5a-5c are constructed.

Basin 6

Basin 6 begins at a cross-drain at Station 460+00 and continues east to the Lakeland Motorsports Park entrance at Station 489+00. Land use within this basin is largely developed, and includes transportation, industrial, open land, and forested wetlands. The preferred pond alternative for Basin 6 is located immediately north of the intersection of SR 33 and Tomkow Road. Habitats within this pond site consist of open lands, and upland hardwood forests. No

wetlands are located within this pond site, and no wetland impacts will result from the construction of Pond 6.

Section 5.0

Wetland Assessment

The wetlands and surface waters within the project corridor will likely be considered jurisdictional by the SWFWMD and the USACOE. During the permitting phase of the project, final wetland impacts will be determined and any required mitigation will be identified. The Uniform Mitigation Assessment Method (UMAM) has been adopted by state and federal regulatory agencies to determine the relative functional values of wetland habitats, and subsequently, the amount of mitigation required to offset adverse impacts resulting from a project.

5.1 UMAM

The Florida Department of Environmental Protection (FDEP) and the water management districts involved in the Environmental Resource Permitting (ERP) Program developed UMAM to provide a consistent, and efficient means of assessing the relative functions of wetland and surface water habitats. It has since been adopted by the USACOE. UMAM provides a standardized procedure for assessing the functions provided by wetlands and other surface waters, the amount that those functions are reduced by a proposed impact, and the amount of mitigation necessary to offset that loss.

UMAM recognizes the potential functions of wetlands to include the following: fish and wildlife habitat, flood storage, nutrient cycling, detritus production, recreation, and maintenance of water quality and quantity. The methodology acknowledges that not all types of wetlands and surface waters provide all of these functions equally.

The UMAM was utilized to assess the current, pre-construction functions of each wetland system within the project limits in order to quantify the functional loss resulting from the proposed project. The impact assessment was separated into the two project Segments. The following Table 3 provides a summary of the results of the UMAM analyses for each build alternative.

Table 3. Results of UMAM Analysis

Wetland ID	FLUCFCS	UMAM Delta	Impact Acreage	Functional Loss
SEGMENT 1 Build Alternatives				
W8 ¹	643	N/A	0.07	N/A
W11	615	0.40	2.90	1.16
W16	615	0.40	0.14	0.06
TOTALS			3.11	1.22
SEGMENT 2 – Diamond/Diverging Diamond with Retaining Walls				
W16	615	0.40	1.19	0.48
W18	621	0.50	1.64	0.82
W24	621, 630, 641	0.57	1.83	1.04
W25 ¹	621	N/A	0.34	N/A
W26	621	0.50	5.09	2.54
W27	621	0.43	0.45	0.20
W32 ²	621	0.40	1.49	0.60
W33	615, 641	0.50	0.06	0.03
TOTALS			12.09	5.71
SEGMENT 2 – Diverging Diamond Interchange without Retaining Walls				
W16	615	0.40	2.11	0.84
W18 ²	621	0.50	2.52	1.26
W24	621, 630, 641	0.57	1.83	1.04
W25 ¹	621	N/A	0.34	N/A
W26	621	0.50	5.14	2.57
W27	621	0.43	0.50	0.22
W32 ²	621	0.40	1.49	0.60
W33	615, 641	0.50	0.06	0.03
TOTALS			13.99	6.56
SEGMENT 2 – Diamond Interchange without Retaining Walls				
W16	615	0.40	2.11	0.84
W18 ²	621	0.50	2.52	1.26
W24	621, 630, 641	0.57	2.49	1.41
W25 ¹	621	N/A	0.35	N/A
W26	621	0.50	5.14	2.57
W27	621	0.43	0.50	0.22
W32 ²	621	0.40	1.49	0.60
W33	615, 641	0.50	0.06	0.03
TOTALS			14.66	6.93

¹wetland is isolated, and less than ½-acre. Impacts will not require mitigation

²remaining offsite portion of wetland will be isolated and less than ½-acre. Impact assessment includes offsite remainder of wetland.

The above scores were assigned based on the guidelines outlined in Chapter 62-345 of the Florida Administrative Code. During the design and permitting phase of the project, the UMAM scores will be reevaluated as the specific details (i.e., size and location) of each impact area are finalized. Preliminary UMAM sheets have been included as Appendix B. These calculations have not been reviewed or approved by the regulatory agencies.

5.2 Avoidance and Minimization

Avoidance and minimization of wetland/surface water impacts has been considered throughout the study, and will continue to be evaluated during the design and permitting phase. During the course of the study, specific measures have been taken with the intent of minimizing impacts to wetlands. These measures focused predominantly on the selection of pond sites that avoid impacts to wetlands. Methods to avoid and minimize wetland impacts will be further refined and addressed during the design and permitting phase.

5.3 Secondary and Cumulative Impacts

It is anticipated that secondary wetland impacts will occur as a result of the construction of the proposed project. Anticipated secondary impacts include a large variety of adverse effects typically referred to as “edge effects.” Edge effects occur when previously undisturbed habitat is cleared, exposing previously buffered areas to the edge of a roadway right-of-way. Many adverse impacts occur to habitat along a roadway edge, including the facilitation of weeds, pests, and pathogens (many of which are exotic), changes to microclimate, increased canopy blow-downs, reduction of shade-dependent plants, and a change in the wildlife species within the newly exposed habitat. The wetland habitats within the project corridor have been historically altered through long-term anthropogenic modification. These past alterations include new road construction; residential, commercial, and industrial developments; agricultural operations; ditch/canal excavation; and large-scale strip-mining operations. Although these wetlands have been subject to substantial past disturbance, additional secondary impacts from the proposed roadway improvements will likely occur. It is anticipated that mitigation will be necessary to adequately offset these adverse secondary impacts.

Cumulative impacts result from the incremental consequences of a proposed project when considered with other past and reasonably foreseeable future actions. According to SWFWMD policy, cumulative impacts result when a project provides mitigation within a different regional watershed as the project. The project occurs within the Withlacoochee River Basin. Currently, there are two mitigation banks located within the Withlacoochee River Basin: Green Swamp Mitigation Bank and Withlacoochee Wetland Mitigation Bank. Green Swamp Mitigation Bank is currently approved by both SWFWMD and USACOE for the sale of forested wetland credits. The Withlacoochee Wetland Mitigation Bank has received state approval, and is currently in the final process of federal review. This mitigation bank will be able to provide forested wetland credits, as well as limited herbaceous credits to projects within the Withlacoochee River Basin. Both mitigation banks were assessed under UMAM, and the current cost of 1 UMAM credits is \$180,000.00. It is anticipated that mitigation will

be available within the Withlacoochee River Basin at the time of design and permitting, and therefore, the project will unlikely result in unacceptable cumulative impacts.

The extent of secondary impacts have not been quantified. The PD&E process will result in the selection of a preferred alternative, and further analysis will be conducted to move one preferred alternative to design. Secondary and cumulative wetland impacts will be further evaluated and quantified during the design and permitting phase, and during this phase, the mitigation requirements to offset said impacts will be finalized.

Section 6.0

Reviewing Regulatory Agencies

Wetlands within the study area are regulated at the state level by the Southwest Florida Water Management District (SWFWMD), and federally by the United States Army Corps of Engineers (USACOE). Both the United States Fish and Wildlife Service (USFWS) and the United States Environmental Protection Agency (EPA) review and provide comments on applications for USACOE permits. In addition, the SWFWMD will solicit comments from the respective state agencies; the Florida Fish and Wildlife Conservation Commission (FFWCC) and the Florida Department of Environmental Protection (FDEP). The FDEP also regulates stormwater discharges associated with construction activities under the National Pollutant Discharge Elimination System (NPDES). These agencies have provided preliminary comments as part of the Efficient Transportation Decision Making (ETDM) preliminary screening. A copy of the ETDM Screening Summary Report has been provided as Appendix C. It is anticipated that the following permits will be required prior to the commencement of construction activities.

Permit

Environmental Resource Permit (ERP)
Section 404 Dredge and Fill Permit (Individual)
NPDES Permit

Issuing Agency

SWFWMD
USACOE
FDEP

SWFWMD

The SWFWMD requires an ERP when construction of any project results in the creation of a stormwater management system, impacts waters of the state, or impacts isolated wetlands. An individual ERP will be required with mitigation since the project's wetland impacts will likely be greater than 1 acre in size. Impacts must be justified by the site design, and the applicant will be required to demonstrate that wetland impacts have been eliminated or reduced to the greatest extent practicable.

USACOE

The USACOE has jurisdiction over wetlands if the wetlands are connected to or adjacent to waters of the United States. Federal jurisdiction also may include manmade surface waters and drainage swales if they meet the requirements of recently revised federal guidance. The majority of the wetlands and surface waters within the study area will be considered *waters of the United States* by the USACOE due to their direct connection, adjacency to, or manmade hydrologic connection to other jurisdictional wetlands or surface waters.

An Individual permit will be required if wetland and other surface water impacts exceed 0.5 acre. The Individual permit must comply with CWA § 404(b)(1) guidelines, including verification that all impacts have been avoided or minimized to the greatest extent practicable, and that any unavoidable impacts are mitigated in the form of wetland creation, restoration and/or enhancement. Recent guidance from the USACOE indicates that the preferred method of compensatory mitigation involves the purchase of wetland mitigation credits from a federally approved mitigation bank.

FDEP

Any project which results in the clearing of one or more acres of land will require a NPDES permit from the FDEP, pursuant to 40 CFR parts 122 and 124. The NPDES stormwater program regulates point-source discharges of stormwater into surface waters of the State of Florida from certain municipal, industrial, and construction activities. This includes roadway construction activities and construction of stormwater management facilities. These permits typically require the implementation of Best Management Practices to ensure compliance. Before proceeding with construction, a Notice of Intent (NOI) must be filed with the FDEP.

6.1 Conceptual Mitigation Plan

Mitigation policies have been established by the USACOE, FDEP, and the SWFWMD. Typical options for providing compensatory mitigation to offset project-related adverse wetland impacts include purchasing credits from a state/federally approved mitigation bank; or onsite/offsite mitigation that includes preservation, restoration, creation and/or enhancement components.

Mitigation Bank

The use of a mitigation bank to offset adverse impacts resulting from a project is the preferred mitigation option of the USACOE. The project must fall within the service area of an approved mitigation bank. Currently, there is only one mitigation bank with both state and federal approvals, whose service area includes the project corridor – Green Swamp Mitigation Bank (GSMB). A second mitigation bank (Withlacoochee Wetland Mitigation Bank) with the same service area has already been granted state approval, and is awaiting federal approval. The current cost of a state/federal credit at each of these mitigation banks is \$180,000 per UMAM credit.

Onsite/Offsite Mitigation

Mitigation may be performed onsite or offsite through the preservation, restoration, enhancement, or creation of wetland habitat. The functional “lift” generated through these

activities must equal or exceed the functional loss resulting from the proposed project. The functional gain from these mitigation options cannot be determined until a site has been selected. If this option is determined to be the preferred mitigation option at the time of design and permitting, a detailed mitigation analysis will then be conducted utilizing UMAM.

Section 7.0 Commitments

This wetland evaluation was conducted for the proposed project in compliance with Executive Order 11990, Protection of Wetlands, 1997, to ensure that every practicable effort is made to avoid short and long-term impacts to wetlands. During the study, thirty-eight (38) wetlands and thirty-eight (38) surface waters were identified within the project corridor. Of the wetlands identified, eight (8) wetlands and seven (7) surface waters may be impacted by the proposed project.

The results of this study conclude that, for the proposed roadway improvements, there are no practicable alternatives to construction within wetlands. Further, all practicable measures to avoid wetlands have been incorporated into the project alignment recommendations. Additional minimization of impacts will be implemented, where possible, during the project design phase. Finally, all unavoidable impacts to wetlands will be adequately mitigated during project permitting through the SWFWMD and the USACOE.

For the duration of this project, the following measures will be taken to address wetland impacts:

1. Continued coordination with the appropriate regulatory agencies will occur through the PD&E process and later, during design.
2. Best Management Practices will be incorporated during design and construction to minimize secondary impacts to wetlands resulting from construction activities.
3. Impacts to wetlands within the project footprint may be unavoidable, and require mitigation. Compensatory mitigation for wetland impacts associated with this project will be compensated for pursuant to Part IV, § 373, F.S. and 33 U.S.C. 1344.

Section 8.0 References

Charin, L. 2000. Field Guide to the Rare Plants of Florida. Florida Natural Areas Inventory, Tallahassee, Florida.

Cowardin, L.M., Carter, V., Golet, F.C., and LaRoe, E.T. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U. S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

Cox, J., R. Kautz, M. MacLaughlin, and T. Gilbert. 1994. Closing the Gaps in Florida's Wildlife Habitat Conservation System. Florida Game and Fresh Water Fish Commission, Tallahassee.

Dressler, R.L., D.W. Hall, K.D. Perkins, and N.H. Williams. 1987. Identification Manual for Wetland Plant Species of Florida. University of Florida Institute of Food and Agriculture Sciences, Gainesville, Florida.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. United States Army Engineers Waterways Experiment Station, Vicksburg, Mississippi.

Florida Department of Environmental Protection. 2007. Uniform Mitigation Assessment Method. 62-345 F.A.C. <http://www.dep.state.fl.us/legal/Rules/surfacewater/62-345/62-345.pdf>

Florida Department of Environmental Protection. 1998. Florida Wetland Plants: An Identification Manual. UF/IFAS. Gainesville, FL.

Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Third Edition.

Florida Department of Transportation. 1995. Project Development and Environmental Manual. Part II, Chapter 18 – Wetlands. Tallahassee, Florida.

Gilbert, K.M., J.D. Tobe, R.W. Cantrell, M.E. Sweeley, and J.R. Cooper. 1995. The Florida Wetlands Delineation Manual.

Langeland, K.A. and K.C. Burks. 1998. Identification and Biology of Non-Native Plants in Florida's Natural Areas. University of Florida, Gainesville, Florida.

Tobe, J.D., K.C. Burks, R.W. Cantrell, M.A. Garland, M.E. Sweeley, D.W. Hall, P. Wallace, G. Anglin, G. Nelson, J.R. Cooper, B. Bickner, K. Gilbert, N. Aymond, K. Greenwood, and N. Raymond. 1998. Florida Wetland Plants: An Identification Manual. Florida Department of Environmental Protection, Tallahassee, Florida.

United States Army Corps of Engineers. 2008. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region. US Army Corps of Engineers Engineer Research and Development Center.

United States Department of Agriculture, Soil Conservation Service. 1984. Soil Survey of Polk County, Florida.

Wunderlin, R.P., and B.F. Hansen. 2008. *Atlas of Florida Vascular Plants* (<http://www.plantatlas.usf.edu/>). [S. M. Landry and K. N. Campbell (application development), Florida Center for Community Design and Research.] Institute for Systematic Botany, University of South Florida, Tampa.

Appendix A
Photographs

Appendix A *Photographs*



Photo 1 – Wetland W8



Photo 2 – Shrub edge of wetland W11

Appendix A Photographs



Photo 3 – Mowed portions of W11 within right-of-way



Photo 4 – Hydrophytic vegetation within mowed portions of W16

Appendix A Photographs



Photo 5 – Small forested area within right-of-way (W16)



Photo 6 – Representative photograph of W26

Appendix A *Photographs*



Photo 7 – Interior portions of W26



Photo 8 – Freshwater marsh portion of W24

Appendix A *Photographs*



Photo 9 – Forested portion of W24

Appendix B

UMAM Analysis

**PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)**

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd		Application Number TBD	Assessment Area (AA) Name or Number W11
FLUCCs code 615	Further classification (optional)	Impact or Mitigation Site? Impact	Assessment Area Size 2.90 ac
Basin/Watershed Name/Number Withlacoochee River Basin (HUC 03100208)	Affected Waterbody (Class) III	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
<p>Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands AA is located within the existing SR 33 ROW, adjacent to the existing 2-lane facility. Immediately east of AA is a large, excavated drainage canal that is likely a remnant of historic Phosphate mining. Recent construction of University Blvd has further fragmented AA. Hydrologic connectivity to downstream wetlands maintained by existing, manmade canal.</p> <p>Assessment area description Forested portions dominated by bald cypress, red maple, slash pine, laurel oak. Shrub dominated portions contain Brazilian pepper, Carolina willow, elderberry, Peruvian primrose willow, grapevine, wax myrtle, cattails. Groundcover dominated by maidencane, soft rush, bahia grass, St. John's wort, chalky bluestem, dog fennel, white-top sedge.</p>			
Significant nearby features SR 33 located immediately west of AA; University Blvd and manmade drainage canal located immediately east of AA; nearby wetlands consist of reclaimed Phosphate mines, and adjacent, nearby uplands consists of golf course, commercial/industrial and disturbed lands		Uniqueness (considering the relative rarity in relation to the regional landscape.) common for wetlands adjacent to high-volume roadway, within historic mining operations	
Functions minimal wildlife utilization; minimum water quality treatment/attenuation; stormwater conveyance		Mitigation for previous permit/other historic use N/A	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, reptiles, amphibians, small mammals		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) wood stork (E/feeding, roosting), snowy egret (SSC/feeding, roosting), Little blue heron (SSC/feeding, roosting), Tricolored heron (SSC/feeding, roosting), white ibis (SSC/feeding), sandhill crane (T, feeding)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): None observed at time of survey			
Additional relevant factors:			
Assessment conducted by: N. Chambers		Assessment date(s): Janury 23 & 31, 2013	

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd	Application Number TBD	Assessment Area (AA) Name or Number W11
Impact or Mitigation Impact	Assessment conducted by: N. Chambers	Assessment date: Janury 23 & 31, 2013

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

<p>.500(6)(a) Location and Landscape Support</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	AA located directly adjacent to high volume roadway. Downstream connectivity maintained by manmade drainage feature. Adjacent land uses consist of roadway and extractive (strip-mine). Subject to historic and ongoing impacts caused by land uses outside of AA.
4	0		
<p>.500(6)(b)Water Environment (n/a for uplands)</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	Water levels lower than normal, due to rapid drainage facilitated by adjacent drainage feature. Notable presence of upland groundcover species (bahia grass). Hydrologic connectivity maintained by manmade drainage ditch.
4	0		
<p>.500(6)(c)Community structure</p> <p>1. Vegetation and/or 2. Benthic Community</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	Severe infestation by exotic/nuisance plant species. Notable presence of upland groundcover (bahia grass) within mowed portions of AA. Topography of AA is anthropogenic in nature. Land management practices (mowing) have severely impacted community structure, and limit natural recruitment.
4	0		

Score = sum of above scores/30 (if uplands, divide by 20)
current or w/o pres with
0.4 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 1.16

Delta = [with-current]
-0.4

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)**

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd		Application Number TBD	Assessment Area (AA) Name or Number W16
FLUCCs code 615	Further classification (optional)	Impact or Mitigation Site? Impact	Assessment Area Size 2.25 ac
Basin/Watershed Name/Number Withlacoochee River Basin (HUC 03100208)	Affected Waterbody (Class) III	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
<p>Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands AA is located within the existing SR 33 ROW, adjacent to the existing 2-lane facility and Interstate 4 interchange. Immediately east of AA is a large, excavated drainage canal that is likely a remnant of historic Phosphate mining. Recent construction of University Blvd has further fragmented AA. Hydrologic connectivity to downstream wetlands maintained by existing, manmade canal.</p> <p>Assessment area description Forested portions dominated by bald cypress, red maple, slash pine, laurel oak. Shrub dominated portions contain Brazilian pepper, Carolina willow, elderberry, Peruvian primrose willow, grapevine, wax myrtle, cattails. Groundcover dominated by maidencane, soft rush, bahia grass, St. John's wort, chalky bluestem, dog fennel, white-top sedge.</p>			
Significant nearby features SR 33 located immediately west of AA; University Blvd and manmade drainage canal located immediately east of AA; nearby wetlands consist of reclaimed Phosphate mines, and adjacent, nearby uplands consists of golf course, commercial/industrial and disturbed lands		Uniqueness (considering the relative rarity in relation to the regional landscape.) common for wetlands adjacent to high-volume roadway, within historic mining operations	
Functions minimal wildlife utilization; minimum water quality treatment/attenuation; stormwater conveyance		Mitigation for previous permit/other historic use N/A	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, reptiles, amphibians, small mammals		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) wood stork (E/feeding, roosting), snowy egret (SSC/feeding, roosting), Little blue heron (SSC/feeding, roosting), Tricolored heron (SSC/feeding, roosting), white ibis (SSC/feeding), sandhill crane (T, feeding)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): None observed at time of survey			
Additional relevant factors:			
Assessment conducted by: N. Chambers		Assessment date(s): Janury 23 & 31, 2013	

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd	Application Number TBD	Assessment Area (AA) Name or Number W16
Impact or Mitigation Impact	Assessment conducted by: N. Chambers	Assessment date: Janury 23 & 31, 2013

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

<p>.500(6)(a) Location and Landscape Support</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	<p>AA located directly adjacent to high volume roadway and interstate. Recent new road construction (University Boulevard) has further fragmented AA, and increased edge effect. Downstream connectivity maintained by manmade drainage feature. Adjacent land uses consist of roadway and extractive (strip-mine). Subject to historic and ongoing impacts caused by land uses outside of AA.</p>
4	0		
<p>.500(6)(b)Water Environment (n/a for uplands)</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	<p>Water levels lower than normal, due to rapid drainage facilitated by adjacent drainage feature. Notable presence of upland groundcover species (bahia grass). Hydrologic connectivity maintained by manmade drainage ditch.</p>
4	0		
<p>.500(6)(c)Community structure</p> <p>1. Vegetation and/or 2. Benthic Community</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	<p>Severe infestation by exotic/nuisance plant species. Notable presence of upland groundcover (bahia grass) within mowed portions of AA. Topography of AA is anthropogenic in nature. Land management practices (mowing) have severely impacted community structure, and limit natural recruitment.</p>
4	0		

Score = sum of above scores/30 (if uplands, divide by 20)
current or w/o pres with
0.4 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.9

Delta = [with-current]
-0.4

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)**

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd		Application Number TBD	Assessment Area (AA) Name or Number W18
FLUCCs code 621	Further classification (optional)	Impact or Mitigation Site? Impact	Assessment Area Size 2.52 ac (2.02 ac onsite)
Basin/Watershed Name/Number Withlacoochee River Basin (HUC 03100208)	Affected Waterbody (Class) III	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
<p>Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands AA is located within the existing Interstate 4 ROW, adjacent to the existing 6-lane facility and interchange on-ramp. University Blvd located approx. 450' south of AA. Surrounding uplands consist of historic Phosphate mining operation, and remnant pine flatwoods. Hydrologic connectivity to upstream/downstream wetlands maintained by shallow roadside swales.</p> <p>Assessment area description Canopy species include bald cypress, red maple, sweetgum. Understory dominated by wax myrtle, Carolina willow, Peruvian primrose willow, elderberry, Brazilian pepper. Groundcover includes swamp fern, Virginia chain fern, wild taro, pickerelweed, soft rush, St. John's wort, pennywort, cinnamon fern.</p>			
Significant nearby features Interstate 4 and I-4/SR 33 on-ramps located to north and west of AA; SR 33 located slightly west of AA; University Blvd located approx. 450' south of AA; overhead powerline easement located along southern boundary of AA.		Uniqueness (considering the relative rarity in relation to the regional landscape.) common for wetlands adjacent to high-volume roadway, within historic mining operations	
Functions minimal wildlife utilization; water quality treatment/attenuation		Mitigation for previous permit/other historic use N/A	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, reptiles, amphibians, small mammals		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) wood stork (E/feeding, roosting), snowy egret (SSC/feeding, roosting), Little blue heron (SSC/feeding, roosting), Tricolored heron (SSC/feeding, roosting), white ibis (SSC/feeding), sandhill crane (T, feeding)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): grey squirrel, black vulture			
Additional relevant factors: Although only 2.02 acre of AA occurs within the project footprint, due to the isolated nature of AA, and the fact that the remaining, offsite area will be less than 0.5 acre, the entire wetland area (onsite and offsite) was included in this analysis.			
Assessment conducted by: N. Chambers		Assessment date(s): Janury 23 & 31, 2013	

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd	Application Number TBD	Assessment Area (AA) Name or Number W18
Impact or Mitigation Impact	Assessment conducted by: N. Chambers	Assessment date: January 23 & 31, 2013

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

<p>.500(6)(a) Location and Landscape Support</p> <p>w/o pres or current</p> <table border="1"> <tr> <td>4</td> <td>with</td> </tr> <tr> <td></td> <td>0</td> </tr> </table>	4	with		0	<p>AA located directly adjacent to high volume roadway and interstate. Wildlife access severely limited by existing barriers. Recent new road construction (University Boulevard) has further fragmented AA. Downstream connectivity maintained by manmade swales. Adjacent land uses consist of roadway, extractive (strip-mine) and utilities. Subject to historic and ongoing impacts caused by land uses outside of AA.</p>
4	with				
	0				
<p>.500(6)(b)Water Environment (n/a for uplands)</p> <p>w/o pres or current</p> <table border="1"> <tr> <td>5</td> <td>with</td> </tr> <tr> <td></td> <td>0</td> </tr> </table>	5	with		0	<p>Water levels lower than normal, due to increased drainage facilitated by manmade drainage features. Notable presence of upland groundcover species (bahia grass). Hydrologic connectivity maintained by swales. Some indicators present that suggest reduced, albeit regular hydroperiod.</p>
5	with				
	0				
<p>.500(6)(c)Community structure</p> <p>1. Vegetation and/or 2. Benthic Community</p> <p>w/o pres or current</p> <table border="1"> <tr> <td>6</td> <td>with</td> </tr> <tr> <td></td> <td>0</td> </tr> </table>	6	with		0	<p>Presence of exotic/nuisance plant species. Topography of AA is severely altered by anthropogenic activities. Land management practices outside of AA not conducive to long-term viability.</p>
6	with				
	0				

Score = sum of above scores/30 (if uplands, divide by 20)
current
or w/o pres
with
0.5
0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 1.26

Delta = [with-current]
-0.5

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)**

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd		Application Number TBD	Assessment Area (AA) Name or Number W24
FLUCCs code 621, 630, 641	Further classification (optional)	Impact or Mitigation Site? Impact	Assessment Area Size 2.49 ac
Basin/Watershed Name/Number Withlacoochee River Basin (HUC 03100208)	Affected Waterbody (Class) III	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
<p>Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands AA is located within existing I-4/SR 33 interchange ROW, within existing agricultural (improved pasture) land use. Wetland historically severed from adjacent habitat through construction of SR 33. Undeveloped forested and non-forested wetlands located immediately to north and west of AA.</p> <p>Assessment area description Canopy species include bald cypress, red maple, sweetgum. Understory dominated by wax myrtle, Carolina willow, Peruvian primrose willow, elderberry, Brazilian pepper. Groundcover includes swamp fern, Virginia chain fern, wild taro, pickerelweed, soft rush, St. John's wort, pennywort, cinnamon fern.</p>			
Significant nearby features Interstate 4 and I-4/SR 33 on-ramps located to south of AA; SR 33 located east of AA		Uniqueness (considering the relative rarity in relation to the regional landscape.) common for wetlands adjacent to high-volume roadway, within agricultural land use	
Functions wildlife utilization; water quality treatment/attenuation		Mitigation for previous permit/other historic use N/A	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, reptiles, amphibians, small mammals		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) wood stork (E/feeding, roosting), snowy egret (SSC/feeding, roosting), Little blue heron (SSC/feeding, roosting), Tricolored heron (SSC/feeding, roosting), white ibis (SSC/feeding), sandhill crane (T, feeding)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): None observed at time of site review			
Additional relevant factors:			
Assessment conducted by: N. Chambers		Assessment date(s): Janury 23 & 31, 2013	

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd	Application Number TBD	Assessment Area (AA) Name or Number W24
Impact or Mitigation Impact	Assessment conducted by: N. Chambers	Assessment date: Janury 23 & 31, 2013

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

<p>.500(6)(a) Location and Landscape Support</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>6</td> <td>0</td> </tr> </table>	6	0	AA located directly adjacent to high volume roadway and interstate. Wildlife access somewhat limited by existing barriers. Downstream connectivity ultimately maintained by manmade drainage ditches Adjacent land uses consist of roadway, agricultural, and nearby industrial. Subject to historic and ongoing impacts caused by land uses outside of AA (highways, agriculture).
6	0		
<p>.500(6)(b)Water Environment (n/a for uplands)</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>5</td> <td>0</td> </tr> </table>	5	0	Water levels lower than normal, due to increased drainage facilitated by manmade drainage features. Condition of plant species indicative of severely reduced hydrology.
5	0		
<p>.500(6)(c)Community structure</p> <p>1. Vegetation and/or 2. Benthic Community</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>6</td> <td>0</td> </tr> </table>	6	0	Presence of exotic/nuisance plant species.Topography of AA altered by past and ongoing, human-induced alterations. Evidence of increased mortality of canopy species, and minimal natural recruitment of appropriate/desirable wetland species.
6	0		

Score = sum of above scores/30 (if uplands, divide by 20)
current or w/o pres with
0.57 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 1.41

Delta = [with-current]
-0.57

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)**

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd		Application Number TBD	Assessment Area (AA) Name or Number W26
FLUCCs code 621	Further classification (optional)	Impact or Mitigation Site? Impact	Assessment Area Size 5.14 ac
Basin/Watershed Name/Number Withlacoochee River Basin (HUC 03100208)	Affected Waterbody (Class) III	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
<p>Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands</p> <p>AA is located within existing I-4/SR 33 interchange ROW. Surrounding uplands consist of high-volume highway, and industrial land uses; Hydrologic connectivity maintained by manmade drainage features/swales</p> <p>Assessment area description</p> <p>Canopy species include bald cypress, red maple, sweetgum. Understory dominated by wax myrtle, Carolina willow, Peruvian primrose willow, elderberry, Brazilian pepper. Groundcover includes swamp fern, Virginia chain fern, wild taro, pickerelweed, soft rush, St. John's wort, pennywort, cinnamon fern.</p>			
Significant nearby features Interstate 4 and I-4/SR 33 off-ramps located to south of AA; SR 33 located west of AA; existing Industrial land use located north/northwest of AA; stormwater management facility located east of AA.		Uniqueness (considering the relative rarity in relation to the regional landscape.) common for wetlands adjacent to high-volume roadway and industrial land use	
Functions wildlife utilization; water quality treatment/attenuation; stormwater conveyance		Mitigation for previous permit/other historic use N/A	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, reptiles, amphibians, small mammals		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) wood stork (E/feeding, roosting), snowy egret (SSC/feeding, roosting), Little blue heron (SSC/feeding, roosting), Tricolored heron (SSC/feeding, roosting), white ibis (SSC/feeding), sandhill crane (T, feeding)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): virginia opossum (roadkill), grey squirrel			
Additional relevant factors:			
Assessment conducted by: N. Chambers		Assessment date(s): Janury 23 & 31, 2013	

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd	Application Number TBD	Assessment Area (AA) Name or Number W26
Impact or Mitigation Impact	Assessment conducted by: N. Chambers	Assessment date: Janury 23 & 31, 2013

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

<p>.500(6)(a) Location and Landscape Support</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>5</td> <td>0</td> </tr> </table>	5	0	AA located directly adjacent to high volume roadway and interstate. Wildlife access substantially limited by existing barriers. Adjacent land uses consist of roadway, and industrial. Subject to historic and ongoing impacts caused by land uses outside of AA (highways, industrial
5	0		
<p>.500(6)(b)Water Environment (n/a for uplands)</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>5</td> <td>0</td> </tr> </table>	5	0	Water levels lower than normal, and evidenced by increase in transitional canopy species. Hydrology severely altered by historic impacts/fragmentation.
5	0		
<p>.500(6)(c)Community structure</p> <p>1. Vegetation and/or 2. Benthic Community</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>5</td> <td>0</td> </tr> </table>	5	0	Presence of exotic/nuisance plant species.Topography of AA altered by past and ongoing, human-induced alterations. Evidence of increased mortality of canopy species, and recruitment of more draught-tolerant tree species. Ongoing maintenance within adjacent land uses has reduced natural recruitment within AA.
5	0		

Score = sum of above scores/30 (if uplands, divide by 20)
current or w/o pres with
0.5 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 2.57

Delta = [with-current]
-0.5

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)**

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd		Application Number TBD	Assessment Area (AA) Name or Number W27
FLUCCs code 621	Further classification (optional)	Impact or Mitigation Site? Impact	Assessment Area Size 0.50 ac
Basin/Watershed Name/Number Withlacoochee River Basin (HUC 03100208)	Affected Waterbody (Class) III	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Interstate 4 and linear stormwater pond located immediately south of AA; stormwater management facility located to west of AA; industrial land use located north and east of AA; hydrologic connectivity maintained by manmade conveyance features.			
Assessment area description Canopy species include bald cypress, red maple, sweetgum. Understory dominated by wax myrtle, Carolina willow, Peruvian primrose willow, elderberry, Brazilian pepper. Groundcover includes swamp fern, Virginia chain fern, wild taro, pickerelweed, soft rush, St. John's wort, pennywort, cinnamon fern.			
Significant nearby features Interstate 4 and SR 33 located south and west of AA; industrial land use located to north and east of AA	Uniqueness (considering the relative rarity in relation to the regional landscape.) common for wetlands adjacent to high-volume roadway and industrial land use		
Functions wildlife utilization; water quality treatment/attenuation; stormwater conveyance	Mitigation for previous permit/other historic use N/A		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, reptiles, amphibians, small mammals	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) wood stork (E/feeding, roosting), snowy egret (SSC/feeding, roosting), Little blue heron (SSC/feeding, roosting), Tricolored heron (SSC/feeding, roosting), white ibis (SSC/feeding), sandhill crane (T, feeding)		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): None observed at time of field review			
Additional relevant factors:			
Assessment conducted by: N. Chambers		Assessment date(s): Janury 23 & 31, 2013	

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd	Application Number TBD	Assessment Area (AA) Name or Number W27
Impact or Mitigation Impact	Assessment conducted by: N. Chambers	Assessment date: Janury 23 & 31, 2013

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

<p>.500(6)(a) Location and Landscape Support</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	AA located adjacent to industrial land use, manmade stormwater treatment pond, and interstate. Wildlife access substantially limited by existing barriers. Adjacent land uses consist of roadway, and industrial. Subject to historic and ongoing impacts caused by land uses outside of AA (highways, industrial)
4	0		
<p>.500(6)(b)Water Environment (n/a for uplands)</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	Water levels lower than normal, and evidenced by increase in transitional canopy species. Hydrology severely altered by historic impacts/fragmentation.
4	0		
<p>.500(6)(c)Community structure</p> <p>1. Vegetation and/or 2. Benthic Community</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>5</td> <td>0</td> </tr> </table>	5	0	Presence of exotic/nuisance plant species.Topography of AA altered by past and ongoing, human-induced alterations. Evidence of increased mortality of canopy species, and recruitment of more draught-tolerant tree species. Ongoing maintenance within adjacent land uses has reduced natural recruitment within AA.
5	0		

Score = sum of above scores/30 (if uplands, divide by 20)
current or w/o pres with
0.43 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.22

Delta = [with-current]
-0.43

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)**

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd		Application Number TBD	Assessment Area (AA) Name or Number W32
FLUCCs code 621	Further classification (optional)	Impact or Mitigation Site? Impact	Assessment Area Size 1.49 ac (1.22 ac onsite)
Basin/Watershed Name/Number Withlacoochee River Basin (HUC 03100208)	Affected Waterbody (Class) III	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
<p>Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands SR 33 located immediately north of AA; SR 33 and industrial center driveway located immediately west of AA; industrial land use located south of AA; hydrolog connectivity maintained through manmade conveyance features; historically severed from upstream/downstream wetlands through construction of SR 33 and industrial facility.</p> <p>Assessment area description Canopy species include bald cypress, red maple. Understory contains Brazilian pepper, grapevine, poison ivy. Minimal groundcover species observed during field review.</p>			
Significant nearby features Industrial facility located to south and southeast; SR 33 located adjacent to AA's northern boundary; I-4 interchange located approx. 1/2-mile to southwest		Uniqueness (considering the relative rarity in relation to the regional landscape.) common for wetlands adjacent to high-volume roadway and industrial land use	
Functions wildlife utilization; water quality treatment/attenuation; stormwater conveyance		Mitigation for previous permit/other historic use N/A	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, reptiles, amphibians, small mammals		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) wood stork (E/feeding, roosting), snowy egret (SSC/feeding, roosting), Little blue heron (SSC/feeding, roosting), Tricolored heron (SSC/feeding, roosting), white ibis (SSC/feeding), sandhill crane (T, feeding)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): black vulture			
Additional relevant factors: Due to the isolated nature of AA, and the fact that the remaining, offsite area will be less than 0.5 acre, the entire wetland area (onsite and offsite) was included in this analysis.			
Assessment conducted by: N. Chambers		Assessment date(s): Janury 23 & 31, 2013	

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd	Application Number TBD	Assessment Area (AA) Name or Number W32
Impact or Mitigation Impact	Assessment conducted by: N. Chambers	Assessment date: Janury 23 & 31, 2013

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

<p>.500(6)(a) Location and Landscape Support</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	<p>AA located adjacent to industrial land use, manmade stormwater treatment pond, and high-volume highway. Wildlife access substantially limited by existing barriers. Adjacent land uses consist of roadway, and industrial. Subject to historic and ongoing impacts caused by land uses outside of AA (highways, industrial)</p>
4	0		
<p>.500(6)(b)Water Environment (n/a for uplands)</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	<p>Water levels lower than normal. Hydrology severely altered by historic impacts/fragmentation. Minimal recruitment of desirable wetland species indicative of inappropriate hydrology.</p>
4	0		
<p>.500(6)(c)Community structure</p> <p>1. Vegetation and/or 2. Benthic Community</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	<p>Presence of exotic/nuisance plant species.Topography of AA altered by past and ongoing, human-induced alterations. Evidence of increased mortality of canopy species. Ongoing maintenance within adjacent land uses has reduced natural recruitment within AA. Minimal evidence of recruitment of desirable groundcover species.</p>
4	0		

Score = sum of above scores/30 (if uplands, divide by 20)
current or w/o pres with
0.4 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.60

Delta = [with-current]
-0.4

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)**

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd		Application Number TBD	Assessment Area (AA) Name or Number W33
FLUCCs code 621, 641	Further classification (optional)	Impact or Mitigation Site? Impact	Assessment Area Size 0.06 ac
Basin/Watershed Name/Number Withlacoochee River Basin (HUC 03100208)	Affected Waterbody (Class) III	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands SR 33 adjacent to southern boundary of AA; low-quality forested/marsh wetlands located to north of AA; hydrologic connectivity to downstream wetlands maintained by sheetflow, and through manmade ditches/swales			
Assessment area description Dominant vegetation includes red maple, Carolina willow, Brazilian pepper, laurel oak, grapevine, salt bush, dog fennel.			
Significant nearby features SR 33 located immedialy south of AA; Industrial facility located to south of AA; racetrack facility located approx 1000' north of AA.	Uniqueness (considering the relative rarity in relation to the regional landscape.) common for wetlands adjacent to high-volume roadway and industrial land use		
Functions wildlife utilization; water quality treatment/attenuation; stormwater conveyance	Mitigation for previous permit/other historic use N/A		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, reptiles, amphibians, small mammals	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) wood stork (E/feeding, roosting), snowy egret (SSC/feeding, roosting), Little blue heron (SSC/feeding, roosting), Tricolored heron (SSC/feeding, roosting), white ibis (SSC/feeding), sandhill crane (T, feeding)		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): mockingbird			
Additional relevant factors:			
Assessment conducted by: N. Chambers		Assessment date(s): Janury 23 & 31, 2013	

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name SR 33 PD&E Study from Old Combee Rd to N. of Tomkow Rd	Application Number TBD	Assessment Area (AA) Name or Number W33
Impact or Mitigation Impact	Assessment conducted by: N. Chambers	Assessment date: Janury 23 & 31, 2013

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

<p>.500(6)(a) Location and Landscape Support</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>5</td> <td>0</td> </tr> </table>	5	0	AA located adjacent to high-volume highway, and low quality forested wetlands. Wildlife access substantially limited by existing barriers (roadway, Lakeland Motorsports Park). Adjacent land uses consist of roadway. Subject to historic and ongoing impacts caused by land uses outside of AA (highways)
5	0		
<p>.500(6)(b)Water Environment (n/a for uplands)</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>4</td> <td>0</td> </tr> </table>	4	0	Water levels lower than normal. Hydrology severely altered by historic impacts/fragmentation. Minimal recruitment of desirable wetland species indicative of inappropriate hydrology.
4	0		
<p>.500(6)(c)Community structure</p> <p>1. Vegetation and/or 2. Benthic Community</p> <p>w/o pres or current with</p> <table border="1"> <tr> <td>5</td> <td>0</td> </tr> </table>	5	0	Presence of exotic/nuisance plant species.Topography of AA altered by past and ongoing, human-induced alterations. Evidence of increased mortality of canopy species. Ongoing maintenance within adjacent land uses has reduced natural recruitment within AA. Observed natural recruitment by shrub-scrub species.
5	0		

Score = sum of above scores/30 (if uplands, divide by 20)
current or w/o pres with
0.47 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.03

Delta = [with-current]
-0.47

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Appendix C
ETDM Summary Report

ETDM Summary Report

Project #13188 - State Road 33: from Old Combee Road to north of Tomkow Road

Preliminary Programming Screen - Published on 09/07/2011

Generated by Scott Swearngen (on behalf of FDOT District 1)

Printed on: 10/25/2011

Table of Contents

Chapter 1 Overview	2
Chapter 2 Project Details	3
2.1. Project Description Data	3
2.2. Purpose & Need Data	3
Chapter 3 Alternative #1	6
3.1. Alternative Description	6
3.2. Segment Description(s)	6
3.3. Project Effects Overview	6
3.4. ETAT Reviews and Coordinator Summary: Natural Issues	7
3.5. ETAT Reviews and Coordinator Summary: Cultural Issues	21
3.6. ETAT Reviews and Coordinator Summary: Community Issues	24
3.7. ETAT Reviews and Coordinator Summary: Secondary and Cumulative Issues	31
Chapter 4 Eliminated Alternative Information	33
4.1. Eliminated Alternatives	33
Chapter 5 Project Scope	34
5.1. General Project Commitments	34
5.2. Required Permits	34
5.3. Required Technical Studies	34
5.4. Dispute Resolution Activity Log	34
Chapter 6 Project-Level Hardcopy Maps	35
Appendices	56
7.1. Degree of Effect Legend	56
7.2. GIS Analyses	56

Introduction to Programming Screen Summary Report

The Programming Screen Summary Report shown below is a read-only version of information contained in the Programming Screen Summary Report generated by the ETDM Coordinator for the selected project after completion of the ETAT Programming Screen review. The purpose of the Programming Screen Summary Report is to summarize the results of the ETAT Programming Screen review of the project; provide details concerning agency comments about potential effects to natural, cultural, and community resources; and provide additional documentation of activities related to the Programming Phase for the project. Available information for a Programming Screen Summary Report includes:

- Screening Summary Report chart
- Project Description information (including a summary description of the project, a summary of public comments on the project, and community-desired features identified during public involvement activities)
- Purpose and Need information (including the Purpose and Need Statement and the results of agency reviews of the project Purpose and Need)
- Alternative-specific information, consisting of descriptions of each alternative and associated road segments; an overview of ETAT Programming Screen reviews for each alternative; and agency comments concerning potential effects and degree of effect, by issue, to natural, cultural, and community resources.
- Project Scope information, consisting of general project commitments resulting from the ETAT Programming Screen review, permits, and technical studies required (if any)
- Class of Action determined for the project
- Dispute Resolution Activity Log (if any)

The legend for the Degree of Effect chart is provided in an appendix to the report.

For complete documentation of the project record, also see the GIS Analysis Results Report published on the same date as the Programming Screen Summary Report.



#13188 State Road 33: from Old Combee Road to north of Tomkow Road

District	District 1	Phase	Programming Screen
County	Polk	From	north of Tomkow Road
Planning Organization	FDOT District 1	To	Old Combee Road
Plan ID		Financial Management No.	43018512201
Federal Involvement	Potential Future Federal Funding		
Contact Information	Name: Gwen Pipkin Phone: (863) 519-2375 ext. 2375 E-mail: gwen.pipkin@dot.state.fl.us		

Snapshot Data From: Programming Screen Summary Report Re-published on 09/07/2011 by Scott Swarengen

Overview

		Evaluation of Direct Effects																				
		Natural							Cultural			Community										
Legend		Air Quality	Coastal and Marine	Contaminated Sites	Farmlands	Floodplains	Infrastructure	Navigation	Special Designations	Water Quality and Quantity	Wetlands	Wildlife and Habitat	Historic and Archaeological Sites	Recreation Areas	Section 4(f) Potential	Aesthetics	Economic	Land Use	Mobility	Relocation	Social	Secondary and Cumulative Effects
N/A	N/A / No Involvement																					
0	None (after 12/5/2005)																					
1	Enhanced																					
2	Minimal (after 12/5/2005)																					
3	Moderate																					
4	Substantial																					
5	Dispute Resolution (Programming)																					
ETAT Review Period: 04/14/2011 - 05/29/2011. Re-Published: 09/07/2011																						
Alternative #1		2	0	2	2	2	2	N/A	2	3	3	3	3	1	2	3	1	2	1	2	3	2
From Old Combee Road to north of Tomkow Road		2	0	2	2	2	2	N/A	2	3	3	3	3	1	2	3	1	2	1	2	3	2

Project Description Data

Description Statement

This capacity improvement project involves the widening of State Road 33 (SR 33) from Old Combee Road/Deeson Pointe Boulevard (milepost 4.993) to north of Tomkow Road (milepost 8.714), in Lakeland, from two lanes to four lanes. SR 33 is a two lane facility with a functional classification of "urban minor arterial." The project is approximately 3.7 miles and will require approximately 155 feet of right-of-way. (See typical section for four lane divided suburban arterial in the "A1 Typical Roadway Sections" document on the ETDM Library on the EST website.) The project is listed in the Polk Transportation Planning Organization's 2035 Cost Affordable LRTP and is displayed as a committed improvement in the City of Lakeland Comprehensive Plan.

Summary of Public Comments not available at this time

Consistency

- Consistency with Air Quality Conformity is unknown.
- CONSISTENT with Coastal Zone Management Program.
- Consistent with Local Government Comp Plan.
- Consistent with MPO Goals and Objectives.

Potential Lead Agencies

- FL Department of Transportation

Exempted Agencies

Agency Name	Justification	Date
US Coast Guard	No navigable waterways in the vicinity of project.	04/06/2011
Federal Transit Administration	No transit facilities being considered as part of this project.	04/06/2011
Federal Rail Administration	No rail facilities being considered as part of this project.	04/06/2011

Community Desired Features

No desired features have been entered into the database. This does not necessarily imply that none have been identified.

Purpose and Need

Purpose and Need Statement

Consistency with Transportation Plan Goals and Objectives

The proposed project is consistent with the City of Lakeland's Comprehensive Plan and the Polk Transportation Planning Organization's (TPO) 2035 Long Range Transportation Plan (LRTP). The project is contained within a section of SR 33 identified as a four-lane improvement need and identified as cost feasible in the currently adopted 2035 LRTP. The project is also considered a committed improvement in the City of Lakeland Comprehensive Plan's Transportation and Capital Improvement Elements.

Purpose and Need Statement

Purpose
The capacity improvement project on SR 33 will enhance the connectivity of the local and regional roadway network, provide needed capacity to meet growing travel demand in northeast Lakeland, support population and employment growth in the area, enhance local and regional multimodal connectivity, and augment an existing emergency evacuation route. The purpose of the project is to identify reasonable alternatives that minimize environmental impacts and implementation costs and respond to public and stakeholder input to the maximum extent practical.

The need for the project is based on the following criteria:
> Area Wide Network/System Linkage - Improve the functional viability of SR 33 as a local and regional travel alternative to Interstate 4 and provide connectivity between central Lakeland and emerging developments in the northeast.
> Growth Management Planning - Improve multimodal access to emerging population and employment centers in northeast Lakeland.
> Modal Interrelationships - Support future multimodal needs by providing bus pullouts and shelter pads; enhanced pedestrian accessibility and safety, and enhanced bicycle access and mobility.
> Emergency Evacuation - Increase the volume of residents that can be evacuated during an emergency event.
> Capacity and Travel Demand - Provide additional roadway capacity on SR 33 to reduce anticipated delays caused by peak hour traffic congestion.

Need
Area Wide Network/System Linkage - The project will improve the functional viability of SR 33 as a local and regional travel alternative to Interstate 4. SR 33 provides connectivity to University Boulevard, a committed new four lane road serving the planned Williams DRI, Polk Commerce Center DRI, and future USF Polytechnic campus. University Boulevard and SR 33 will be the most direct link between these new residential and commercial centers and north and central Lakeland.

Growth Management Planning - Traffic on SR 33 is expected to increase due to projected population and employment growth both along the corridor and in the region. The table below shows the Polk Transportation Planning Organization's 2035 population and employment forecast for the adjacent traffic analysis zones. The adjacent TAZs account for growth related to the Williams DRI and USF Polytechnic campus, but not the Polk Commerce Center DRI, which will further contribute to traffic growth in the corridor.

EXISTING AND FUTURE POPULATION AND EMPLOYMENT GROWTH (2006 TO 2035)

Year	Population	Employment
2006	9,022	1,910
2035 Growth	19,989	5,917
2035 Total	10,967	4,007

Modal Interrelationships - This project includes provisions for multimodal interface with transit through the addition of bus pullouts and shelter pads

along both sides of SR 33 within the project limits. (These are included as specific payment items in the Bridgewater DRI Development Agreement.) The Polk LRTP shows an unfunded transit need along the SR 33 corridor within the project limits. The proposed improvements are anticipated to include bicycle lanes and sidewalks along both sides of the roadway. The resulting multimodal improvements will help to improve multimodal connections between neighborhoods immediately adjacent to the project and destinations nearby.

Emergency Evacuation - SR 33 is designated as a hurricane evacuation route by the Florida Division of Emergency Management. The proposed enhancement will increase the capacity of traffic that can be evacuated during an emergency event and improve emergency response times. The capacity improvement will also enhance accessibility to other evacuation routes like Interstate 4.

Capacity/Transportation Demand - This project provides increased capacity along SR 33 to meet the projected future travel demand. The existing roadway LOS along SR 33 is acceptable (LOS "C") with volumes around 10,000 AADT based on FDOT 2009 traffic counts. However, with the planned future growth in this area these volumes are expected to rise to approximately 15,400 AADT by 2035 amounting to a roadway LOS "D." While LOS "D" is acceptable, the roadway will experience moderate delays during peak travel conditions. The proposed widening to four lanes will allow SR 33 to meet future travel demand and continue to serve as an important regional arterial.

Purpose and Need Reviews

Agency	Acknowledgment	Review Date
FL Department of Environmental Protection	Understood	05/26/2011
FL Department of State	Understood	05/27/2011
FL Fish and Wildlife Conservation Commission	Understood	05/18/2011
Federal Highway Administration	Not Understood	06/02/2011

Comments: FHWA has reviewed the Purpose and Need statement for the proposed capacity improvements to SR 33 in Polk County. Consistency:

The project summary states "The project is contained within a section of SR 33 identified as a four-lane improvement need and identified as cost feasible in the currently adopted 2035 LRTP." There are three segments to SR33 identified in the plan.

Which section of SR 33 is this project located within?

Please note that the project must be consistent within the STIP and TIP prior to FHWA signing environmental documents.

No public comments are included in the Advance Notice document.

Has this project been presented to local residents?

Purpose:

The purpose of this project is to increase capacity and functionality of SR 33 as described in the first sentence of the Purpose statement. The second sentence under the "Purpose" heading should be removed.

Please provide reasoning for the southern terminus for this project.

Need:

The proposed widening provides LOS improvements for projected needs but additional alternatives and information which might remedy the projected LOS should be explored before determining a plan of action. The current LOS in the area is "C" and the projected LOS "D" in 2035 is an acceptable LOS therefore need based on LOS is not proven. If the need for the project is based modeling assumptions for future traffic in 2035, then the data to support those models should be clearly documented and based on the most recent information (including the current economic situation that typically shows reduced population growth and VMT).

Please provide project LOS after additional lanes.

What alternatives, including multi-modal, have been considered in addition to the 'no build' and widening options (for example; traffic management techniques, turning lanes, adding bike paths, adding bus routes and associated pull offs and shelters)?

Please identify data and model used to predict traffic volumes on existing SR 33.

Please identify the assumptions used for the traffic projections, including whether they are consistent with the low, medium or high ranges of the Bureau of Economic and Business Research (BEBR) population growth projections.

Does the projected LOS consider the reduction from 4 to 2 lanes between Lakeland Harbor Blvd and Deep Forest Ct?

No safety related need is identified in the current Purpose and Need Statement which might justify the project. ETDM GIS analysis identified 3 fatalities over 2 years (2005-2007) within 200 feet of the project area.

If safety is a justification for providing extra lanes then please provide additional accident data and how projected improvements would change the current conditions.

Though enhancement to existing facilities is reasonable it does not define a Need for the project.

Please identify or better define specific needs in order to identify the best alternative(s) to meet those needs.

National Marine Fisheries Service	Understood	04/25/2011
Natural Resources Conservation Service	Understood	04/18/2011
Southwest Florida Water Management District	Understood	05/26/2011
US Army Corps of Engineers	Understood	05/27/2011

US Environmental Protection Agency	Understood	06/07/2011
US Fish and Wildlife Service	Understood	04/25/2011
The following organizations were notified but did not submit a review of the Purpose and Need statement:		
<ul style="list-style-type: none">- FL Department of Agriculture and Consumer Services- FL Department of Community Affairs- National Park Service- Seminole Tribe of Florida		

Alternative #1

Alternative Description

From:	Old Combee Road	To:	north of Tomkow Road
Type:	Widening	Status:	ETAT Review Complete
Total Length:	3.97 mi.	Cost:	
Modes:	Roadway	SIS:	N

Segment Description(s)

Location and Length							
Segment No.	Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP

3.97

Jurisdiction and Class			
Segment No.	Jurisdiction	Urban Service Area	Functional Class

Base Conditions				
Segment No.	Year	AADT	Lanes	Config

Interim Plan				
Segment No.	Year	AADT	Lanes	Config

Needs Plan				
Segment No.	Year	AADT	Lanes	Config

Cost Feasible Plan				
Segment No.	Year	AADT	Lanes	Config

Funding Sources

No funding sources found.

Project Effects Overview

Issue	Degree of Effect	Organization	Date Reviewed
Natural			
Air Quality	0 None	US Environmental Protection Agency	06/07/2011
Coastal and Marine	0 None	Southwest Florida Water Management District	05/26/2011
Coastal and Marine	N/A N/A / No Involvement	National Marine Fisheries Service	04/25/2011
Contaminated Sites	0 None	US Environmental Protection Agency	06/07/2011
Contaminated Sites	0 None	FL Department of Environmental Protection	05/26/2011
Contaminated Sites	2 Minimal	Southwest Florida Water Management District	05/26/2011
Farmlands	2 Minimal	Natural Resources Conservation Service	04/18/2011
Floodplains	2 Minimal	US Environmental Protection Agency	06/07/2011
Floodplains	2 Minimal	Southwest Florida Water Management District	05/26/2011
Infrastructure	2 Minimal	Southwest Florida Water Management District	05/26/2011
Navigation	0 None	US Army Corps of Engineers	08/02/2011
Special Designations	0 None	US Environmental Protection Agency	06/07/2011
Special Designations	2 Minimal	Southwest Florida Water Management District	05/26/2011
Water Quality and Quantity	3 Moderate	US Environmental Protection Agency	06/07/2011
Water Quality and Quantity	2 Minimal	FL Department of Environmental Protection	05/26/2011
Water Quality and Quantity	3 Moderate	Southwest Florida Water Management District	05/26/2011
Wetlands	3 Moderate	US Environmental Protection Agency	06/07/2011
Wetlands	3 Moderate	Federal Highway Administration	06/02/2011
Wetlands	3 Moderate	US Army Corps of Engineers	05/27/2011

Wetlands	2	Minimal	FL Department of Environmental Protection	05/26/2011
Wetlands	3	Moderate	Southwest Florida Water Management District	05/26/2011
Wetlands	N/A	N/A / No Involvement	National Marine Fisheries Service	04/25/2011
Wetlands	3	Moderate	US Fish and Wildlife Service	04/25/2011
Wildlife and Habitat	3	Moderate	Southwest Florida Water Management District	05/26/2011
Wildlife and Habitat	3	Moderate	FL Fish and Wildlife Conservation Commission	05/18/2011
Wildlife and Habitat	3	Moderate	US Fish and Wildlife Service	04/25/2011
Cultural				
Historic and Archaeological Sites	3	Moderate	FL Department of State	05/27/2011
Historic and Archaeological Sites	0	None	Southwest Florida Water Management District	05/26/2011
Historic and Archaeological Sites	3	Moderate	Seminole Tribe of Florida	04/25/2011
Recreation Areas	0	None	US Environmental Protection Agency	06/07/2011
Recreation Areas	1	Enhanced	FL Department of Environmental Protection	05/26/2011
Recreation Areas	0	None	Southwest Florida Water Management District	05/26/2011
Section 4(f) Potential	2	Minimal	Federal Highway Administration	06/02/2011
Community				
Aesthetics	2	Minimal	Federal Highway Administration	06/02/2011
Aesthetics	3	Moderate	FDOT District 1	06/02/2011
Economic	1	Enhanced	FDOT District 1	06/02/2011
Land Use	2	Minimal	Federal Highway Administration	06/02/2011
Land Use	2	Minimal	FDOT District 1	06/02/2011
Mobility	1	Enhanced	FDOT District 1	06/02/2011
Mobility	1	Enhanced	FL Department of Environmental Protection	05/26/2011
Relocation	3	Moderate	Federal Highway Administration	06/02/2011
Relocation	0	None	FDOT District 1	06/02/2011
Social	0	None	US Environmental Protection Agency	06/07/2011
Social	3	Moderate	Federal Highway Administration	06/02/2011
Social	2	Minimal	FDOT District 1	06/02/2011
Secondary and Cumulative				
Secondary and Cumulative Effects	3	Moderate	Southwest Florida Water Management District	05/26/2011

ETAT Reviews and Coordinator Summary: Natural Issues

Coordinator Summary: Air Quality Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

Comments: The USEPA did not identify any air quality issues associated with this project.

Polk County is not within a designated Air Quality Non-Attainment Area or Maintenance Area for any of the four pollutants - nitrogen oxides, ozone, carbon monoxide, and small particulate matter - specified by the USEPA in National Ambient Air Quality Standards. According to the EST GIS analysis results, however, the project is located within an area identified as noncompliant with 2006-2008 and 2007-2009 ozone standards established by the USEPA and, therefore, considered a 'presumptive nonattainment area' for ozone.

Overall, the project is not expected to result in adverse effects to air quality. Because temporary impacts to air quality may occur during road construction as a result of fugitive dust and exhaust emissions, a Summary DOE of Minimal has been assigned to the Air Quality issue.

Commitments and Responses: An Air Quality Report will not be required for this project.

Technical Study: None.

ETAT Reviews: Air Quality Issue: 1 found

0 None assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

Coordination Document: No Selection
Dispute Information: N/A
Identified Resources and Level of Importance: None found.
Comments on Effects to Resources: None found.
Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Air Quality issue for this alternative: Federal Highway Administration

Coordinator Summary: Coastal and Marine Issue

0 None assigned 08/10/2011 by FDOT District 1

Comments: The NMFS conducted a site inspection of the project study area on 22 April 2011 to assess potential concerns to living estuarine and marine resources. The NMFS reported that it does not appear that the project will result in any direct or indirect impacts to NMFS trust resources.
Coordination Document: No Involvement.

The SWFWMD did not identify any coastal or marine issues associated with this project. **Coordination Document:** No Involvement.

The project is not located within a coastal area; therefore, it is not anticipated to affect marine resources. For this reason, a Summary DOE of None has been assigned to the Coastal and Marine issue.

Commitments and Responses: An Essential Fish Habitat (EFH) Assessment will not be included in the scoping recommendations for this project.

Technical Study: None.

ETAT Reviews: Coastal and Marine Issue: 2 found

0 None assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: No Involvement
Dispute Information: N/A
Identified Resources and Level of Importance: None found.
Comments on Effects to Resources: None found.
Coordinator Feedback: None

N/A N/A / No Involvement assigned 04/25/2011 by David A. Rydene, National Marine Fisheries Service

Coordination Document: No Involvement
Dispute Information: N/A
Identified Resources and Level of Importance: None.
Comments on Effects to Resources: NOAA's National Marine Fisheries Service (NMFS) has reviewed the information contained in the Environmental Screening Tool for ETDM Project # 13188. The Florida Department of Transportation District 1 proposes widening US 33 from Old Combee Road to north of Tomkow Road in Polk County, Florida. The road would be widened from two lanes to four lanes

NMFS staff conducted a site inspection of the project area on April 22, 2011, to assess potential concerns regarding living aquatic resources. It does not appear that there will be any direct or indirect impacts to NMFS trust resources. Since the resources affected are not ones for which NMFS is responsible, we have no comment to provide regarding the project's impacts.

Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Coastal and Marine issue for this alternative: Federal Highway Administration

Coordinator Summary: Contaminated Sites Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

Comments: The FDEP did not identify any contamination issues associated with this project.

The SWFWMD reported that while no potentially contaminated sites were observed within the immediate project vicinity during the field assessment conducted on 18 April 2011, the 500-foot project buffer contains multiple onsite sewage treatment facilities (including septic tanks and drain fields). The project is also located within a phosphate mining reclamation area. The SWFWMD stated that there may be unreported contamination sources within the 100-foot to 500-foot project buffers due to the former mining activities within the area. **Coordination Document:** Permit Required.

The USEPA did not identify any contamination issues associated with this project.

According to the EST GIS analysis results, there are no Brownfield locations, hazardous waste sites, National Priority List sites, nuclear sites, RCRA-regulated facilities, Superfund hazardous waste sites, or Toxic Release Inventory sites located within the 200-foot buffer of this project. In addition, the Onsite Sewage Treatment and Disposal Systems reported through the EST GIS analysis results within the project's 500-foot buffer consist of permitted residential and commercial septic tanks. Based on the fact that the project study area is located within a former phosphate mining region, however, a Contamination Screening Evaluation is recommended for this project. As a result, a Summary DOE of Minimal has been assigned to the Contaminated Sites issue.

Commitments and Responses: Preparation of a Contamination Screening Evaluation Report will be included in the scoping recommendations for this project.

ETAT Reviews: Contaminated Sites Issue: 3 found

0 None assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

Coordination Document: No Selection
Dispute Information: N/A
Identified Resources and Level of Importance: None found.
Comments on Effects to Resources: None found.
Coordinator Feedback: None

0 None assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: No Selection
Dispute Information: N/A
Identified Resources and Level of Importance: None found.
Comments on Effects to Resources: None found.
Coordinator Feedback: None

2 Minimal assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required
Dispute Information: N/A
Identified Resources and Level of Importance: No potentially contaminated sites were observed on the day of the onsite visit (18APR2011). However, there are multiple onsite sewage treatment facilities (including septic tanks and drain fields) located within 500 feet of the project, and the project area is reclaimed from former phosphate mining activities. There may be additional, unrecorded contaminated sites within the 100-foot to 500-foot buffers for the project.

The project is located in former mining areas and it is possible that there are very local patches of increased vulnerability due to the past disturbance and removal of overburden materials composing the intermediate and surficial aquifers. The project area may be in a Karst area, according to the District publication: "Development of Proposed Environmental Resource Permit Criteria for Sensitive Karst Areas," SWRF, LLC, September 2007.

Regionally, the pollution potential of the Floridan Aquifer is moderate as indicated by DRASTIC scores between 138 and 140 within the 100-foot to 500-foot buffer area. The pollution potential of the intact intermediate aquifer is lower, with DRASTIC scores ranging between 93 and 95; however, the material composing the intermediate aquifer may be absent in some local areas within 500 feet of the project. The DRASTIC score for the intact surficial aquifer is the highest of the three aquifers at approximately 186. Where present, this aquifer system would be the most vulnerable to pollution; however, it may be locally absent within the 500-foot buffer area. The regional DRASTIC scores are consistent with the regional FAVA vulnerability response.

Within 100 - 500 feet of the project, the recharge rate to the Floridan is estimated at 1- 10 inches/year.

Comments on Effects to Resources: If encountered and disturbed during construction, contaminated soils or other materials could result in surface and/or groundwater pollution. Because of the proximity of Lake Deeson the pollution vulnerability of the Floridan Aquifer, the pollution potential of project construction activities may be high as a result of contamination entering surface or ground water from untreated or under-treated stormwater runoff or the interception of contaminated soils.

Additional Comments (optional): The SWFWMD has assigned a Degree of Effect based on their opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory interests and obligations.

To minimize groundwater and surface water pollution potential, it may be helpful to:

1. Confirm the presence or absence of existing potable supply wells, both public and domestic, and identify precisely all potential sources of contamination within the path of construction or in proximity of the proposed surface water management systems;
2. Avoid known contaminated sites where possible in the selection of the project alignment and stormwater runoff facilities;
3. Thoroughly evaluate potential stormwater treatment facility sites for the presence of contamination and eliminate contaminated sites as possible pond sites; and
4. Design and construct stormwater treatment facilities to prevent physical disturbance and water quality impacts to the Floridan Aquifer.

Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Contaminated Sites issue for this alternative: Federal Highway Administration

Coordinator Summary: Farmlands Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

Comments: The NRCS commented that no Prime Farmland soils occur within any of the project buffer widths based on the EST GIS analysis results. The NRCS reported, however, that Unique Farmland soils exist within the project area; the amounts range from 12.6 acres within the 100-foot project buffer to 55.4 acres within the 500-foot buffer. The NRCS indicated that while impacts to Farmlands of Unique Importance are restricted to the extreme southwestern part of the project, this area has been converted to residential uses since the soil survey was originally published. As such, the impact to important farmlands is negligible.

According to the EST GIS analysis results, 24.8 acres (12.72%) of Farmland of Unique Importance are located within the 200-foot project buffer. Consistent with the City of Lakeland's Comprehensive Plan and the Polk Transportation Planning Organization's (TPO) 2035 Long Range Transportation Plan (LRTP), the project occurs within an area characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. Future land use plans call for increased residential, industrial, and mixed use

developments in the area. For these reasons, a Summary DOE of Minimal has been assigned to the Farmlands issue.

Commitments and Responses: A Farmlands Assessment will not be required for this project.

Technical Study: None.

ETAT Reviews: Farmlands Issue: 1 found

2 *Minimal* assigned 04/18/2011 by Rick Allen Robbins, Natural Resources Conservation Service

Coordination Document: No Selection

Dispute Information:N/A

Identified Resources and Level of Importance: The USDA-NRCS considers soil map units with important soil properties for agricultural uses to be Prime Farmland. In addition, the USDA-NRCS considers any soils with important soil properties and have significant acreages that are used in the production of commodity crops (such as, cotton, citrus, row crops, specialty crops, nuts, etc.) to be considered as Farmlands of Unique Importance. Nationally, there has been a reduction in the overall amount of Prime and Unique Farmlands through conversion to non-farm uses. This trend has the possibility of impacting the nation's food supply and exporting capabilities.

Comments on Effects to Resources: Conducting GIS analysis of Prime Farmland (using USDA-NRCS data) and Important (Unique) Farmland Analysis (using 2010 SSURGO data) has resulted in the determination that there are no Prime Farmland Soils at any buffer width. However, there are Unique Farmland soils at all buffer widths within the Project Area. The amounts range from 12.6 acres at the 100' buffer width and 55.4 acres at the 500' buffer width. The impact to Farmlands of Unique Importance is restricted to the extreme southwestern part of the project. This area has been converted to residential uses since the soil survey was originally published. In this circumstance, the impact to important farmlands is negligible. Therefore, we are assigning a Minimal Degree of Impact for this project.

CLC Commitments and Recommendations: Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Farmlands issue for this alternative: Federal Highway Administration

Coordinator Summary: Floodplains Issue

2 *Minimal* assigned 08/10/2011 by FDOT District 1

Comments: The SWFWMD commented that approximately 0.019 acre of DFIRM Flood Zone A occurs within the project's 100-foot buffer; this small area extends along the eastern right-of-way of SR 33 and is occupied by a forested wetland of good quality. The SWFWMD also noted that 1.7 acres of Flood Zone A occur within the 200-foot project buffer; the remainder of the project area occurs within Flood Zone X. The SWFWMD additionally mentioned that the project crosses a ditch (approximately 500 feet south of Village Lakes Boulevard) that connects two artificial ponds located east and west of SR 33. The SWFWMD further noted that the addition of fill to this ditch may require floodplain compensation if floodplain stage is altered. Coordination Document: Permit Required.

The USEPA reported that while approximately 1.7 acres of Hazardous Flood Zone is located within the 200-foot project buffer, impact on the floodplain is likely to be minimal. The USEPA indicated that impacts can be minimized by increasing drainage efficiency and coordinating with other agencies to avoid and mitigate.

According to the EST GIS analysis results, only 1.7 acres (0.84%) of the project's 200-foot buffer is located within FEMA Flood Zone A (an area within the 100-year floodplain for which base flood elevations have not been determined). The remaining 193.7 acres (99.16%) of the project's 200-foot buffer occurs within FEMA Flood Zone X (an area determined to be outside of the 100- and 500-year floodplains). Based on the foregoing, a Summary DOE of Minimal has been assigned to the Floodplains issue.

Commitments and Responses: A Floodplains Assessment will be included in the scoping recommendations for this project.

Technical Study: Floodplains Assessment.

ETAT Reviews: Floodplains Issue: 2 found

2 *Minimal* assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

Coordination Document: No Selection

Dispute Information:N/A

Identified Resources and Level of Importance: Less than two acres in the 200-foot buffer zone.

Comments on Effects to Resources: About 1.7 acres of Hazardous Flood Zone is identified to be within the 200 foot buffer. Impact on the floodplain is likely, but is minimal. This impact can be minimized by increasing drainage efficiency and coordinating with other agencies to avoid and mitigate the impact. Areas that will be filled in should be carefully designed to minimize impacts on adjacent properties.

Coordinator Feedback: None

2 *Minimal* assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Dispute Information:N/A

Identified Resources and Level of Importance: Approximately 0.019 acre of DFIRM Zone A occurs within the 100-foot project buffer. This small area extends along the eastern ROW of SR 33 for an approximate length of 400 feet commencing at a point located 191 feet south of the SR 33/Tomkow Rd intersection. This area is occupied by a forested wetland that is of good quality. The remainder of the project appears to be located in Zone X. Within the 200-foot buffer, the area expands to 1.7 acres.

It should be noted that there is potential for the project to affect several other areas of historic basin storage that may require compensation but have not been identified on the FEMA flood plain maps or the map updates. One such area may be the ditch passing under SR-33 at a point 507 feet

southwest of the SR-33/Village Lakes Blvd intersection. This ditch connects two artificial ponds that are located on the east and west sides of SR 33. **Comments on Effects to Resources:** If the project were to result in fill placed within a floodplain or historic basin storage area, there would be the potential to raise the floodplain stage or to prolong the duration of flooding.

Additional Comments (optional): The SWFWMD has assigned a Degree of Effect based on their opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory interests and obligations.

If recent, reliable data indicate that floodplain impacts will occur, such impacts can be reduced or eliminated by providing compensation for lost floodplain storage.

For those improvements that may affect the existing cross drainage facilities, a bridge hydraulics report should be prepared and submitted with the Environmental Resource Permit application.

In the future, Polk County and the SWFWMD may update the FEMA Flood Insurance Rate Maps (FIRMs) using limited hydraulic and hydrologic modeling and approximate methods using recent land cover data. These data may be useful in the design of the project.

Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Floodplains issue for this alternative: FL Department of Environmental Protection, Federal Highway Administration

Coordinator Summary: Infrastructure Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

Comments: The SWFWMD reported that two groundwater sampling wells are located within the 200-foot project buffer; three National Geodetic Survey Benchmarks are also located near the proposed project. The SWFWMD recommends that FDOT contact the SWFWMD Hydrologic Data Section in the Brooksville Office to discuss potential impacts to the data collection sites as the disruption of data collection can adversely affect the quality of long term analysis. Coordination Document: To Be Determined: Further Coordination Required.

According to the EST GIS analysis results, the following infrastructure-related features are present within the 500-foot project buffer: one FDEM fire station, one limited use drinking water well, and 466.4 linear feet of railway (railroad siding). USEPA Water Quality Data Monitoring Stations were only identified within the 5,280-foot project buffer. While a limited number of infrastructure-related features are located within the immediate project vicinity, due to agency concerns regarding potential impacts to data collection sites, a Summary DOE of Minimal has been assigned to the Infrastructure issue.

Commitments and Responses: None.

Technical Study: None.

ETAT Reviews: Infrastructure Issue: 1 found

2 Minimal assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: To Be Determined: Further Coordination Required

Dispute Information: N/A

Identified Resources and Level of Importance: Two groundwater sampling wells (Site IDs: 17568 and 17567) are located within 200-feet of the proposed alternative. Additional infrastructure information is provided below:

SITE_ID	SITE_NAME	SITE_TYPE1	SITE_PRI_1	SITE_STATUS
17622	SADDLE CREEK	WT	Atmospheric Rainfall	Inactive
17569	WILLIAMS POND	CLAY MONITOR	SURF	Groundwater Well Inactive
17623	I-4 DEEP WELL	NR	POLK CITY	Groundwater Well Inactive
17567	COMBEE ROAD	DEEP		Groundwater Well Active
17674	LAKELAND HILLS	DEEP	NR LAKELAND	Groundwater Well Inactive
17568	STATE ROAD 33-COMBEE ROAD	SHALLOW		Groundwater Well Active

The following NGS Benchmarks are located near this proposed SR-33 widening project:

- http://www.ngs.noaa.gov/cgi-bin/ds_mark.prl?PidBox=AK1542
- http://www.ngs.noaa.gov/cgi-bin/ds_mark.prl?PidBox=AK1540
- http://www.ngs.noaa.gov/cgi-bin/ds_mark.prl?PidBox=AK1541

Comments on Effects to Resources: Disruption of data collection can adversely affect the quality of long term analysis.

Additional Comments (optional): The FDOT is encouraged to contact the District's Hydrologic Data Section in the Brooksville headquarters to discuss potential impacts to the District's data collection sites.

Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Infrastructure issue for this alternative: Federal Highway Administration

Coordinator Summary: Navigation Issue

N/A N/A / No Involvement assigned 08/10/2011 by FDOT District 1

Comments: The USACE did not identify any navigable waterways within the project study area. The USACE stated that the study should ensure navigation will remain unaffected in case an important factor was overlooked. Coordination Document: PD&E Support Document as per PD&E Manual.

The project does not cross any navigable waterways. For this reason, a Summary DOE of N/A / No Involvement has been assigned to the Navigation issue.

Commitments and Responses: A Navigation Study, Bridge Questionnaire, and USCG Bridge Permit will not be required for this project.

Technical Study: None.
Permit: None.

ETAT Reviews: Navigation Issue: 1 found

0 None assigned 08/02/2011 by Garrett Lips, US Army Corps of Engineers

Coordination Document: PD&E Support Document As Per PD&E Manual

Dispute Information:N/A

Identified Resources and Level of Importance: The EST identified no navigable waterways or marine facilities so the degree of effect should be none for navigation; however, the study should ensure navigation will remain unaffected if the EST overlooked an important factor.

The EST also identified approximately less than 10 acres of NWI wetlands within 200 feet of the roadway corridor, and approximately 28 acres of wetlands within 500 feet of the roadway. The Corps expects the study and design to implement alternatives and design configurations that avoid wetlands to the extent practical. The Corps recommends the FDOT to study not only alternatives that achieve the project purpose and are feasible but also recommend FDOT to consider a design with the smallest environmental footprint from the onset of the study and not to propose overly aggressive sprawling roadway configurations in anticipation of future changes to water quality requirements, for instance. We recommend modest roadway designs with only the minimum, yet safe, travel lane widths and recommend the maximum use of barriers in lieu of wide shoulders or medians, and retaining walls in areas of wetlands to reduce the overall roadway footprint. The Corps agrees with the FHWA project concept of "every day counts" and supports the process to accelerate project delivery and to maximize protection of the environment.

CERP projects: The EST did not identify any CERP project within the area of the proposed project.

Comments on Effects to Resources: The Corps recommends avoidance of all wetlands and waters where practicable alternatives exist. The impacts must implement measures to minimize impacts to the extent practical. However, if unavoidable impacts are anticipated, the Corps recommends the FDOT to follow the most current regulations regarding compensatory mitigation. Currently, the hierarchy preference is for mitigation bank credit purchase.

CLC Commitments and Recommendations: Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Navigation issue for this alternative: Federal Highway Administration

Coordinator Summary: Special Designations Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

Comments: The SWFWMD reported that the 7,000-acre FWC Tenoroc Fish Management Area occurs approximately 300 feet south of the project, and the northernmost portion of the project (0.02 mile) is located within the Green Swamp Area of Critical State Concern; the area to potentially be affected, however, is located on the extreme edge of the Area of Critical State Concern. The SWFWMD stated that project effects to these resources are expected to be minimal as SR 33 is an existing roadway and the proposed impact areas have previously been disturbed by development. Coordination Document: Permit Required.

The USEPA did not identify any issues associated with resources of special designation for this project.

According to the EST GIS analysis results, the Green Swamp Area of Critical State Concern is the only resource of special designation reported within the 200-foot project buffer. Avoidance and minimization will be addressed during the project's design and permitting phase, and best management practices will be implemented during project construction activities. In addition, the project study area is located within a previously disturbed region of the Green Swamp along its southern boundary. Therefore, a Summary DOE of Minimal has been assigned to the Special Designations issue.

Commitments and Responses: None.

Technical Study: None.

ETAT Reviews: Special Designations Issue: 2 found

0 None assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

Coordination Document: No Selection

Dispute Information:N/A

Identified Resources and Level of Importance: None found.

Comments on Effects to Resources: None found.

Coordinator Feedback: None

2 Minimal assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Dispute Information:N/A

Identified Resources and Level of Importance: The 7,000-acre FFWCC Tenoroc Fish Management Area is located 307 feet south of the project in the vicinity of the Old Combee Rd/Deeson Pointe Blvd intersection. The main entrance to the facility is located off CR-33A/CR-659 and is accessed from I-4 Exit 38 (SR33).

Approximately 0.02 mile of the project at the north terminus is located in the Green Swamp Area of Critical Concern. Within this 0.02-mile length, land use/cover includes the northern tip of a 9-acre forested wetland, a driveway into a parking lot, mowed SR 33 ROW and a 0.9-acre disturbed upland forested area.

Most of the project is located within the Withlacoochee Environmental Management Area. Less than 1% of the project (at the west terminus) is located within the Charlotte Harbor Environmental Management Area.

The proposed site is located within an area previously identified as a Sensitive Karst Area (see "Development of Proposed Environmental Resource Permit Criteria for Sensitive Karst Areas" by SWRF, L.L.C. (fka Storm Water Resources of Florida, L.C.) by the Southwest Florida Water Management District, 9/2007)

Comments on Effects to Resources: Effects are expected to be minimal. SR-33 is an existing facility; the very small area of impact is already disturbed, and the affected area is located on the extreme edge of the Area of Critical Concern.

Additional Comments (optional): The SWFWMD has assigned a Degree of Effect based on their opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory and proprietary interests and obligations.

Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Special Designations issue for this alternative: FL Department of Agriculture and Consumer Services, Federal Highway Administration

Coordinator Summary: Water Quality and Quantity Issue

3 *Moderate* assigned 08/10/2011 by FDOT District 1

Comments: The FDEP commented that the project is located within the hydrologic boundaries of the Green Swamp Area of Critical State Concern and that the watershed conditions in the project area are generally good. The FDEP reported that stormwater runoff from the road surface may alter adjacent wetlands and surface waters through increased pollutant loading; therefore, every effort should be made to maximize the treatment of stormwater runoff to prevent ground and surface water contamination. The FDEP recommends that the PD&E study include an evaluation of existing stormwater treatment adequacy and details on future stormwater treatment facilities. Coordination Document: Permit Required.

The SWFWMD reported that the project is located within three impaired basins: Lake Deeson (WBID 1449A), Saddle Creek (WBID 1497), and Lake Tenoroc (WBID 1497C). The SWFWMD noted that the existing swale system associated with SR 33 appears to provide both attenuation and water quality treatment for stormwater runoff; however, the existing culverts need maintenance. Within the project's 200-foot buffer, the SWFWMD identified a stormwater management system that may belong to Arbor Glenn Apartments and a stormwater ditch that drains to Lakeland Harbor Mobile Home Park. The SWFWMD commented that any impacts to the existing stormwater management system will require storage compensation. The SWFWMD also stated that localized patches of increased vulnerability to the three aquifers (Floridan, intermediate, and surficial) may exist due to the former mining activities in the area. The SWFWMD recommends that:

- FDOT refer to the Peace River watershed study to confirm watershed boundaries and obtain the latest topographic information;
- Stormwater ponds be designed as shallow as practical and that geotechnical evaluations be conducted within potential pond sites in order to determine the potential for sinkhole development;
- A pre-application meeting be conducted prior to submittal of the ERP application (Note: an existing pre-application file (#398253) is being maintained at the SWFWMD Brooksville Service Office); and
- FDOT refer to 1) the list of Environmental Resource Permits located within the project's 200-foot buffer and 2) specific studies containing useful water quality and hydrologic information that can be accessed through the SWFWMD's online library during future phases of project development.

Coordination Document: Permit Required.

The USEPA indicated that the project has the potential to increase impervious surface in the area, which will impact the water flow and water quality in the Saddle Creek basin (which includes Lake Gibson, Lake Parker, and Lake Crago); the Green Swamp (Withlacoochee River basin); and several unnamed ponds and ditches. The USEPA stated that stormwater treatment should be optimized to minimize the impact of runoff.

There are no Outstanding Florida Waters or Aquatic Preserves located within the project's 200-foot buffer. While the project will be designed to meet state water quality and quantity standards, a Summary DOE of Moderate has been assigned to the Water Quality and Quantity issue due to the presence of impaired waters within the project study area.

Commitments and Responses: A Water Quality Impact Evaluation (WQIE), per FDOT guidance, will be included in the scoping recommendations for this project.

Technical Study: Water Quality Impact Evaluation (WQIE).

Permit: Environmental Resource Permit.

ETAT Reviews: Water Quality and Quantity Issue: 3 found

3 *Moderate* assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

Coordination Document: No Selection

Dispute Information: N/A

Identified Resources and Level of Importance: The Project area impacts the Saddle Creek basin, which also includes Lake Gibson, Lake Parker, Lake Crago, the Green Swamp (Withlacoochee River basin), and several unnamed ponds and ditches.

Comments on Effects to Resources: The proposed widening will significantly increase the impervious area, therefore will impact the water flow and water quality. Stormwater treatment should be optimized to minimize the impact of runoff on the water bodies listed above. The moderate degree of effect is assigned based on the scale of the project and the potential level of impact.

Coordinator Feedback: None

2 *Minimal* assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: Permit Required

Dispute Information: N/A

Identified Resources and Level of Importance: The proposed project is within the hydrologic boundaries of the Green Swamp. The watershed conditions in the project area are generally good. Stormwater runoff from the road surface may alter adjacent wetlands and surface waters through

increased pollutant loading. Increased runoff carrying oils, greases, metals, sediment, and other pollutants from the increased impervious surface will be of concern. Natural resource impacts within and adjacent to the proposed road right-of-way will likely include alteration of the existing surface water hydrology and natural drainage patterns, and reduction in flood attenuation capacity of area creeks, ditches, and sloughs as a result of increased impervious surface within the watershed.

Comments on Effects to Resources: Every effort should be made to maximize the treatment of stormwater runoff from the proposed road project to prevent ground and surface water contamination. Stormwater treatment should be designed to maintain the natural predevelopment hydroperiod and water quality, as well as to protect the natural functions of adjacent wetlands. We recommend that the PD&E study include an evaluation of existing stormwater treatment adequacy and details on the future stormwater treatment facilities. Retro-fitting of stormwater conveyance systems would help reduce impacts to water quality.

Coordinator Feedback: None

3 Moderate assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Dispute Information:N/A

Identified Resources and Level of Importance: The south terminus of the project occupies a drainage divide between the Withlacoochee River Watershed and the Peace River Watershed. The extreme end of the south terminus is located in the Peace River Basin, specifically the Saddle Creek basin (WBID 1497) which also includes Lake Gibson (WBID 1497D), Lake Parker (WBID 1497B) and Lake Crago (WBID 1497D1). The remainder of the project occupies the Orange Hammock Drain basin (WBID 1449) which contributes flows to the Green Swamp, thence the Withlacoochee River. Also included in the Withlacoochee Basin is the Lake Deeson drainage basin (WBID 1449A), a closed system located within 600 feet of the project. Other waterbodies within the 500-foot buffer area include several unnamed ponds and ditches.

Surface waterbodies within the project area include: Lake Deeson; Lake Tenoroc and the other ponds on the Tenoroc Fish Management Area which is located 307 feet south of the project; numerous artificial ponds remaining after mining ceased; golf course ponds, and stormwater ponds. Two of the larger artificial ponds are connected under SR 33 by means of a ditch located at a point 507 feet southwest of the SR 33/Village Lakes Blvd intersection. The ditch is approximately 992 feet in length and there is a small weir structure across the ditch at approximately 300 feet northwest of SR 33.

The November 02, 2010 Verified List of Impaired Waters includes the following TMDL information relevant to the District's permitting interests for this project: Lake Deeson basin (WBID 1449A) is impaired for nutrients.

The January 15, 2010 Verified List of Impaired Waters includes the following TMDL information relevant to the District's permitting interests for this project:

Saddle Creek basin (WBID 1497) is impaired for nutrients, coliform bacteria and dissolved oxygen;

Lake Tenoroc basin (WBID 1497C) is impaired for nutrients.

During site visits on 08/11/2010 and 04/18/11, culverts were observed across and near the proposed project. Based on the field reconnaissance, the existing swale system seems to be providing both attenuation and water quality treatment of the runoff from the SR-33. However, the culverts that were observed need maintenance. Erosion and sediment were observed in and at the culverts. The culverts seem to have been modified in the past and may need more modification due to the proposed expansion to four lanes.

At the Melody Lane and Old Combee Road Intersection, an RCP culvert is located across SR-33. Also, a Stormwater Management System that possibly belongs to the Arbor Glenn Apartments is located within the 200 foot proposed segment buffer corridor north of SR-33. To the South, within the 200 foot buffer, a stormwater ditch is located that drains into Lakeland Harbor Mobile Home Park. Provisions must be made in terms of storage compensation should the proposed project affect the stormwater pond.

The proposed alternative is located within 200-feet of several existing Environmental Resource Permits, as follows:

7112.005 - COL East West Road Permit Modification (City of Lakeland)
2832.001 - FDOT SR 33 Widening I-4 to Old Combee Road (Florida Department of Transportation)
19706.000 - THE ATRIUM APARTMENT HOMES (Parke 33-Ph Ii Llc & Courtyd Etc)
7065.000 - DOT-PARK & RIDE LOT, SR 33 & I-4 (Florida Dept Of Transportation)
2832.000 - DOT-S.R. 33 (Florida Dept Of Transportation)
10752.000 - LAKE DEESON WOODS (North Oaks Partnership)
25559.000 - LAKELAND-FIRE STATION 6 (City Of Lakeland Facilities & Const Mgmt)
21375.002 - FIRST PARK AT BRIDGEWATER PHASE 1 (Fr Development Services Inc)
21375.008 - GATEWAY LAKELAND COMMERCIAL PARK (I-433 Venture LLC)
21375.003 - THE VILLAGES @ BRIDGEWATER-REVISED SWM (View Properties Inc & Board Of Trustees-Internal Imp Trust Fund)
20706.000 - WARNOCK CR 33 WAREHOUSES (Capstone Holdings)
21375.014 - VILLAGES AT BRIDGEWATER PH 2 (Bridgewater Lakeland Developers)
21375.022 - VILLAGES AT BRIDGEWATER (Villages At Bridgewater Community Association Inc.)
21375.001 - BRIDGEWATER PH I (Bridgewater Lakeland Developers)
11896.038 - DOT I-4 WIDENING SECTIONS 3-4 AND 5 (FDOT District One)
21607.000 - LAKELAND CITY OF-NE WATER TRANSMISSION (City Of Lakeland Water Utilities Water Administration)
21375.013 - VILLAGES AT BRIDGEWATER PH I-409 UNITS (Bridgewater Lakeland Developers)
21375.004 - THE VILLAGES @ BRIDGEWATER-PHS I (Bridgewater Lakeland Developers)
21607.001 - LAKELAND CITY OF-NE WATER TRANSMISSION (City Of Lakeland Water Utilities Water Administration)
21375.020 - VILLAGES AT BRIDGEWATER - PH I (Bridgewater Lakeland Dev Llc &)
33549.000 - STATE ROAD 33 SELF STORAGE (33 Self Storage LLC)
25789.001 - SPANISH OAKS (Spanish Oaks Of Central FI LLC)
34389.001 USF Polytechnic Campus
7112.004 East West Road Borrow Areas
7112.006 Williams/USFP Stockpile Area
2832.001 FDOT SR 33 Widening I-4 to Old Combee Road
16851.000 Polk Co. - Lake Deeson Water Management Plan

Hydrogeologically, the project area is characterized by a three-aquifer system that includes the Floridan Aquifer, an intermediate aquifer and the surficial aquifer. The project is located in former mining areas and it is possible that there are localized patches of increased vulnerability due to the past removal of overburden materials composing the intermediate and surficial aquifers. The project area may be in a Karst area, according to the District publication: "Development of Proposed Environmental Resource Permit Criteria for Sensitive Karst Areas," SWRF, LLC, September 2007.

Comments on Effects to Resources: Impacts associated with the project may include: increased runoff volumes and decreased runoff quality in discharges to Lake Deeson which receives untreated runoff from its immediate medium density residential watershed and from SR 33. Filling within the floodplain or historic basin storage areas may cause or contribute to increased flood stages or durations on Lake Deeson. The project has the potential to result in groundwater contamination from stormwater runoff due to the karstic nature of the project area and the hydrologic disturbances resulting from past mining activity.

Additional Comments (optional): The SWFWMD has assigned a Degree of Effect based on their opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory and proprietary interests and obligations.

According to the "EPA drainage basins" and information from the District and FDEP, Lake Deeson is located in the Withlacoochee River Basin; however, the Polk Water Atlas locates Lake Deeson in the Peace River Basin. Refer to the Peace River watershed study to confirm the watershed boundaries, and latest topographic (LiDAR) information.

Due to the potential for contamination of surface waters and the Floridan Aquifer, it is recommended that the stormwater facilities be designed as shallow as practical and that geotechnical evaluations of specific pond sites be conducted to determine the potential for sinkhole development and direct entry of runoff to the Floridan Aquifer. Discharge from the project's facilities shall not cause or contribute to reduced water quality in Lake Deeson.

Water quality data are available for Lake Deeson from EPA, Polk County Department of Natural Resources and the District. Stage data for Lake Deeson area available from the District's Lake Deeson stage data collection site located at 2806'45.10"N 08155'53.50".

The District will require that stormwater management systems that discharge directly or indirectly into waters not meeting standards, including impaired waters, provide a net improvement condition in the water body in terms of the pollutants that contribute to the water body's impairment. A higher level of treatment may be necessary to assure that permitted facilities meet that requirement (refer to Section 3.3.1.4 of the District's Basis of Review).

Hydrologic and meteorological data are available from four District data collection sites in the general project vicinity which are listed below:

SWFWMD ID #116 LAKE DEESON STAGE;
SWFWMD ID #398 LAKE GIBSON RAINFALL;
SWFWMD ID #910 COMBEE ROAD DEEP WELL; and
SWFWMD ID #1570 SR 33/COMBEE ROAD SHALLOW WELL.

In addition, specific studies that contain useful water quality and hydrologic information have been done by FDEP, the SWFWMD and the USGS. These reports can be accessed through the District's Library at <http://www15.swfwmd.state.fl.us/dbtw-wpd/mywebqbe/librarybasic.htm>. Type in the water body of interest, click on "Submit query" then click on the pull-down menu in the upper left and select "Record Display - Web." Publications of particular relevance include:

Gates, M.T. 2009. Hydrogeologic investigation of the upper Peace River in Polk County, FL. SWFWMD. Brooksville, FL.

Metz, P.A. 2009. Hydrologic conditions that influence streamflow losses in a karst region of the upper Peace River Polk County, FL. USGS. Reston, VA.

Keith & Schnars, Inc. 2003. Saddle Creek watershed management program: Task II Watershed management plan, vols. 1 & 2. SWFWMD. Brooksville, FL.

Spechler, R.M., and Kroening, S.E., 2007. Hydrology of Polk County, Florida: U.S. Geological Survey Scientific Investigations Report 2006-5320. USGS. Reston, VA.114 p.

Projects of the SWFWMD that may be helpful in the PD&E and design phase of the project include:

1. Project K075 - Polk County Watershed Management Plan-Saddle Creek
2. Project K081 - Auburndale-Tenoroc Wetland Improvement Phase Two, and
3. Project N122 - Stormwater Improvements-Flood Protection for Polk County.

The FDOT is encouraged to contact the District's Resource Projects Engineering Section in the Brooksville headquarters to discuss the above referenced projects.

If this project's proprietary authorizations qualify as a project of Heightened Public Concern, additional steps will be required during the review process and prior to ERP approvals.

If this project will require the acquisition of new right-of-way areas, the current rule for eminent domain noticing is 40D-1.603(9), FAC and requires the applicant to provide the noticing to the affected property owners. Additionally, any issued permit may include special conditions prohibiting construction until the FDOT provides evidence of ownership and control.

The District has assigned a pre-application file (PA #398253) for the purpose of tracking its participation in the ETDM review of this project. Previous pre-application files for this SR-33 project include PA #8259, PA #9161 and PA #397628. Pre-application files are maintained at the District's Bartow Service Office. Please refer to the pre-application file when contacting District regulatory staff regarding this project.

Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Water Quality and Quantity issue for this alternative: Federal Highway Administration

Coordinator Summary: Wetlands Issue

3 Moderate assigned 08/10/2011 by FDOT District 1

Comments: The FDEP reported that there are 38.8 acres of lacustrine wetlands and 28.8 acres of palustrine wetlands within the 500-foot project buffer according to National Wetlands Inventory data. The FDEP stated that the project will likely require an Environmental Resource Permit from the

SWFWMD. Coordination Document: Permit Required.

The FHWA reported that the project may result in approximately 8.8 acres of wetland impacts as indicated through SWFWMD data of the EST GIS analysis results. The FHWA stated that avoidance of these potential impacts should be maximized and mitigation of impacts will be necessary. Coordination Document: To Be Determined: Further Coordination Required.

The FWS noted that wetlands are present within the project study area. The FWS stated that unavoidable impacts should be offset through mitigation that fully compensates for the loss of wetland resources. Coordination Document: To Be Determined: Further Coordination Required.

The NMFS restated comments provided for the Coastal and Marine issue.

The SWFWMD commented that 3.3 acres of wetlands could potentially be impacted within the 100-foot project buffer; these wetlands are concentrated primarily near the northern project terminus within a cypress wetland system located along both sides of SR 33. The SWFWMD stated that while the wetland system located on the east side is of good quality, the portion located along the west side of SR 33 has been disturbed by logging and dredging activities. The SWFWMD noted that encroachment into the 200-foot project buffer will increase potential wetland impacts to 9.0 acres (of which 8.0 acres are associated with the cypress wetland system). The SWFWMD additionally reported 0.1 acre of other wetlands within the 100-foot project buffer; these wetlands consist of a herbaceous system located near the intersection of SR 33 and Village Lakes Boulevard and a mixed shrub/forested system located at the intersection of SR 33 and Huron Way. The SWFWMD noted that if construction activities are expanded into the 200-foot project buffer, impacts to these wetland systems will increase to 1.0 acre. The SWFWMD further noted that the project study area is located within the Withlacoochee River and Peace River basins if mitigation within the same basins is necessary. Coordination Document: Permit Required.

The USACE reported that there are less than 10.0 acres of wetlands within the 200-foot project buffer and approximately 28.0 acres of wetlands within the 500-foot project buffer according to National Wetlands Inventory data. The USACE did not identify any CERP projects within the area. The USACE noted that purchase of credits from a mitigation bank is currently the preferred method of achieving compensatory wetland mitigation for unavoidable impacts; avoidance and/or minimization measures must be implemented to the extent practical. Coordination Document: PD&E Support Document as per PD&E Manual.

The USEPA identified over 15.0 acres of wetlands within the 200-foot project buffer and over 60.0 acres within the 500-foot project buffer. The USEPA noted that while impacts to wetlands near the southern terminus of the proposed project may be completely avoided, impacts near the northern terminus may be more difficult to avoid. The USEPA stated that unavoidable impacts should be fully mitigated.

According to the National Wetlands Inventory database, 3.7 acres (1%) of lacustrine wetlands and 4.5 acres (2.29%) of palustrine wetlands are present within the 200-foot project buffer. The FDOT will 1) incorporate avoidance and minimization measures to the greatest extent practicable into the project design, 2) fully mitigate unavoidable adverse wetland impacts as part of the permitting process, and 3) utilize best management practices during project construction. Due to agency concerns of potential adverse wetland impacts resulting from the proposed roadway expansion and the issues associated with providing compensatory wetland mitigation (especially for forested wetlands), however, a Summary DOE of Moderate has been assigned to the Wetlands issue.

Commitments and Responses: Preparation of a Wetlands Evaluation Report will be included in the scoping recommendations for this project.

Technical Study: Wetlands Evaluation Report.

Permit(s): Environmental Resource Permit. / USACE Dredge and Fill Permit.

ETAT Reviews: Wetlands Issue: 7 found

3 Moderate assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

Coordination Document: No Selection

Dispute Information: N/A

Identified Resources and Level of Importance: Base on EST data, over 15 acres of wetlands within the 200 acre buffer, and over 60 acres within the 500 foot buffer.

Comments on Effects to Resources: Impact on wetlands varies geographically in the different areas of the project. Impact near the south side of the proposed project may be completely avoided, but impact on wetlands near the northern side may be more difficult to avoid. Unavoidable impact should be fully mitigated.

Coordinator Feedback: None

3 Moderate assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

Coordination Document: To Be Determined: Further Coordination Required

Dispute Information: N/A

Identified Resources and Level of Importance: Wetlands provide water treatment, flood attenuation, and wildlife habitat and should and can be avoided during construction if appropriate planning measures are provided.

Comments on Effects to Resources: Approximately 8.8 acres of wetland impacts are shown in GIS analysis of SWFWMD polygons. Avoidance of these potential impacts should be maximized and mitigation of impacts will be necessary.

CLC Commitments and Recommendations: Coordinator Feedback: None

3 Moderate assigned 05/27/2011 by Garrett Lips, US Army Corps of Engineers

Coordination Document: PD&E Support Document As Per PD&E Manual

Dispute Information: N/A

Identified Resources and Level of Importance: The EST identified no navigable waterways or marine facilities so the degree of effect should be none for navigation; however, the study should ensure navigation will remain unaffected if the EST overlooked an important factor.

The EST also identified approximately less than 10 acres of NWI wetlands within 200 feet of the roadway corridor, and approximately 28 acres of wetlands within 500 feet of the roadway. The Corps expects the study and design to implement alternatives and design configurations that avoid

wetlands to the extent practical. The Corps recommends the FDOT to study not only alternatives that achieve the project purpose and are feasible but also recommend FDOT to consider a design with the smallest environmental footprint from the onset of the study and not to propose overly aggressive sprawling roadway configurations in anticipation of future changes to water quality requirements, for instance. We recommend modest roadway designs with only the minimum, yet safe, travel lane widths and recommend the maximum use of barriers in lieu of wide shoulders or medians, and retaining walls in areas of wetlands to reduce the overall roadway footprint. The Corps agrees with the FHWA project concept of "every day counts" and supports the process to accelerate project delivery and to maximize protection of the environment.

CERP projects: The EST did not identify any CERP project within the area of the proposed project.

Comments on Effects to Resources: The Corps recommends avoidance of all wetlands and waters where practicable alternatives exist. The impacts must implement measures to minimize impacts to the extent practical. However, if unavoidable impacts are anticipated, the Corps recommends the FDOT to follow the most current regulations regarding compensatory mitigation. Currently, the hierarchy preference is for mitigation bank credit purchase.

Coordinator Feedback: None

2 Minimal assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: Permit Required

Dispute Information: N/A

Identified Resources and Level of Importance: The National Wetlands Inventory GIS report indicates that there are 38.8 acres of lacustrine and 28.8 acres of palustrine wetlands within the 500-ft. project buffer zone.

Comments on Effects to Resources: The proposed project will likely require an environmental resource permit (ERP) from the Southwest Florida Water Management District. The ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of highway construction to the greatest extent practicable:

- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging and steep/vertically retained side slopes, and median width reductions within safety limits.
- Wetlands should not be displaced by the installation of stormwater conveyance and treatment swales; compensatory treatment in adjacent uplands is the preferred alternative.
- After avoidance and minimization have been exhausted, mitigation must be proposed to offset the adverse impacts of the project to existing wetland functions and values. Significant attention is given to forested wetland systems, which are difficult to mitigate.
- The cumulative impacts of concurrent and future transportation improvement projects in the vicinity of the subject project should also be addressed.

Coordinator Feedback: None

3 Moderate assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Dispute Information: N/A

Identified Resources and Level of Importance: Project impacts extending into the 100-foot buffer area have the potential of adversely affecting approximately 3.3 acres of wetland. The most significant areas of wetland that may be affected are located near the north terminus. Here, 3.2 acres of potentially affected wetlands consist of a portion of a 9-acre cypress community on the project's east side that is connected by means of two culverts (one is 24" diameter pipe and the other is 3' x 5' box) to a former cypress community on the west side of the road. The east cypress community is of good quality with reliable physical evidence of appropriate hydroperiods. The west cypress system has been disturbed by dredging and is now a wet prairie/marsh/shrub wetland with most of the cypress trees having been logged out, fallen or standing dead. Expanding project impacts into the 200-foot buffer area increases the acres of wetland potentially affected to a total of 9.0 acres of which 8.0 acres are the wetlands at the north terminus. Of the 9 acres, 4.9 acres of impact potentially would occur to the 9-acre east wetland, representing approximately 40% of this good quality system.

Within the 100-foot buffer area, the other wetlands that would be potentially affected by the project total approximately 0.1 acre and include portions of two small shrub/herbaceous systems on the west side of SR 33 just north of the SR 33/Village Lakes Blvd intersection and a mixed shrub/forested system located on the west side of Huron Way at SR 33. Expanding project impacts into the 200-foot buffer area increases the acres of potential impact to these smaller wetlands to a total of 1.0 acre.

Listed Species (FWC, November 2010, Florida's Endangered and Threatened Species) that are known or expected to utilize the wetlands within 200 feet of the project include: American alligator (SSC), Florida sandhill crane (ST), limpkin (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), white ibis (SSC) and wood stork (FE).

Comments on Effects to Resources: The most significant impacts would occur to the good quality cypress community located at the north terminus where between 17% and 40% of the wetland could be adversely affected. Impacts to this, and the other, wetlands may include: the further reduction of wetland functions and values relating to wildlife habitat, including known habitat for Listed Species; and the elimination and/or reduction of the water storage function provided by the affected wetlands.

Additional Comments (optional): The SWFWMD has assigned a Degree of Effect based on an opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory interests and obligations.

Wetland impacts can be eliminated or reduced by:

1. Adjusting the alignment and cross section to minimize disturbance to wetlands;
2. Implementing strict controls over sediment transport off site during construction;
3. Restricting the staging area and the movement of vehicles and equipment to non-wetland areas;
4. Giving preference to already-disturbed upland locations versus wetland locations for project facilities;
5. Leaving as much native vegetation, as feasible, intact along the right-of-way; and
6. Selecting treatment pond sites outside of wetlands.

Except as provided in Section 3.2.2.1 of the ERP Basis of Review, adequate and appropriate wetland mitigation activities will be required for unavoidable wetland and surface water impacts associated with the project. The project mitigation needs may be addressed in the FDOT Mitigation Program (Chapter 373.4137, F.S.) which requires the submittal of anticipated wetland and surface water impact information to the SWFWMD. This information is utilized to evaluate mitigation options, followed by nomination and multi-agency approval of the preferred options. These mitigation options typically include enhancement of wetland and upland habitats within existing public lands, public land acquisition followed by habitat improvements, and the purchase of private mitigation bank credits. The SWFWMD may choose to exclude a project in whole or in part if the SWFWMD is unable to identify mitigation that would offset wetland and surface water impacts of the project. Under this scenario, the SWFWMD will coordinate

with the FDOT on which impacts can be appropriately mitigated through the program as opposed to separate mitigation conducted independently. Depending on the quantity and quality of the proposed wetland impacts, the SWFWMD may propose purchasing credits from a mitigation bank and/or pursue and propose alternative locations for mitigation. For ERP purposes of mitigating any adverse wetland impacts within the same drainage basin, the project polygon is located within the Withlacoochee River Basin and the Peace River Basin. The SWFWMD requests that the FDOT continue to collaborate on the potential wetland impacts as this project proceeds into future phases, and include the associated impacts on FDOT's annual inventory.

If this project will require the acquisition of new right-of-way areas, the current rule for eminent domain noticing is 40D-1.603(9), FAC and requires the applicant to provide the noticing to the affected property owners. Additionally, any issued permit may include special conditions prohibiting construction until the FDOT provides evidence of ownership and control.

The District has assigned a pre-application file (PA #398253) for the purpose of tracking its participation in the ETDM review of this project. Previous pre-application files for this SR-33 project include PA #8259, PA #9161 and PA #397628. Pre-application files are maintained at the District's Bartow Service Office. Please refer to the pre-application files when contacting District regulatory staff regarding this project.

Coordinator Feedback: None

N/A N/A / No Involvement assigned 04/25/2011 by David A. Rydene, National Marine Fisheries Service

Coordination Document: No Involvement

Dispute Information:N/A

Identified Resources and Level of Importance: None.

Comments on Effects to Resources: NOAA's National Marine Fisheries Service (NMFS) has reviewed the information contained in the Environmental Screening Tool for ETDM Project # 13188. The Florida Department of Transportation District 1 proposes widening US 33 from Old Combee Road to north of Tomkow Road in Polk County, Florida. The road would be widened from two lanes to four lanes

NMFS staff conducted a site inspection of the project area on April 22, 2011, to assess potential concerns regarding living aquatic resources. It does not appear that there will be any direct or indirect impacts to NMFS trust resources. Since the resources affected are not ones for which NMFS is responsible, we have no comment to provide regarding the project's impacts.

Coordinator Feedback: None

3 Moderate assigned 04/25/2011 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Dispute Information:N/A

Identified Resources and Level of Importance: Wetlands

Comments on Effects to Resources: Wetlands provide important habitat for fish and wildlife. Information provided in the Environmental Screening Tool indicates that wetlands are found within the project area. The Service recommends that these valuable resources be avoided to the greatest extent practicable. If impacts to wetlands are unavoidable, the Service recommends the FDOT provide mitigation that fully compensates for the loss of wetland resources.

CLC Commitments and Recommendations: **Coordinator Feedback:** None

Coordinator Summary: Wildlife and Habitat Issue

3 Moderate assigned 08/10/2011 by FDOT District 1

Comments: The FWC evaluated the 500-foot project buffer for the presence of wildlife and habitat resources and noted that the project is located within a rural area that has undergone recent suburban development. The FWC identified the following habitat types within the 500-foot buffer: Freshwater Marsh, Wet Prairie, Shrub Swamp, Cypress Swamp, Hardwood Swamp, Mixed Wetland Forest, Grassland, Extractive, Dry Prairie, Pinelands, Hardwood Hammock, Sand Pine Scrub, Xeric Oak Scrub, Mixed Hardwood-Pine Forest, and Shrub and Brushland. The FWC also commented that the project study area is located approximately 300 feet north of the Tenoroc Fish Management Area; within FWS Consultation Areas for the Florida scrub-jay, crested caracara, and snail kite; and within the Core Foraging Area (CFA) of six wood stork rookeries. The FWC further noted that the primary wildlife issues associated with this project consist of potential adverse effects to a moderate number of listed species, potential loss of valuable wetland habitat, potential loss of one of the last remnants of the Lakeland Ridge, and potential water quality degradation resulting from additional stormwater runoff. Coordination Document: To Be Determined: Further Coordination Required.

The FWS reviewed its GIS database for recorded locations of federally listed threatened and endangered species on or adjacent to the project study area and stated that the project corridor is located within the CFA of three active wood stork nesting colonies. To minimize adverse effects to the wood stork, the FWS recommends that any lost foraging habitat resulting from the project be replaced within the CFA of the affected colony. The FWS also stated that for projects that impact five or more acres of wood stork foraging habitat, a functional assessment must be conducted using the FWS' Wood Stork Foraging Analysis Methodology on the foraging habitat to be impacted and the foraging habitat provided as mitigation. The FWS recommends that the FDOT prepare a Biological Assessment during the project's PD&E phase. Coordination Document: To Be Determined: Further Coordination Required.

The SWFWMD reported that native upland habitats comprise 48.0 acres of the 100-foot project buffer and 96.0 acres of the 200-foot project buffer; however, the overall quality of this habitat is medium to poor due to excessive fragmentation. The SWFWMD noted that there is a 5-acre parcel of high-quality xeric oak/sand pine habitat located adjacent to SR 33 at Lake Luther Drive and a moderate-quality xeric community located within a power easement that crosses SR 33 near the same intersection; these communities have a high potential to serve as habitat for the gopher tortoise. The SWFWMD recommends that impacts to these xeric habitats be avoided to the greatest extent practicable. The SWFWMD additionally reported that the project is located within FWS Consultation Areas for the Florida scrub-jay, crested caracara, and snail kite; however, habitat for all but the scrub-jay is extremely limited within the 200-foot project buffer. Coordination Document: Permit Required.

According to the EST GIS analysis results, the project's 200-foot buffer (corridor) is located within FWS Consultation Areas for the Florida scrub-jay, crested caracara, and snail kite although suitable habitat for these species within the project corridor is fragmented and considered low quality. The project study area is also located within the Greater Charlotte Harbor and Withlacoochee River Ecosystem Management Areas, within the CFA of six active nesting wood stork colonies, and within the Green Swamp Florida Forever Board of Trustees (BOT) Project. Due to agency concerns of potential

adverse impacts to suitable listed species' habitat and the need for Section 7 Consultation with the FWS, a Summary DOE of Moderate has been assigned to the Wildlife and Habitat issue.

Commitments and Responses: Preparation of an Endangered Species Biological Assessment will be included in the scoping recommendations for this project.

Technical Study: Endangered Species Biological Assessment (ESBA).

ETAT Reviews: Wildlife and Habitat Issue: 3 found

3 Moderate assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Dispute Information: N/A

Identified Resources and Level of Importance: According to the District's 2009 land use data, native upland land cover types not occupied by industrial, residential or utility land uses total 48 acres and 96 acres of the areas within the 100-foot and 200-foot buffer areas, respectively. Overall, the quality of the habitat within the 200-foot buffer is medium to poor in terms of upland wildlife species as a result of the fragmentation of available habitat into very small parcels. One high quality parcel of xeric scrub oak/sand pine community is the five-acre parcel located in the northeast quadrant of the SR 33/Lake Luther Dr intersection. There is also moderate quality xeric habitat on the electrical line ROW that crosses SR 33 0.25 mile east of Lake Luther Dr.

The entire 200-foot buffer area is included within the Consultation Areas for three Listed Species, the Florida scrub jay, crested caracara and snail kite. Habitat for all but the Florida scrub jay is extremely limited within the 200-foot buffer. Scrub jay habitat is available on the five-acre parcel located in the northeast quadrant of the SR 33/Lake Luther Dr intersection.

In view of the geographical range of the project area and the type and quality of the upland habitats available in the project's 100-foot to 200-foot buffer areas, the following Listed Species have been observed or can be expected to be present: blue-tailed mole skink (FT), Florida pine snake (SSC), Florida sand skink (FT), gopher tortoise (ST), eastern indigo snake (FT), burrowing owl (SSC), southeast American kestrel (ST), Florida sandhill crane (ST), Florida scrub jay (FT), Florida mouse (SSC) and Sherman's fox squirrel (SSC).

Comments on Effects to Resources: This project has the potential to result in adverse impacts to remaining parcels of scrub oak/sand pine habitat that have a high potential to be utilized by Listed Species, particularly gopher tortoise. The five-acre parcel located in the northeast quadrant of the SR 33/Lake Luther Dr intersection is of good quality and it represents a remnant of habitat that formerly was extensive in the area. The loss or disturbance of this parcel should be avoided. That parcel and the other small areas of xeric habitat, such as on the power line ROW provide important habitat for gopher tortoise, a Listed Species known to be present in the vicinity of the project.

Additional Comments (optional): The SWFWMD has assigned a Degree of Effect based on an opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory interests and obligations.

Upland wildlife habitat impacts can be eliminated or reduced by:

1. Restricting the staging area and the movement of vehicles and equipment to areas that are already highly disturbed;
2. Consider leaving intact the quality native habitats, particularly the scrub oak/sand pine areas, along the right-of-way;
3. Consider upland enhancement as a mitigation option; and
4. Selecting treatment pond sites out of the scrub oak/sand pine habitat areas.

It is recommended that the FDOT prepare an Endangered Species Biological Assessment (ESBA) and that FDOT consult with the US Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission to try to eliminate/reduce impacts to Listed Species.

It should be noted that the Florida Fish and Wildlife Conservation Commission revised rules for listing imperiled species. The biological status reviews on these species are now completed. The final reports and recommendations will be presented to the Commission at the June 8/9 meeting in St. Augustine. Until a final review of each species is completed, the existing legal status of species is as listed in the November 2010 publication entitled "Florida's Endangered and Threatened Species." FDOT is encouraged to coordinate with the FFWCC on the status of the species blue-tailed mole skink (FT), Florida pine snake (SSC), Florida sand skink (FT), gopher tortoise (ST), eastern indigo snake (FT), burrowing owl (SSC), southeast American kestrel (ST), Florida sandhill crane (ST), Florida scrub jay (FT), Florida mouse (SSC) and Sherman's fox squirrel (SSC).

Coordinator Feedback: None

3 Moderate assigned 05/18/2011 by Scott Sanders, FL Fish and Wildlife Conservation Commission

Coordination Document: To Be Determined: Further Coordination Required

Dispute Information: N/A

Identified Resources and Level of Importance: The Habitat Conservation Scientific Services Section of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated an agency review of ETDM #13188, Polk County, and provides the following comments related to potential effects to fish and wildlife resources on this Programming Phase project.

The Project Description Summary states that this project involves widening SR 33 from 2 to 4 lanes between Old Combee Road/Deeson Pointe Boulevard and a point north of Tomkow Road, a distance of approximately 3.7 miles. This project extends the proposed four-lane section of SR 33, reviewed as ETDM #13025 in September 2010, further northward through the project limits.

The project area was evaluated for potential fish, wildlife, and habitat resources within 500 feet of the proposed alignment. Our assessment reveals that the project area is a rural landscape on the outskirts of Lakeland that is rapidly undergoing suburban development. The 2003 FWC Habitat and Landcover Grid describes 27.63% of the assessment area as High Impact Urban or Low Impact Urban, but much of the remaining area has been developed in the years subsequent to that classification. Wetland or aquatic land cover types in the assessment area include Freshwater Marsh and Wet Prairie, Shrub Swamp, Cypress Swamp, Hardwood Swamp, Mixed Wetland Forest and Open Water. The mostly remnant upland land cover types include Grassland, Extractive (phosphate mined land), Dry Prairie, Pinelands, Hardwood Hammocks and Forests, Sand Pine Scrub, Xeric Oak Scrub, Mixed Hardwood-Pine Forest, and Shrub and Brushland.

Based on range and preferred habitat type, the following species listed by the Federal Endangered Species Act and the State of Florida as Federally

Endangered (FE), Federally Threatened (FT), State-Threatened (ST), or State Species of Special Concern (SSC) may occur along the project area: gopher frog (SSC), gopher tortoise (ST), Eastern indigo snake (FT), Florida pine snake (SSC), American alligator (FT), limpkin (SSC), snowy egret (SSC), little blue heron (SSC), tricolored heron (SSC), white ibis (SSC), Florida sandhill crane (ST), wood stork (FE), burrowing owl (SSC), Audubon's crested caracara (FT), Southeastern American kestrel (ST), Sherman's fox squirrel (SSC), and Florida mouse (SSC).

The GIS analysis revealed several specific characteristics associated with lands along the project alignment that provide an indication of potential habitat quality or sensitivity that will require field studies to verify the presence or absence of listed wildlife species and the quality of wildlife habitat resources. The Bridgewater Tract of the FWC's Tenoroc Fish Management Area is southeast of this project, and the northeast corner of Tenoroc is approximately 300 feet from the intersection of SR 33 and Old Combee Road. On the FWC's ranking of Potential Habitat Richness, 30.82% of the assessment area is ranked at medium or moderately high, and 2.22% of the area has a high or medium classification for FWC's Strategic Habitat Conservation Areas priority ranking. The project site is within the U.S. Fish and Wildlife Service Consultation Areas for Scrub Jay, Crested Caracara, and Snail Kite, and is within the core foraging area of six wood stork rookeries.

Primary wildlife issues associated with this project include: potential adverse effects to a moderate number of species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern; potential loss of valuable wetland habitat, particularly the cypress and hardwood swamp adjacent to the road between the Interstate-4 ramps and Tomkow Road; potential loss of one of the last remnants of the Lakeland Ridge, a xeric oak scrub on the north side of SR 33 that extends 0.2 miles east from Lake Luther Road; and potential water quality degradation as a result of additional stormwater runoff from the expanded roadway surface draining into area water bodies, including wetlands and lakes in the Tenoroc Fish Management Area. We recommend further coordination with our agency to develop site-specific stormwater management measures for this project. For technical assistance and coordination on the Tenoroc Fish Management Area, please contact Mr. Danon Moxley of our Division of Freshwater Fisheries Management at (863) 648-3200, very early in the planning process for the Project Development and Environment (PD&E) Study.

Comments on Effects to Resources: Based on the project information provided, we believe the direct and indirect effects of this project could be moderate, provided wetland and scrub habitat losses are minimized, and stormwater management measures are implemented to protect both the hydrology and quality of receiving wetlands and lakes.

Additional Comments (optional): We recommend that the PD&E Study address natural resources by including the following measures for conserving fish and wildlife and habitat resources that may occur within and adjacent to the project area. Plant community mapping and wildlife surveys for the occurrence of wildlife species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern should be performed, both along the Right-of-way and within sites proposed for Drainage Retention Areas. Based on the survey results, a plan should be developed to address direct, indirect, and cumulative effects of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures should also be formulated and implemented. If gopher tortoises are present within any permanent or temporary construction area, a permit should be obtained from the FWC. Drainage Retention Areas and equipment staging areas should be located in previously disturbed sites to avoid habitat destruction or degradation. A compensatory mitigation plan should include the replacement of any wetland, upland, or aquatic habitat lost as a result of the project. This could be achieved by purchasing land, or securing conservation easements over lands adjacent to existing public lands, and by habitat restoration. Replacement habitat for mitigation should be type for type, as productive, and equal to or of higher functional value. We recommend land acquisition and restoration of appropriate tracts adjacent to existing public lands near the project area, or tracts placed under conservation easement or located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas. Please notify us immediately if the design, extent, or footprint of the current project is modified, as we may choose to provide additional comments and/or recommendations.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Brian Barnett at (850) 528-6316 or email brian_barnett@urscorp.com to initiate the process for further overall coordination on this project.

Coordinator Feedback: None

3 Moderate assigned 04/25/2011 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Dispute Information: N/A

Identified Resources and Level of Importance: Federally-listed species and fish and wildlife resources

Comments on Effects to Resources: Federally listed species - The Service has reviewed our Geographic Information Systems (GIS) database for recorded locations of federally listed threatened and endangered species on or adjacent to the project study area. The GIS database is a compilation of data received from several sources.

Wood Stork

The project corridor is located in the Core Foraging Areas (within 18.6 miles) of three active nesting colonies of the endangered wood stork (*Mycteria americana*). The Service believes that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork, we recommend that any lost foraging habitat resulting from the project be replaced within the CFA of the affected nesting colony. Moreover, wetlands provided as mitigation should adequately replace the wetland functions lost as a result of the action. The Service does not consider the preservation of wetlands, by itself, as adequate compensation for impacts to wood stork foraging habitat, because the habitat lost is not replaced. Accordingly, any wetland mitigation plan proposed should include a restoration, enhancement, or creation component. In some cases, the Service accepts wetlands compensation located outside the CFA of the affected wood stork nesting colony. Specifically, wetland credits purchased from a "Service Approved" mitigation bank located outside of the CFA would be acceptable to the Service, provided that the impacted wetlands occur within the permitted service area of the bank.

For projects that impact 5 or more acres of wood stork foraging habitat, the Service requires a functional assessment be conducted using our "Wood Stork Foraging Analysis Methodology"(Methodology) on the foraging habitat to be impacted and the foraging habitat provided as mitigation. The Methodology can found in the Service's letter and effect determination key to the U.S. Army Corps of Engineers dated May 18, 2010 (Service Federal Activity Code Number 41420-2007-FA-1494, available upon request).

The Service believes that the following federally listed species have the potential to occur in or near the project site: wood stork, Florida scrub-jay (*Aphelocoma coerulescens*), and eastern indigo snake (*Drymarchon corais couperi*), as well as the federally protected plants listed at the following link: [http://www.fws.gov/verobeach/images/pdflibrary/Polk County3.pdf](http://www.fws.gov/verobeach/images/pdflibrary/Polk%20County3.pdf). Accordingly, the Service recommends that the Florida Department of Transportation (FDOT) prepare a Biological Assessment for the project (as required by 50 CFR 402.12) during the FDOT's Project Development and Environment

process.

Fish and Wildlife Resources - Wetlands provide important habitat for fish and wildlife. Information provided in the Environmental Screening Tool indicates that wetlands are found within the project area. The Service recommends that these valuable resources be avoided to the greatest extent practicable. If impacts to wetlands are unavoidable, the Service recommends the FDOT provide mitigation that fully compensates for the loss of wetland resources.

CLC Commitments and Recommendations: Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Wildlife and Habitat issue for this alternative: Federal Highway Administration

ETAT Reviews and Coordinator Summary: Cultural Issues

Coordinator Summary: Historic and Archaeological Sites Issue

3 Moderate assigned 08/10/2011 by FDOT District 1

Comments: No review was submitted by the FHWA or the Miccosukee Tribe of Indians. The FDOS noted that many cultural resource surveys have been conducted within a 100 foot buffer of the project corridor but none were specifically conducted for the current project. They also note that no significant historic sites and no archaeological sites were identified within a 500 foot buffer of the project corridor. However, there are five bridges located within the project corridor. No National Register of Historic Places (National Register) -eligible or listed sites were identified within a half mile of the project corridor. According to FDOS, there is a potential for archaeological sites within the project corridor. They recommended that a Cultural Resource Assessment Survey (CRAS) be conducted to locate and assess any cultural resources that may be present.

The Seminole Tribe of Florida noted the absence of a systematic cultural resource assessment survey of the project corridor and requested a survey be conducted in order to determine effects to archaeological sites. The STOF-THPO asked to review the results of the CRAS before commenting on possible effects to archaeological sites within the project corridor

A review of the Florida Master Site File (FMSF) GIS data revealed that 10 previous surveys intersect the project corridor. A cultural resource reconnaissance survey conducted in January 2011 overlaps with the western end of the project corridor between Old Combee Road and the eastern boundary of Lake Deeson Village. No comprehensive archeological or historic resource survey of the project corridor has been completed.

The FMSF listed no archaeological sites, six previously recorded historic resources, and one historic resource group within 500 feet of the project corridor. The resource group is the post-WW II era Lake Deeson Village trailer park (8PO7495) located at 5210 SR 33 in Lakeland. The six previously recorded historic resources and the resource group were evaluated by the SHPO as ineligible for inclusion in the National Register of Historic Places (National Register) on February 24, 2011.

A review of the Polk property appraiser data revealed a total of 83 parcels adjacent to the project corridor, 4 of which had historic build dates.

A review of the City of Lakeland Archaeological Site Potential map indicates that the project corridor is located within an area that was not identified as having a high archaeological potential.

An analysis of the 1849 General Land Office plat map and surveyors' notes illustrates this area as predominantly 3rd rate pine interspersed with ponds. The plat maps also illustrate an unnamed road within or adjacent to the project corridor which the surveyors' notes refer to as "old road". No other features suggestive of any type of settlement or encampment are illustrated. The historic aerials depict the area around the project corridor as covered with lakes, ponds, and wetlands interspersed with higher ground, consistent with the ponds and pineland illustrated in the historic plats and referred to in the surveyors' notes. According to the soil map, most of the project corridor is located in excessively to moderately well drained soils, with a few areas of poorly drained soils.

Based on this analysis, a Summary DOE of Moderate has been assigned to the Historic and Archaeological Sites issue.

Commitments and Responses: A comprehensive archaeological and historic resource survey has not been completed for the project corridor. Therefore, preparation of a Cultural Resource Assessment Survey (CRAS), as per the PD&E Manual, is recommended. This survey will serve to verify the location, integrity, and eligibility of previously unrecorded historical resources that have recently reached the 50 year historic threshold, as well as confirm the low archaeological potential of the unsurveyed area of the corridor suggested by this analysis. Because the City of Lakeland is included in the current DOS list of Certified Local Governments, coordination Office is recommended to identify any local resources or areas of concern.

Section 4(f) Potential Impacts to Cultural Resources: Based on the results of this analysis, there are no known Section 4(f) impacts to cultural resources.

ETAT Reviews: Historic and Archaeological Sites Issue: 3 found

3 Moderate assigned 05/27/2011 by Alyssa McManus, FL Department of State

Coordination Document: No Selection

Dispute Information: N/A

Identified Resources and Level of Importance: There are no identified historic sites of significance identified within the project corridor. No National Register eligible or listed sites are identified within a 1/2 mile of the project corridor.

There are five bridges located within the project corridor.

Comments on Effects to Resources: While there have been many cultural resource surveys within the 100 ft. buffer of this project, none was specifically conducted for his particular project. The 'drive it' feature of the EST shows some structures which appear to be over 50 years of age. These buildings will need to be identified and evaluated to determine eligibility for the National Register, and to determine effects to significant resources, should they be identified.

The bridges that will be replaced as part of this project should be documented for evaluation if they are over 50 years of age. A Florida Master Site File

bridge form is available online and will be a good preliminary document to determine these bridges' historical significance.

While there are no identified archaeological sites identified within a 500' buffer of this project corridor, they possibly exist within the areas of this project where the ground will be disturbed. Judgemental subsurface testing should be done to determine the absence or presence of cultural material.

Since potentially significant archaeological sites may be present, it is the request of this office that the project site be subjected to a professional cultural resource survey. The purpose of this survey will be to locate and assess any cultural resources that may be present. The resultant survey shall conform to the specification set forth in Chapter 1A-46, Florida Administrative Code, and will need to be forwarded to the Division of Historical Resources in order to complete the reviewing process for this proposed project and its impacts. The results of the analysis will determine if significant cultural resources would be disturbed by this development. In addition, if significant remains are located, the data described in the report and the consultant's conclusions will assist this office in determining measures that must be taken to avoid, minimize, or mitigate adverse impacts to archaeological sites and historical properties listed, or eligible for listing in the NRHP, or otherwise significant. The Division of Historical Resources does not maintain a list of professional consultants who are qualified to work in the State of Florida and/or who meet The Secretary of the Interior's Historic Preservation Professional Standards [Volume 62, Number 119, page 33707 (June 20, 1997)], ("Professional Qualifications"), or as amended in the future. However, the American Cultural Resources Association (ACRA) maintains a listing of professional consultants (<http://acra-crm.org/index.cfm>). In addition, the Register of Professional Archaeologists (RPA) maintains a membership directory for locating professional archaeologists as well as other professional preservation consultants (<http://www.rpanet.org/>). Many qualified historic preservation/cultural resource management professionals are not members of these organizations, and omission from the directories does not imply that someone does not meet the Secretary's Standards or that the resultant work would not be acceptable.

Additional Comments (optional): after the survey is complete, this office will be able to determine the impact the project will have on cultural resources.

Coordinator Feedback: None

0 None assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: No Involvement

Dispute Information: N/A

Identified Resources and Level of Importance: None found.

Comments on Effects to Resources: None found.

Coordinator Feedback: None

3 Moderate assigned 04/25/2011 by Elliott York, Seminole Tribe of Florida

Coordination Document: No Selection

Dispute Information: N/A

Identified Resources and Level of Importance: Due to the presence of several archaeological sites and absence of a systematic Cultural Resources Assessment Survey (CRAS) for the project corridor, the STOF-THPO would like to request a CRAS be conducted in order to determine effects, if any, to archaeological sites within the project area.

Comments on Effects to Resources: The STOF-THPO would like to review a CRAS before commenting on possible effects to archaeological sites in the project area.

Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Historic and Archaeological Sites issue for this alternative: Federal Highway Administration

Coordinator Summary: Recreation Areas Issue

1 Enhanced assigned 08/10/2011 by FDOT District 1

Comments: The FDEP commented that the project is within 500 feet of the Tenoroc Fish Management Area and located within the Green Swamp Florida Forever Board of Trustees (BOT) Project area. The FDEP also reported that the project will 1) provide an opportunity for a much needed trail connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail (which is a key component of the Florida Greenways and Trails System) and 2) complement a number of other pathway projects currently being constructed in the area. The FDEP additionally stated that the Office of Greenways and Trails should be contacted for further information/assistance and noted support for the project by the City of Lakeland's Planning and Zoning Board. Coordination Document: To Be Determined: Further Coordination Required.

The SWFWMD did not identify any issues or potential project effects related to recreation areas/features. Coordination Document: No Involvement.

The USEPA did not identify any issues or potential project effects related to recreation areas/features.

Based on the EST GIS Analysis results, the project is approximately 300 feet north of the Tenoroc Fish Management Area and located within the Green Swamp Florida Forever BOT Project area. Other recreational features that exist in the area are as follows: Golf Club/Course at Bridgewater, Lakeland RV Resort, and recreational trails. According to the City of Lakeland's Comprehensive Plan, the future land use vision of the project area calls for increased residential, industrial, and mixed use developments. The sidewalks and dedicated bicycle lanes (or off-road multi-use trail) to be included in the SR 33 widening will not only support the growth expected along the corridor and provide a connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, but complement the notable number of recreational features within the vicinity of the project. For these reasons, a Summary DOE of Enhanced has been assigned to the Recreation Areas issue.

Commitments and Responses: A Section 4(f) Determination of Applicability will be included in the scoping recommendations for this project to confirm that potential impacts to features providing recreational opportunities will be minimized to the greatest extent practicable.

Technical Study: Section 4(f) Determination of Applicability.

ETAT Reviews: Recreation Areas Issue: 3 found

0 None assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

Coordination Document: No Selection
Dispute Information: N/A
Identified Resources and Level of Importance: None found.
Comments on Effects to Resources: None found.
Coordinator Feedback: None

1 Enhanced assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: To Be Determined: Further Coordination Required
Dispute Information: N/A
Identified Resources and Level of Importance: The project is within 500 ft. of the Tenoroc Fish Management Area - co-managed by the Florida Fish and Wildlife Conservation Commission and the DEP's Bureau of Mining and Minerals Regulation. The project is also located within the Green Swamp Florida Forever BOT Project area.
Comments on Effects to Resources: The DEP's Office of Greenways and Trails reports that the project provides an opportunity for a much needed trail connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, which is a key component of the Florida Greenways and Trails System.
-- 12-foot pathways are currently being constructed as part of the East-West Road (University Boulevard) project between SR 33 and SR 570 (Polk Parkway) that is scheduled for completion in early 2012.
-- A multi-use trail is envisioned to be incorporated into the SR 33 design north of SR 659 (Combee Road), thereby providing a connection between Tenoroc Fish Management Area and E-W Road corridors that directly connect with the Van Fleet State Trail.
-- The SR 33 project corridor also parallels a trail corridor that is located on the south side of Long Lake. Given the 200-ft. right-of-way width on SR 33 and existing/planned residential units in the area, a trail could be constructed within the SR 33 design south of SR 659. In fact, the City of Lakeland's Planning and Zoning Board has explicitly requested that a trail be accommodated in a site plan for a utility facility proposed at Maggiore Boulevard/Huron Way.
-- It should also be noted that the City's four-lane improvement on SR 33 adjacent to the PD&E project limits (West of Old Combee/Deeson Point to Interstate 4 at Exit 33) includes sidewalks and dedicated bicycle lanes. Since SR 33 within the project area currently has a 60-mph posted speed limit, a transition from an on-road to off-road facility would certainly be appreciated.

For further information and assistance, please contact Ms. Marsha Connell in the Office of Greenways and Trails at (850) 245-2052.

Coordinator Feedback: None

0 None assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: No Involvement
Dispute Information: N/A
Identified Resources and Level of Importance: None found.
Comments on Effects to Resources: None found.
Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Recreation Areas issue for this alternative: Federal Highway Administration, National Park Service

Coordinator Summary: Section 4(f) Potential Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

Comments: The FHWA reported that while at least 8 previous cultural resource surveys have been conducted on or near the project area, per the EST GIS analysis results, portions of the project area were not covered. The FHWA stated that a Cultural Resource Assessment Survey (CRAS) or documentation of a recently conducted CRAS within the project area will be needed. Coordination Document: To Be Determined: Further Coordination Required.

Based on the EST GIS Analysis results, the project is approximately 300 feet north of the Tenoroc Fish Management Area and located within the Green Swamp Florida Forever BOT Project area. Other features that exist which may potentially be protected under the auspices of Section 4(f) include: Golf Club/Course at Bridgewater, Lakeland RV Resort, recreational trails, FDOT RCI bridges, and cultural field survey areas. According to the City of Lakeland's Comprehensive Plan, the future land use vision of the project area calls for increased residential, industrial, and mixed use developments. The sidewalks and dedicated bicycle lanes (or off-road multi-use trail) to be included in the SR 33 widening will not only support the growth expected along the corridor and provide a connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, but complement the notable number of recreational features within the vicinity of the project. A Section 4(f) DOA, specifically for resources related to recreational and wildlife management uses, will be developed during the Project Development phase and formal Section 4(f) designation will be provided (as necessary), by FHWA, for those Section 4(f) properties bordering the project area of potential effect. A separate Section 4(f) DOA (as part of the Section 106 process) will be developed for those historic, archaeological, and/or tribal resources that have been found to have an "adverse effect" from the proposed project through findings of the CRAS. Due to the fact that the proposed improvements are expected to fit within the existing roadway right-of-way, a Summary DOE of Minimal has been assigned to the Section 4(f) issue.

Commitments and Responses: A Section 4(f) Determination of Applicability will be included in the scoping recommendations for this project to confirm that potential impacts to recreational features and identified historic and archaeological resources will be minimized to the greatest extent practicable.

Technical Study: Section 4(f) Determination of Applicability.

ETAT Reviews: Section 4(f) Potential Issue: 1 found

2 Minimal assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

Coordination Document: To Be Determined: Further Coordination Required

Dispute Information:N/A

Identified Resources and Level of Importance: At least 8 previous cultural resource surveys have been conducted on or near the project area. Per GIS analysis, portions of the project area were not covered by documented surveys. A CRAS will be needed for the project area or please provide documentation of recent CRAS conducted within the project area.

Comments on Effects to Resources: At least 8 previous cultural resource surveys have been conducted on or near the project area. Per GIS analysis, portions of the project area were not covered by documented surveys. A CRAS will be needed for the project area or please provide documentation of recent CRAS conducted within the project area.

CLC Commitments and Recommendations: Coordinator Feedback: None

ETAT Reviews and Coordinator Summary: Community Issues

Coordinator Summary: Aesthetics Issue

3 *Moderate* assigned 08/10/2011 by FDOT District 1

Comments: FDOT noted that the current aesthetic character along the majority of the roadway is a combination of rural and suburban with a mix of natural environment, recreation and residential neighborhoods; however, this character intensifies near the Interstate 4 interchange with business park, light industrial and warehouse-type land uses. For these reasons along with the potential for noise and vibration related impacts anticipated during construction, the presence of community natural resources in the area, and the location of growing residential areas within close proximity, the FDOT recommended an overall project impact degree of effect of moderate. Coordination Document: None.

FHWA stated that there do not appear to be significant changes to current aesthetic conditions. Coordination Document: None.

In the vicinity of the project, SR 33, in part, serves traffic entering and exiting Interstate 4 and in route from the Polk Parkway. The aesthetic character of the area continues to change from rural to suburban residential and mixed-use. There are however growing residential areas and community natural resources within close proximity. Because of this situation coupled with the potential for noise and vibration related impacts anticipated during construction, a Summary DOE of Moderate has been assigned to the Aesthetic issue.

Commitments and Responses: Public outreach regarding project effects and general design concepts related to corridor aesthetics will be conducted during project development.

Technical Study: None.

ETAT Reviews: Aesthetics Issue: 2 found

2 *Minimal* assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

Coordination Document: No Selection

Dispute Information:N/A

Identified Resources and Level of Importance: No significant changes to current aesthetic conditions.

Comments on Effects to Resources: No significant changes to current aesthetic conditions.

CLC Commitments and Recommendations: Coordinator Feedback: None

3 *Moderate* assigned 06/02/2011 by Scott Swearingen, FDOT District 1

Coordination Document: No Selection

Dispute Information:N/A

Identified Resources and Level of Importance: 100-Foot Buffer:

Residential Areas - 16.8 acres

Office of Greenways and Trails (OGT) Multi-Use Trails Priorities (High)

500-Foot Buffer:

Residential Areas - 110.0 acres

Mobile Home and RV Parks - Oakridge MHP

FNAI Managed Lands - Tenoroc Fish Management Area

Quarter-Mile (1,320-Foot) Buffer:

Residential Areas - 354.7 acres

Mobile Home and RV Parks - Lakeland RV Resort

Comments on Effects to Resources: The project area is characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. Almost 320 acres within the quarter-mile buffer are designated as conservation land and the Tenoroc Fish Management Area is located within the 500-foot buffer. Within the 100-foot buffer exists an area identified by the Florida Office of Greenways and Trails as a "high" priority multi-use trail as well as the Golf Club at Bridgewater.

The current aesthetic character along the majority of the roadway is a combination of rural and suburban with a mix of natural environment, recreation and residential neighborhoods. This character intensifies near the Interstate 4 interchange with business park, light industrial and warehouse-type land uses. Potential project impacts on community aesthetics, including noise and vibration related impacts (during construction), are anticipated to be moderate due to the nearby presence of community natural resources, the existing land use scale and character along the roadway, and the location of growing residential areas within close proximity to the project.

CLC Commitments and Recommendations: Potential project impacts on community aesthetics appear to be moderate. Continued public outreach during project development should solicit opinions and preferences from residents regarding project effects and general design concepts related to corridor aesthetics. **Coordinator Feedback:** None

Coordinator Summary: Economic Issue

Comments: FDOT stated that area residents and businesses are expected to benefit from this project with improved capacity and accessibility. The project enhances the local network and regional connectivity along this section of State Road 33. As future growth occurs within this area of Lakeland, State Road 33 will be able to better accommodate local and shorter-distance regional trips as an alternative to Interstate 4. Coordination Document: None.

The project has the potential to benefit both residents and businesses with improved capacity and accessibility. It enhances both the local network and regional connectivity of State Road 33. Therefore, a Summary DOE of Enhanced has been assigned to the Economic issue.

Commitments and Responses: Public outreach will be conducted to solicit input from residents and businesses which rely on State Road 33 for access.

Technical Study: None.

ETAT Reviews: Economic Issue: 1 found

Coordination Document: No Selection

Dispute Information: N/A

Identified Resources and Level of Importance: 100-Foot Buffer:

Residential Areas - 16.8 acres

Commercial Areas - 2.2 acres

Industrial Areas - 7.8 acres

Florida Forever BOT Project - Green Swamp, 36.4 acres

500-Foot Buffer:

Residential Areas - 110.0 acres

Commercial Areas - 8.7 acres

Industrial Areas - 42.2 acres

Bridgewater DRI - 163.5 acres

Future land use:

Residential Area: 220.0 acres

Mixed Use/Urban Village Area: 109.0 acres

Conservation Area: 72.2 acres

Polk County Transit - Bus Route 52

Quarter-Mile (1,320-Foot) Buffer:

Residential Areas - 354.7 acres

Commercial Areas - 25.0 acres

Industrial Areas - 113.7 acres

Bridgewater DRI - 489.2 acres

Future land use:

Residential Area: 509.4 acres

Mixed Use/Urban Village Area: 334.9 acres

Conservation Area: 319.6 acres

Florida Forever BOT Project - Green Swamp, 641.32 acres

One-Mile (5,280-Foot) Buffer:

Residential Areas - 1316.0 acres

Bridgewater DRI - 1140.9 acres

Lake Gibson E Daughtery Road PUD - 15.6 acres

Airport - Lake Gibson

Comments on Effects to Resources: State Road 33 in the vicinity of the project area provides access to downtown Lakeland, Interstate 4, and the Polk Parkway (via Interstate 4). The project area consists primarily of currently undeveloped lands, including around 640 acres of the Green Swamp Florida Forever BOT Project within the quarter-mile buffer. Future land use plans call for increased residential, industrial, and mixed use developments in the area at low to medium densities. There are few commercial properties in the project area but a substantial amount of industrial/warehousing space - including the Haverty's distribution center - within the Business Park adjacent to the west side of State Road 33, south of I-4. The project provides greater mobility and accessibility to the existing distribution and planned industrial uses in the corridor.

This project also enhances the local network and regional connectivity along this section of State Road 33. As future growth occurs within this area of Lakeland, State Road 33 will be able to better accommodate local and shorter-distance regional trips as an alternative to Interstate 4.

CLC Commitments and Recommendations: Area residents and businesses are expected to benefit from this project with improved capacity and accessibility; therefore, the recommended degree of effect is Enhanced. It is also recommended that additional public outreach be conducted to solicit input from residents and businesses which rely on State Road 33 for access. **Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Economic issue for this alternative: Federal Highway Administration

Coordinator Summary: Land Use Issue

Comments: FDOT noted that the project area is characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. The project is consistent with the Lakeland Comprehensive Plan and is shown as a cost-feasible project in the Polk TPO 2035 LRTP. The project is also considered a committed improvement in the Lakeland Comprehensive Plan's

Transportation and Capital Improvement Elements. FDOT stated that impacts to adjacent land uses are anticipated to be minimal, although the increased presence of commuter and non-motorized traffic resulting from growth in residential and mixed use areas may create conflicts between truckers and commuters sharing the corridor. Coordination Document: None.

FHWA stated that if land use changes are proposed they should be identified in appropriate planning documents. Coordination Document: None.

The project area is growing as a suburban residential and mixed-use community. The proposed project improvements appear to be in sync with such growth patterns and trends; however, as motorized and non-motorized traffic increases as a result, so does the potential for conflicts among the various modes sharing the corridor. Also, the project is consistent with and included in all of the appropriate public planning documents. Land use impacts appear to be minimal; therefore, a Summary DOE of Minimal has been assigned to the Land Use issue.

Commitments and Responses: None.

Technical Study: None.

ETAT Reviews: Land Use Issue: 2 found

2 Minimal assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

Coordination Document: No Selection

Dispute Information:N/A

Identified Resources and Level of Importance: If land use changes are proposed they should be identified in appropriate planning documents.

Comments on Effects to Resources: If land use changes are proposed they should be identified in appropriate planning documents.

CLC Commitments and Recommendations: Coordinator Feedback: None

2 Minimal assigned 06/02/2011 by Scott Swearingen, FDOT District 1

Coordination Document: No Selection

Dispute Information:N/A

Identified Resources and Level of Importance: City of Lakeland Comprehensive Plan
Polk Transportation Planning Organization's 2035 Long Range Transportation Plan (LRTP)

100-Foot Buffer:

- Residential Areas - 16.8 acres
- Commercial Areas - 2.2 acres
- Industrial Areas - 7.8 acres

500-Foot Buffer:

- Residential Areas - 110.0 acres
- Commercial Areas - 8.7 acres
- Industrial Areas - 42.2 acres
- Transportation Areas (right-of-way) - 34.9 acres
- Mobile Home and RV Parks - Oakridge MHP
- FNAI Managed Lands - Tenoroc Fish Management Area
- Bridgewater DRI - 163.5 acres
- Future land use:
 - Residential Area - 220.0 acres
 - Mixed Use/Urban Village Area - 109.0 acres
 - Conservation Area - 72.2 acres

Quarter-Mile (1,320-Foot) Buffer:

- Residential Areas - 354.7 acres
- Commercial Areas - 25.0 acres
- Industrial Areas - 113.7 acres
- Bridgewater DRI - 489.2 acres
- Future land use:
 - Residential Area - 509.4 acres
 - Mixed Use/Urban Village Area - 334.9 acres
 - Conservation Area - 319.6 acres
 - Mobile Home and RV Parks - Lakeland RV Resort

Comments on Effects to Resources: The project area is characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. However, almost 320 acres within the quarter-mile buffer are designated as conservation land. Table 2 outlines the existing generalized land uses within the 500-foot project buffer. Agriculture is the dominant land use in the corridor, followed by residential uses and other open spaces.

Table 2. Generalized Land Use (500-Foot Buffer)

500-Foot Buffer		
Description	Acres	Percent*
ACREAGE NOT ZONED FOR AGRICULTURE	56.7	11.35%
AGRICULTURAL	98.7	19.78%
INDUSTRIAL	13.6	2.72%
PARCELS WITH NO VALUES	11.8	2.37%
PUBLIC/SEMI-PUBLIC	2.0	0.39%
RECREATION	38.5	7.72%

RESIDENTIAL 60.7 12.16%
RETAIL/OFFICE 9.4 1.89%
ROW 1.5 0.3%
VACANT NONRESIDENTIAL 43.0 8.62%
VACANT RESIDENTIAL 2.8 0.56%

*Percentages do not add to 100% due to the omission of the transportation right-of-way from the D1 generalized land use inventory
EST - District 1 Generalized Land Use - analysis performed on 5/3/2011

The predominant future land use designations within the 500-foot buffer are Residential Medium, Mixed Use/Activity Center, and Residential Low. Within the quarter-mile buffer, however, the dominant designations are Mixed Use/Activity Center and Conservation.

The proposed project is consistent with the City of Lakeland's Comprehensive Plan and the Polk Transportation Planning Organization's (TPO) 2035 Long Range Transportation Plan (LRTP). The project is contained within a section of SR 33 identified as a four-lane improvement need and identified as cost feasible in the currently adopted 2035 LRTP. The project is also considered a committed improvement in the City of Lakeland Comprehensive Plan's Transportation and Capital Improvement Elements.

CLC Commitments and Recommendations: Impacts to adjacent land uses are anticipated to be minimal, although the increased presence of commuter and non-motorized traffic resulting from growth in residential and mixed use areas may create conflicts between truckers and commuters sharing the corridor. It is recommended that community outreach solicit input on potential effects to land uses in the corridor. **Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Land Use issue for this alternative: FL Department of Community Affairs

Coordinator Summary: Mobility Issue

1 Enhanced assigned 08/10/2011 by FDOT District 1

Comments: FDEP reported that the project provides an opportunity for a much needed trail connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, which is a key component of the Florida Greenways and Trails System. They noted that a trail could be constructed within the SR 33 design south of SR 659, and that the City of Lakeland's Planning and Zoning Board has explicitly requested that a trail be accommodated in a site plan for a utility facility proposed at Maggiore Boulevard/Huron Way. Coordination Document: To Be Determined: Further Coordination Required.

FDOT stated that the resulting multimodal improvements from this project along SR 33 will help to improve multimodal connections between neighborhoods immediately adjacent to the project and destinations nearby. The project includes provisions for multimodal interface with transit through the addition of bus pullouts and shelter pads along both sides. Also, the proposed improvements are anticipated to include bicycle lanes and sidewalks along both sides of the roadway. Coordination Document: None.

The project is anticipated to provide mobility improvements for multiple transportation mode types, including vehicular, pedestrian, bicycle and transit, and will strengthen connections to other trails and recreational amenities. Therefore, a summary DOE of Enhanced has been assigned to the Mobility issue.

Commitments and Responses: Public outreach during project development in coordination with the Polk TPO should continue to solicit community opinions and preferences, targeting input from the transportation disadvantaged population, regarding the proposed capacity improvements and mobility options along this segment of State Road 33.

Technical Study: None.

ETAT Reviews: Mobility Issue: 2 found

1 Enhanced assigned 06/02/2011 by Scott Swearngen, FDOT District 1

Coordination Document: No Selection

Dispute Information: N/A

Identified Resources and Level of Importance: Identified Resources:

City of Lakeland Comprehensive Plan

Polk Transportation Planning Organization's 2035 Long Range Transportation Plan (LRTP)

100-Foot Buffer:

Residential Areas - 16.8 acres

Lakeland Fire Department Station 6

Office of Greenways and Trails (OGT) Multi-Use Trails Priorities (High)

Crashes (2005-2007) - 90 (3 fatal)

500-Foot Buffer:

Residential Areas - 110.0 acres

Polk County Transit - Bus Route 52

Railroad Siding - 466 feet

Mobile Home and RV Parks - Oakridge MHP

Crashes (2005-2007) - 126 (4 fatal)

Quarter-Mile (1,320-Foot) Buffer:

Residential Areas - 354.7 acres

Mobile Home and RV Parks - Lakeland RV Resort

Railroad Siding - 3,599 feet

One-Mile (5,280-Foot) Buffer:
Railroad Siding - 12,972 feet
FDOH Group Care Facilities (7)
Airport - Lake Gibson

Comments on Effects to Resources: This project widens State Road 33 from an existing two-lane to a planned four-lane facility utilizing a suburban typical section. It is located in northern Lakeland, with the majority of the project south of Interstate 4 and having an existing interchange with I-4 near the project's northeastern limit. It will extend the existing four-lane section of SR 33 further northward for an additional 3.7 miles approximately.

The proposed improvements to State Road 33 are intended to improve operational capacity to meet mobility needs and to improve the functional viability of this roadway as a local and regional travel alternative to Interstate 4. State Road 33 provides access to nearby areas facilities including the Polk Parkway and downtown Lakeland.

This project includes provisions for multimodal interface with transit through the addition of bus pullouts and shelter pads along both sides of SR 33 within the project limits. (These are included as specific payment items in the Bridgewater DRI Development Agreement.) The Polk LRTP shows an unfunded transit need along the SR 33 corridor within the project limits. The proposed improvements are anticipated to include bicycle lanes and sidewalks along both sides of the roadway. The resulting multimodal improvements will help to improve multimodal connections between neighborhoods immediately adjacent to the project and destinations nearby.

The project is consistent with the City of Lakeland's Comprehensive Plan and the Polk Transportation Planning Organization's (TPO) 2035 Long Range Transportation Plan (LRTP). The project is contained within a section of SR 33 identified as a four-lane improvement need and identified as cost feasible in the currently adopted 2035 LRTP. The project is also considered a committed improvement in the City of Lakeland Comprehensive Plan's Transportation and Capital Improvement Elements.

CLC Commitments and Recommendations: The project is anticipated to enhance mobility and accessibility for both motorized and non-motorized traffic; however, public outreach in coordination with the Polk TPO should continue to solicit community opinions and preferences, targeting input from the transportation disadvantaged population, regarding the proposed capacity improvements and mobility options along this segment of State Road 33.

Coordinator Feedback: None

1 *Enhanced* assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: To Be Determined: Further Coordination Required

Dispute Information: N/A

Identified Resources and Level of Importance: The project is within 500 ft. of the Tenoroc Fish Management Area - co-managed by the Florida Fish and Wildlife Conservation Commission and the DEP's Bureau of Mining and Minerals Regulation. The project is also located within the Green Swamp Florida Forever BOT Project area.

Comments on Effects to Resources: The DEP's Office of Greenways and Trails reports that the project provides an opportunity for a much needed trail connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, which is a key component of the Florida Greenways and Trails System.

-- 12-foot pathways are currently being constructed as part of the East-West Road (University Boulevard) project between SR 33 and SR 570 (Polk Parkway) that is scheduled for completion in early 2012.

-- A multi-use trail is envisioned to be incorporated into the SR 33 design north of SR 659 (Combee Road), thereby providing a connection between Tenoroc Fish Management Area and E-W Road corridors that directly connect with the Van Fleet State Trail.

-- The SR 33 project corridor also parallels a trail corridor that is located on the south side of Long Lake. Given the 200-ft. right-of-way width on SR 33 and existing/planned residential units in the area, a trail could be constructed within the SR 33 design south of SR 659. In fact, the City of Lakeland's Planning and Zoning Board has explicitly requested that a trail be accommodated in a site plan for a utility facility proposed at Maggiore Boulevard/Huron Way.

-- It should also be noted that the City's four-lane improvement on SR 33 adjacent to the PD&E project limits (West of Old Combee/Deeson Point to Interstate 4 at Exit 33) includes sidewalks and dedicated bicycle lanes. Since SR 33 within the project area currently has a 60-mph posted speed limit, a transition from an on-road to off-road facility would certainly be appreciated.

For further information and assistance, please contact Ms. Marsha Connell in the Office of Greenways and Trails at (850) 245-2052.

Coordinator Feedback: None

The following organization(s) were expected to but did not submit a review of the Mobility issue for this alternative: Federal Highway Administration

Coordinator Summary: Relocation Issue

2 *Minimal* assigned 09/07/2011 by FDOT District 1

Comments: FDOT stated that the proposed improvements are expected to fit within the existing public rights-of-way, including the required stormwater treatment facilities and that there is no anticipated need to relocate households or businesses as a result of the project. Coordination Document: None.

FHWA expressed concerns with the existing right-of-way width being adequate to accommodate the project's planned improvements and, therefore, relocations of nearby residences may be necessary. FHWA requested that potential relocations be identified as early in the planning process as possible. Coordination Document: To Be Determined: Further Coordination Required.

The proposed improvements are expected to fit within the existing public rights-of-way, including the required stormwater treatment facilities. There do not appear to be any project-related relocation effects per this project. The FDOT has coordinated with the FHWA in assigning a Summary DOE. The FHWA stated that relocation impacts have not been identified and that further agency and public involvement may be necessary as the project proceeds forward. A summary DOE of Minimal has been assigned to the Relocation issue. If relocation impacts do arise, they should be noted as early in the project development process as possible.

Commitments and Responses: Any potential relocations of existing residents due to the project will be identified during project development.

Technical Study: None.

ETAT Reviews: Relocation Issue: 2 found

3 *Moderate* assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

Coordination Document: To Be Determined: Further Coordination Required

Dispute Information:N/A

Identified Resources and Level of Importance: Please ID potential relocations as early in the planning process as possible.

Comments on Effects to Resources: In some areas apparently less than 200 feet is available for project construction and associated needs. Due to the proximity of private residences to the project area relocations might be necessary and should be identified as early in the planning stages as possible.

CLC Commitments and Recommendations: Coordinator Feedback: None

0 *None* assigned 06/02/2011 by Scott Swearingen, FDOT District 1

Coordination Document: No Selection

Dispute Information:N/A

Identified Resources and Level of Importance: 100-Foot Buffer:

Residential Areas - 16.8 acres

Lakeland Fire Department Station 6

Florida Forever BOT Project - Green Swamp, 36.4 acres

Comments on Effects to Resources: The project area is characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. The proposed improvements are expected to fit within the existing public rights-of-way, including the required stormwater treatment facilities. There is no anticipated need to relocate households or businesses as a result of the project.

CLC Commitments and Recommendations: There are no project-related relocation effects expected. The recommended degree of effect is None.

Coordinator Feedback: None

Coordinator Summary: Social Issue

3 *Moderate* assigned 08/10/2011 by FDOT District 1

Comments: The FDOT noted numerous community facilities within the project study area. With regard to area demographics, the 500-foot and one-mile buffer areas contain a relatively low percentage of African-Americans (32.8%) and Hispanic persons. Also, the percentage of households without a car is relatively low as is the percentage of elderly persons (age 65+). The median family income is higher than the County average. These statistics indicate a high probability of an overall area population with limited transportation mobility capacity and/or options. Per the FDOT PD&E Manual, Part 1, Chapter 11, Section 11.2.4, public outreach activities targeting minority persons will not be required. This is due to the low percentage of minority persons in the study area. Regardless, FDOT recommended that measures be taken during public involvement to identify potential transportation disadvantaged groups, including the elderly, and ensure they are not disproportionately affected by the project. Coordination Document: None.

FHWA expressed concerns with the existing right-of-way width being adequate to accommodate the project's planned improvements and, therefore, relocations of nearby residences may be necessary. FHWA requested that potential relocations be identified as early in the planning process as possible. Coordination Document: To Be Determined: Further Coordination Required.

The USEPA noted both positive and negative impacts of the project. Positive impacts include better connectivity and accessibility for nearby communities. Negative impacts include general widening and potential increase in traffic volumes. Coordination Document: None.

The project is anticipated to improve capacity, circulation and mobility; however, this could lead to higher traffic volumes and an overall disruption to the social environment. The proposed improvements are expected to fit within the existing public rights-of-way, including the required stormwater treatment facilities. The demographic character of the project study area depicts a relatively less racially and ethnically diverse population that is younger, wealthier and with greater automobile access than Polk County as a whole. Per the FDOT PD&E Manual, Part 1, Chapter 11, Section 11.2.4, if the demographic data indicates that 5% or 1,000 persons or more in a project area speak a language other than English then Limited English Proficiency (LEP) accommodations should be required. Based on available U.S. Census data for the area, such accommodations will not be required for the project. Due to the high level of existing community facilities and residential populations in the area as well as the potential for increased traffic volumes, a summary DOE of Moderate has been assigned to the Social issue.

Commitments and Responses: Community outreach and input regarding the potential effects of this project should continue and measures should be taken during public involvement to identify potential transportation disadvantaged groups, including the elderly, and ensure they are not disproportionately affected by the project. Such outreach and involvement will be conducted during project development.

Technical Study: None.

ETAT Reviews: Social Issue: 3 found

0 *None* assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

Coordination Document: No Selection

Dispute Information:N/A

Identified Resources and Level of Importance: Over 18% of land within the 200 foot buffer is midium density residential.

Comments on Effects to Resources: Communities along the corridor will be impacted. The project is likely to positively impact some communities by providing better connectivity and accessibility. The general widening and potential increase in volume of traffic will present a negative impact. Therefore the degree of effect of "none" is assigned. Further project details during the development and design can determine if the net social impact is positive.

Coordinator Feedback: None

3 *Moderate* assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

Coordination Document: To Be Determined: Further Coordination Required

Dispute Information:N/A

Identified Resources and Level of Importance: Please identify the proposed type and width of road way and number and location of potential or identified relocations that would be necessary.

Comments on Effects to Resources: In some areas apparently less than 200 feet is available for project construction and associated needs. Due to the proximity of private residences to the project area relocations might be necessary and should be identified as early in the planning stages as possible.

CLC Commitments and Recommendations: Coordinator Feedback: None

2 Minimal assigned 06/02/2011 by Scott Swearingen, FDOT District 1

Coordination Document: No Selection

Dispute Information: N/A

Identified Resources and Level of Importance: 100-Foot Buffer:

Residential Areas - 16.8 acres

Lakeland Fire Department Station 6

Office of Greenways and Trails (OGT) Multi-Use Trails Priorities (High)

Parcel Derived Park (1 golf course)

200-Foot Buffer:

Lakeland Motorsports Park

500-Foot Buffer:

Residential Areas - 110.0 acres

Mobile Home and RV Parks - Oakridge MHP

FNAI Managed Lands - Tenoroc Fish Management Area

Bridgewater DRI - 163.5 acres

Future land use:

Residential Area: 220.0 acres

Mixed Use/Urban Village Area: 109.0 acres

Conservation Area: 72.2 acres

Quarter-Mile (1,320-Foot) Buffer:

Residential Areas - 318.7 acres

Bridgewater DRI - 489.2 acres

Mobile Home and RV Parks - Lakeland RV Resort

TLC Family Church (Parcel Derived Religious Center)

One-Mile (5,280-Foot) Buffer:

Residential Areas - 1316.0 acres

Bridgewater DRI - 1140.9 acres

Parcel Derived Schools - School Board of Polk County

Lake Gibson E Daughtery Road PUD - 15.6 acres

Religious Centers, Parcel Derived or Geocoded (5)

Lake Deeson Boat Ramp

Other Parcel Derived Parks (2 golf courses)

Health Care Facilities, Parcel Derived or Geocoded (3)

FDOH Group Care Facilities (7)

Social Service Facilities, Parcel Derived or Geocoded (10)

Assisted Housing - Sterling Place

SHPO Historic Standing Structures - 6230 Lake Luther Road

Homeowners or Condominium Associations (2)

Florida Archaeological or Historic Sites (2) - 0.28 acres

USA International Speedway

Lakeland Drag Strip

Airport - Lake Gibson

Comments on Effects to Resources: Several community facilities exist within close proximity to the project. Facilities within the quarter-mile buffer include a city fire station, an area designated by the OGT as a "high priority" multi-use trail, the Tenoroc Fish Management Area, one religious center, two mobile home/RV parks, and the Lakeland Motorsports Park. There are about 319 acres of medium to high density residential uses within the quarter-mile buffer, or a little less than 23 percent of the total land area within the buffer. Additionally, almost 490 acres of land are planned for development as part of the Bridgewater DRI.

Numerous community facilities exist within the one-mile buffer as listed above.

Table 1 displays the demographic characteristics of the corridor within the 500-foot and one-mile buffers and compares these areas with parallel statistics for the City of Lakeland and Polk County. According to the US Census Bureau data, the one-mile buffer area contains a lower percentage of minority persons, including those claiming Hispanic ethnicity, which is relatively low at 4.7% (compared to 6.4% in Lakeland and 9.7% in all of Polk County). The percentages of persons over the age of 65 and under the age of 18 are similar in the one-mile buffer area to those measures for Polk County as a whole, but the project area appears to contain a generally younger than average population for the City of Lakeland. The percentage of households with no vehicular access is substantially lower than in Polk County or the City of Lakeland, while the project area's median income is notably higher.

Per the FDOT PD&E Manual, Part 1, Chapter 11, Section 11.2.4, if the demographic data indicates that 5% or 1,000 persons or more in a project area speak a language other than English then Limited English Proficiency (LEP) accommodations should be required. Based on the demographic information from the US Census Bureau data, LEP accommodations are not required for this project.

Table 1. Demographic Information

Demographic 500' Buffer 1 Mile Buffer Lakeland Polk County

White (Race) 91.9% 90.9% 73.5% 81.0%
 African-American (Race) 4.4% 4.9% 21.3% 13.8%
 "Other" * (Race) 3.7% 4.2% 5.2% 5.2%
 Hispanic (Ethnic Group) 2.8% 4.7% 6.4% 9.7%
 Age 65+ 14.2% 17.5% 23.0% 18.3%
 Under age 18 25.8% 24.4% 21.4% 24.4%
 HH w/o car 3.6% 4.7% 10.8% 7.2%
 Med. Family Income \$45,378 \$44,002 \$40,468 \$41,442
 Source: US Census Bureau (2000 Data - Polk County)

* "Other" includes Asian, Native American, Native Hawaiian & Other Pacific Islander Alone, & Other Race.

CLC Commitments and Recommendations: The potential impacts to the social environment are expected to be minimal. However, it is recommended that community outreach and input regarding the potential effects of this project continues. Measures should be taken during public involvement to identify potential transportation disadvantaged groups, including the elderly, and ensure they are not disproportionately affected by the project. **Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Social issue for this alternative: FL Department of Community Affairs

ETAT Reviews and Coordinator Summary: Secondary and Cumulative Issues

Coordinator Summary: Secondary and Cumulative Effects Issue

2 *Minimal* assigned 09/07/2011 by FDOT District 1

Comments: The SWFWMD stated that the project may result in further loss and/or disturbance of breeding and foraging habitat for listed species and further fragmentation of remaining uplands. The SWFWMD noted that excessive habitat damage can be avoided by restricting construction equipment to previously disturbed areas. The SWFWMD also commented that the use of Low Impact Development techniques may assist in water quality treatment and water quantity management. The SWFWMD recommends that wetland impacts be eliminated or reduced by implementing strict controls over sediment transport offsite during construction and by restricting staging areas to uplands. Coordination Document: Permit Required.

According to the City of Lakeland's Comprehensive Plan, the future land use vision of the project area calls for increased residential, industrial, and mixed use developments. The purpose of this project is to improve the functional viability of SR 33 as a local and regional travel alternative to Interstate 4 to provide needed capacity to meet growing travel demand in northeast Lakeland and support increases in both population and employment in the area. This project is additionally anticipated to augment an existing emergency evacuation route. For these reasons, a Summary DOE of Minimal has been assigned to the Secondary and Cumulative Effects issue. The FDOT has coordinated with the SWFWMD in assigning a Summary DOE. The SWFWMD stated that their determination of any DOE is primarily based on the project's increased coordination & efforts with the FDOT during the future regulatory process (ERP). Therefore, the SWFWMD assigned their recommended DOE due to the increased permitting efforts of the project.

Commitments and Responses: None.

Technical Study: None.

ETAT Reviews: Secondary and Cumulative Effects Issue: 1 found

3 *Moderate* assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Dispute Information: N/A

At-Risk Resource: Wildlife and Habitat

Comments on Effects: The project's potential impacts on wildlife and habitat include the further elimination and/or disturbance of breeding and foraging areas for listed species and the further dissection and fragmentation of remaining uplands. Increased traffic and increased traffic lane width will increase the potential for wildlife fatalities on SR 33, particularly for gopher tortoises who utilize the remaining patches of suitable habitat adjacent to the project.

Recommended Avoidance, Minimization, and Mitigation Measures: Excessive habitat damage to remaining quality upland habitats can be eliminated by restricting construction equipment to other, disturbed areas.

Recommended Actions to Improve At-Risk Resources: The results from the recommended analysis of road kill potential, particularly of gopher tortoises, should be utilized to eliminate serious impacts to wildlife and habitats.

At-Risk Resource: Water Quality and Quantity

Comments on Effects: The surface water features in the project area have been adversely affected by past land uses, untreated runoff from roadways and agricultural lands, physical disturbances including excavation, ditching, and other activities. The project has the potential to continue to promote both physical and water quality impacts to these aquatic systems.

Recommended Avoidance, Minimization, and Mitigation Measures: Compliance with existing permit requirements, the successful use of erosion and sediment control BMPs, and compliance with applicable TMDL and MFL requirements will help assure that minimum water quality standards are met. Water quantity concerns will also be addressed during the ERP process. In general, limiting or otherwise offsetting encroachment on the ditches, channels, and floodplains in the area can reduce quantity concerns. For groundwater resources, ensure that spillages of petroleum products and other chemicals do not occur during construction, and that stormwater treatment ponds do not intrude into the limerock or penetrate confining material of the aquifer system, either directly or by sinkhole formation. Low impact development strategies may help with water quality treatment as well as water quantity management.

Recommended Actions to Improve At-Risk Resources: For surface water resources, reduce pollutant loads to the drainage features in the project area by treating stormwater runoff from currently untreated areas, by controlling erosion from the project site, by limiting activities in surface water, by protecting surface water from the ingress of grease and oils from equipment, and by considering restoration strategies at construction sites. Low impact development strategies may help to limit secondary and cumulative impacts.

At-Risk Resource: Wetlands

Comments on Effects: Possible secondary and cumulative impacts to wetlands within the project include the further loss or reduction of the remaining wetlands.

Recommended Avoidance, Minimization, and Mitigation Measures: Wetland impacts can be eliminated or reduced by implementing strict controls over sediment transport off site during construction and by restricting the staging area and the movement of vehicles and equipment to non-wetland areas.

Recommended Actions to Improve At-Risk Resources:

1. Avoid impacts to wetlands wherever feasible;
2. Increase the buffer area around existing wetlands as practicable;
3. Reduce impacts by restoring or enhancing wetland acreage impacted previously by roadway construction.

Coordinator Feedback: None

Eliminated Alternatives

No eliminated alternatives present.

Project Scope

General Project Commitments

No General Project Commitments Found

Required Permits

Permit Name	Type	Review Date
Dredge and Fill Permit	USACE	08/10/11
Environmental Resource Permit	State	08/10/11

Required Technical Studies

Technical Study Name	Type	Review Date
Contamination Screening Evaluation Report	ENVIRONMENTAL	08/10/11
Endangered Species Biological Assessment	ENVIRONMENTAL	08/10/11
Wetlands Evaluation Report	ENVIRONMENTAL	08/10/11
Cultural Resource Assessment Survey Report	Other	08/10/11
Floodplains Assessment	Other	08/10/11
Section 4f Evaluation	ENVIRONMENTAL	08/10/11
Conditions: Section 4(f) Determination of Applicability		
Water Quality Impact Evaluation (WQIE)	ENVIRONMENTAL	08/10/11

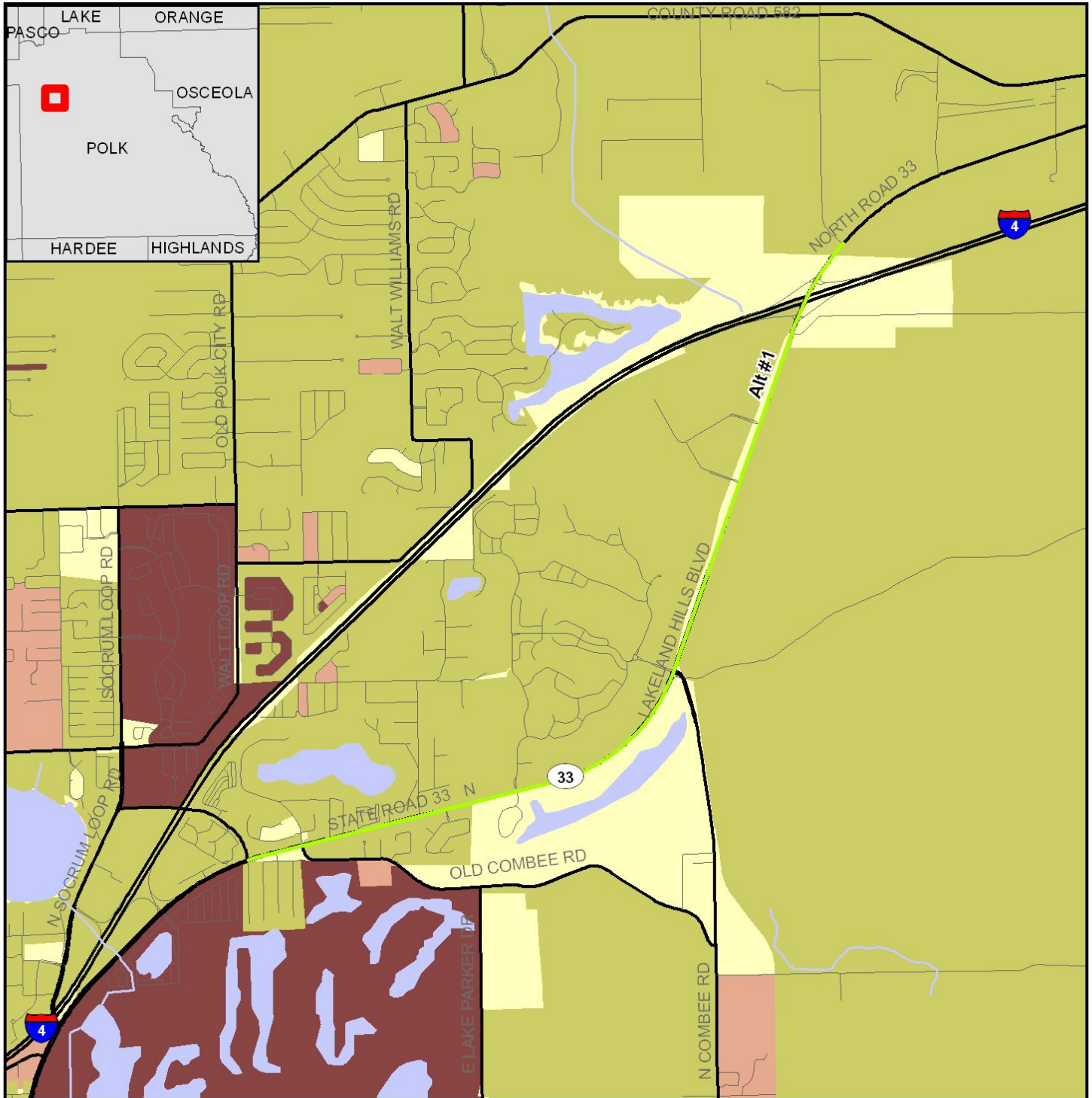
Dispute Resolution Activity Log

No Dispute Actions Found.

Project-Level Hardcopy Maps

13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 1 Miles

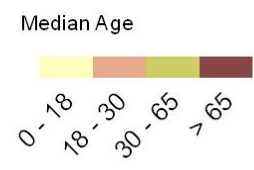


Data Sources:
 US Geological Survey
 FL Department of Transportation
 Geographic Data Technology, Inc.
 US Census Bureau

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.

Population Age Distribution Map

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

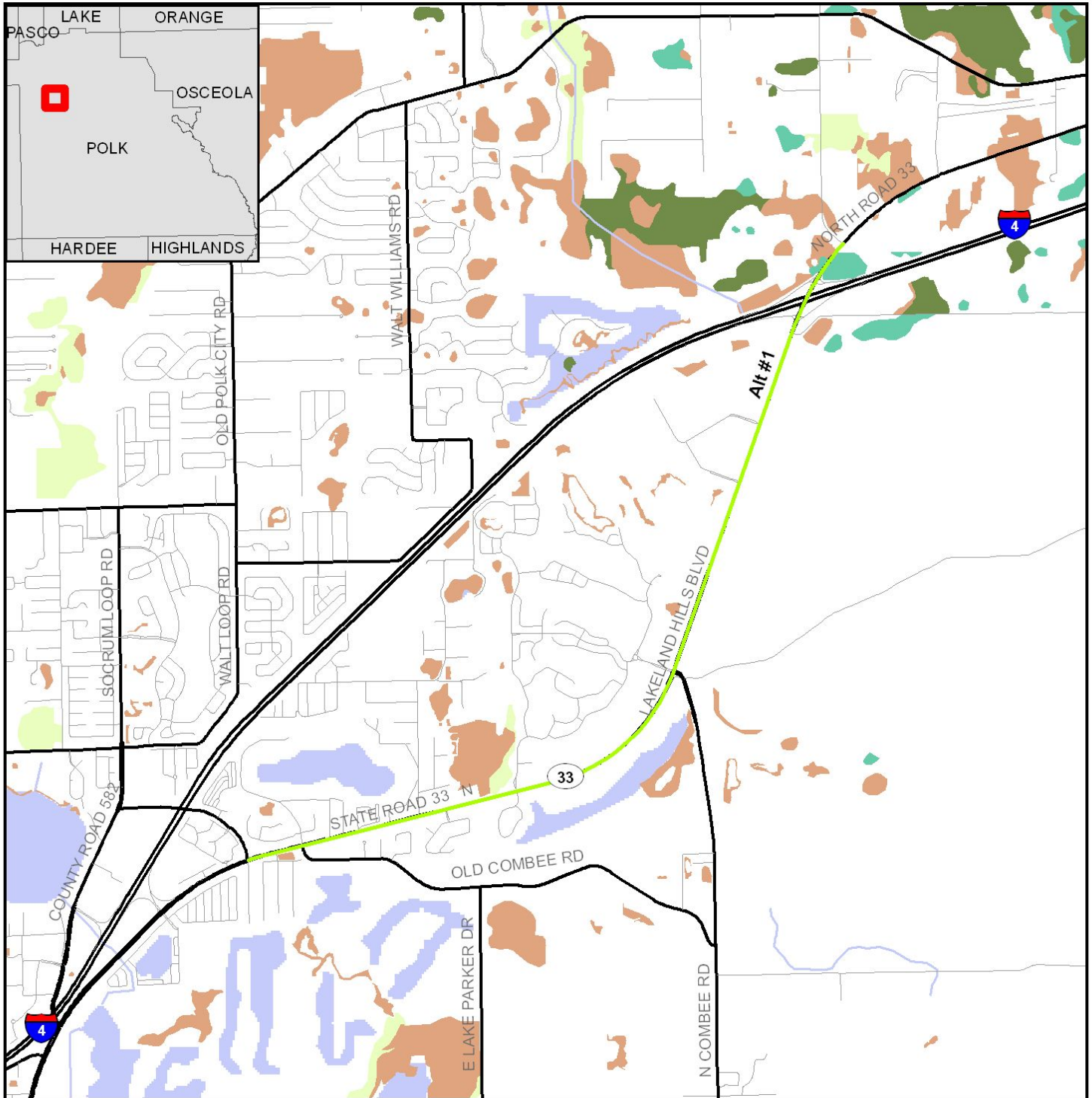


Map Generated on: 4/1/2011



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.6 Miles



- | | | | |
|---------------------------|------------------------|-------------------------------|--------------------------------------|
| ETDM Alternative Point | River, Stream or Canal | Continuous Seagrass | Gravel Beach/Riprap |
| ETDM Alternative Terminus | Water Body | Discontinuous Seagrass | Exposed Tidal Flat |
| ETDM Alternative Segment | Aquatic Preserve | Coastal Barrier Resource Area | Sheltered Tidal Flat |
| ETDM Alternative Polygon | Navigable Water Way | Swamp or Marsh | Mixed Sand And Gravel Beach |
| Major Road | Exposed Rocky Platform | Sand Beach | Sheltered Rock/Seawall/Vegetated |
| Local Road or Trail | | | Exposed Vertical Rocky Shore/Seawall |

Coastal and Marine Resource Map

Data Sources: Geographic Data Technology, Inc.; US Geological Survey; Florida Marine Research Institute; Florida Department of Transportation; Florida Department of Environmental Protection; National Oceanic and Atmospheric Association; Florida Water Management Districts

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.

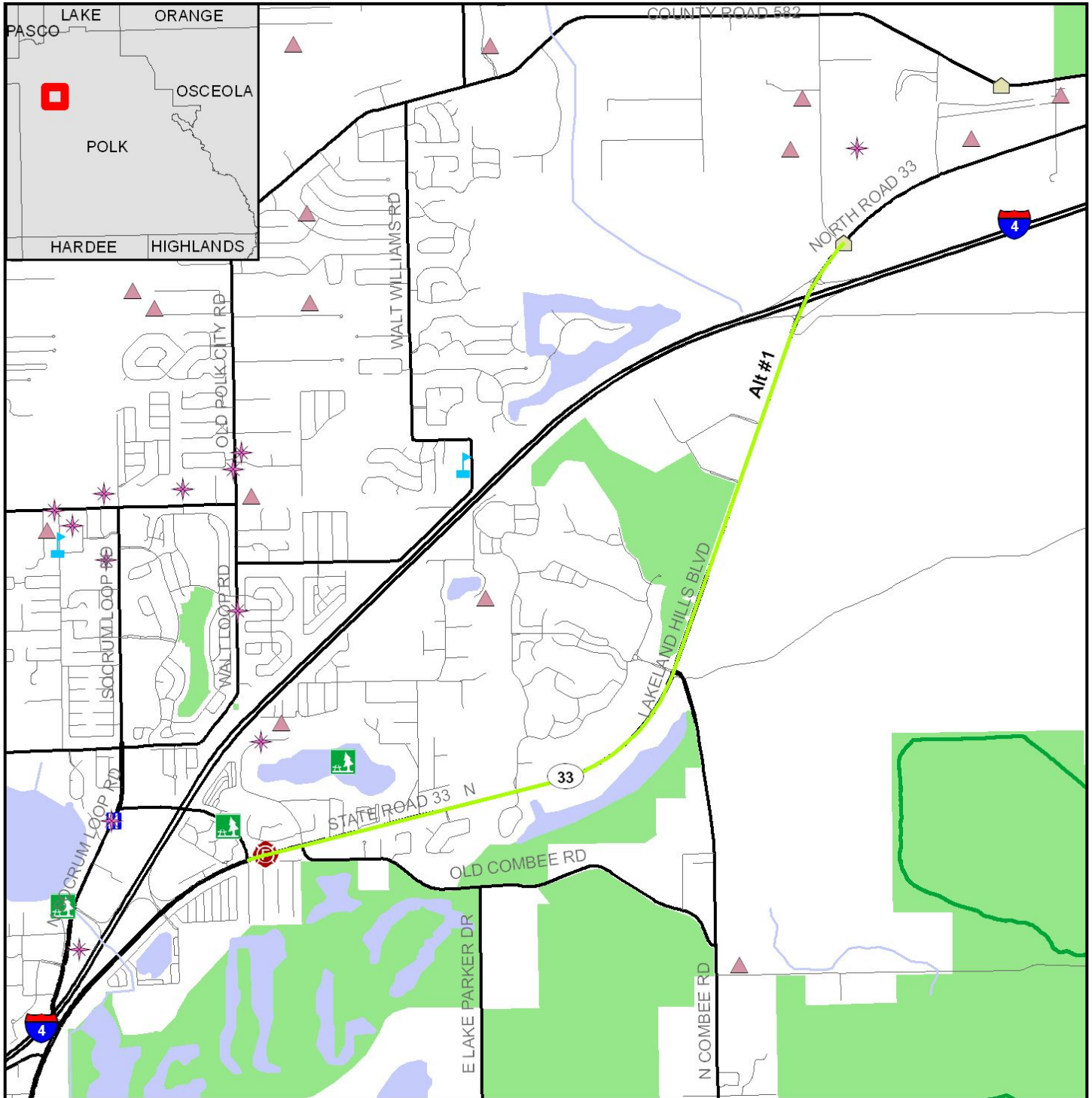


Map Generated on: 4/1/2011



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



00.09 Miles



- | | | | |
|---------------------------|------------------|------------------------|---------------------------------|
| ETDM Alternative Point | Cemetery | Fire Station | Major Road |
| ETDM Alternative Terminus | Social Service | Health Care | Local Road or Trail |
| ETDM Alternative Segment | Community Center | School | Railroad |
| ETDM Alternative Polygon | Law Enforcement | Park | Community Boundary |
| Government | Place of Worship | River, Stream or Canal | Water Body |
| Civic Center | Cultural Center | Recreational Trail | Conservation or Recreation Area |

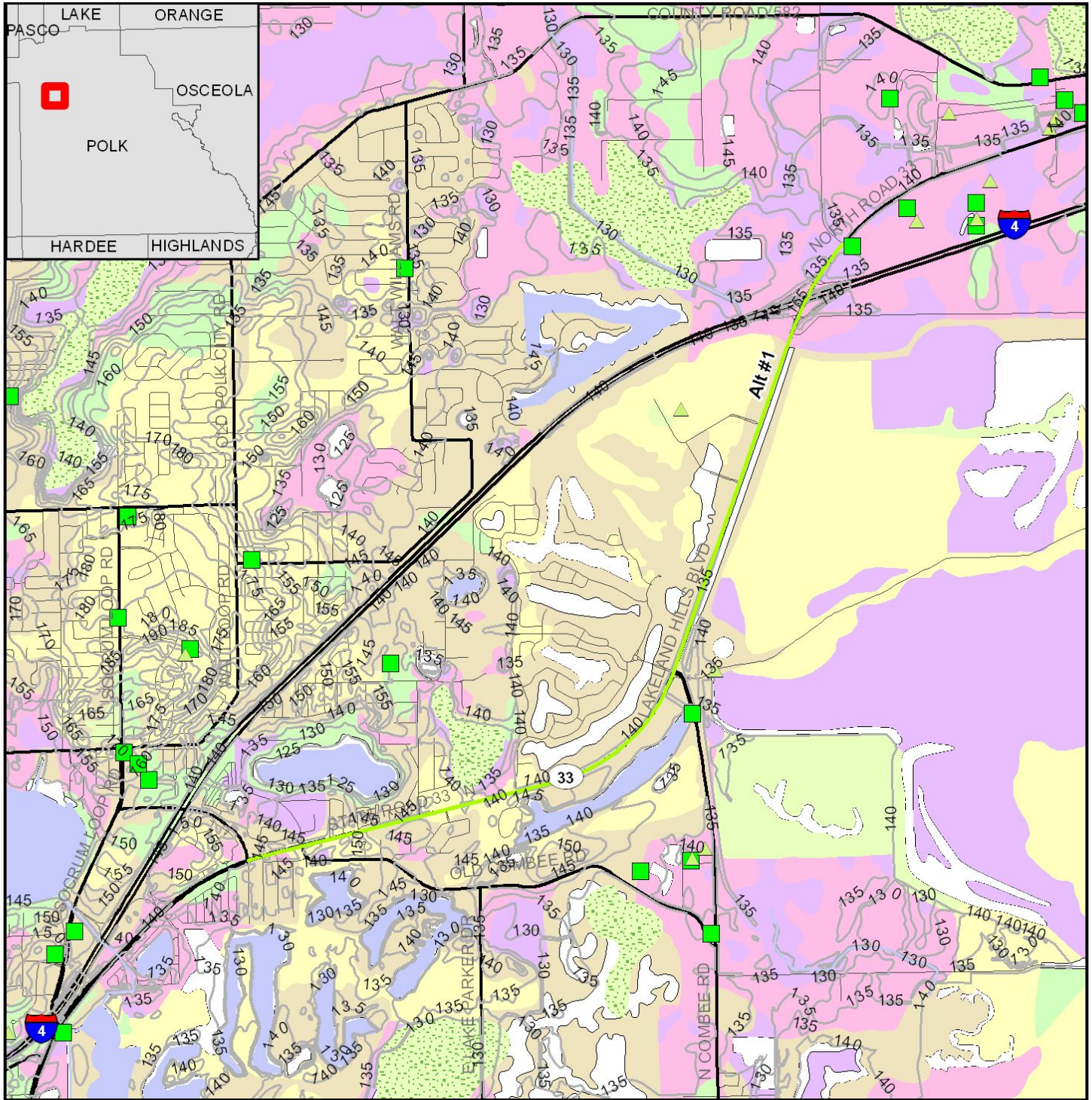
Data Sources:

US Geological Survey; FL Department of Transportation; Geographic Data Technology, Inc.; FL Property Appraisers; FL Natural Areas Inventory



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.7 Miles

Potential Contamination Assessment Map

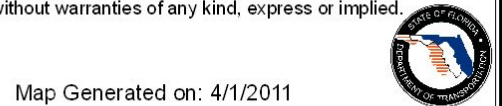


- | | | | |
|---------------------------|-------------------------|-------------------------|-----------------|
| ETDM Alternative Point | Railroad | NPL Remediation Site | FDEP Tanks |
| ETDM Alternative Terminus | River, Stream or Canal | Hazardous Material Site | Brownfield Area |
| ETDM Alternative Segment | Toxic Release Inventory | Power Plant | 5 FT Contour |
| ETDM Alternative Polygon | Dry Cleaning Facility | Superfund Site | Water Body |
| Major Road | Solid Waste Facility | Nuclear Site | Swamp/Marsh |
| Local Road or Trail | | | |

Data Sources:

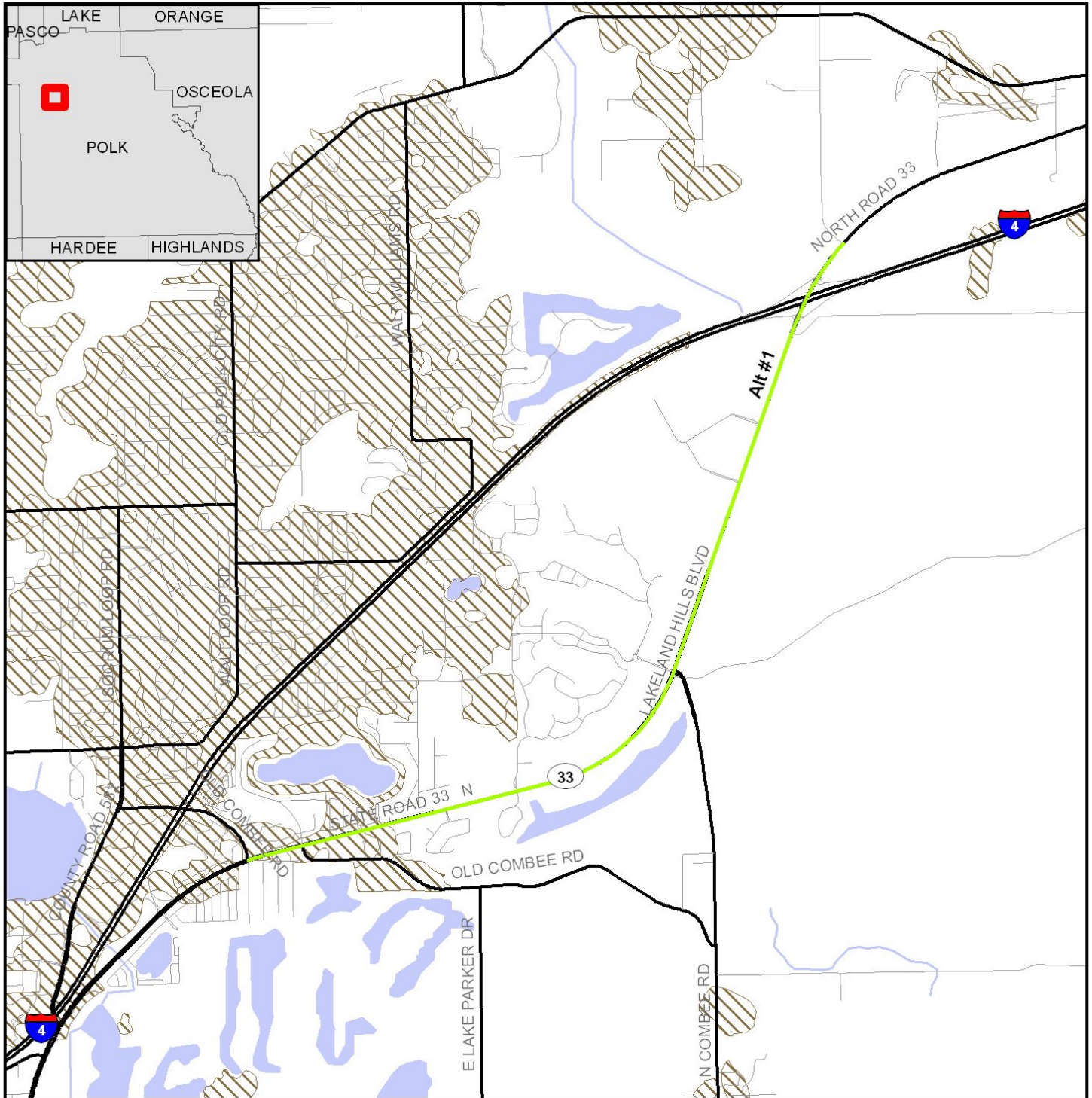
Geographic Data Technology, Inc.; US Geological Survey; FL Department of Transportation; FL Department of Environmental Protection; FL Water Management Districts; US Environmental Protection Agency; Natural Resource Conservation Service

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.7 Miles

Farmlands Resource Map



- ETDM Alternative Point
- ETDM Alternative Terminus – Major Road
- ETDM Alternative Segment – Local Road or Trail
- ▨ ETDM Alternative Polygon
- River, Stream or Canal
- Roads**
- Cropland/Pastureland
- Nurseries/Vineyards
- Specialty Farms
- Tree Crops
- Water Body
- ▨ Prime Farmland Soils
- Rural Open Lands

Data Sources: Geographic Data Technology, Inc., Florida Water Management Districts, US Geological Survey, Natural Resources Conservation Services
 This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied

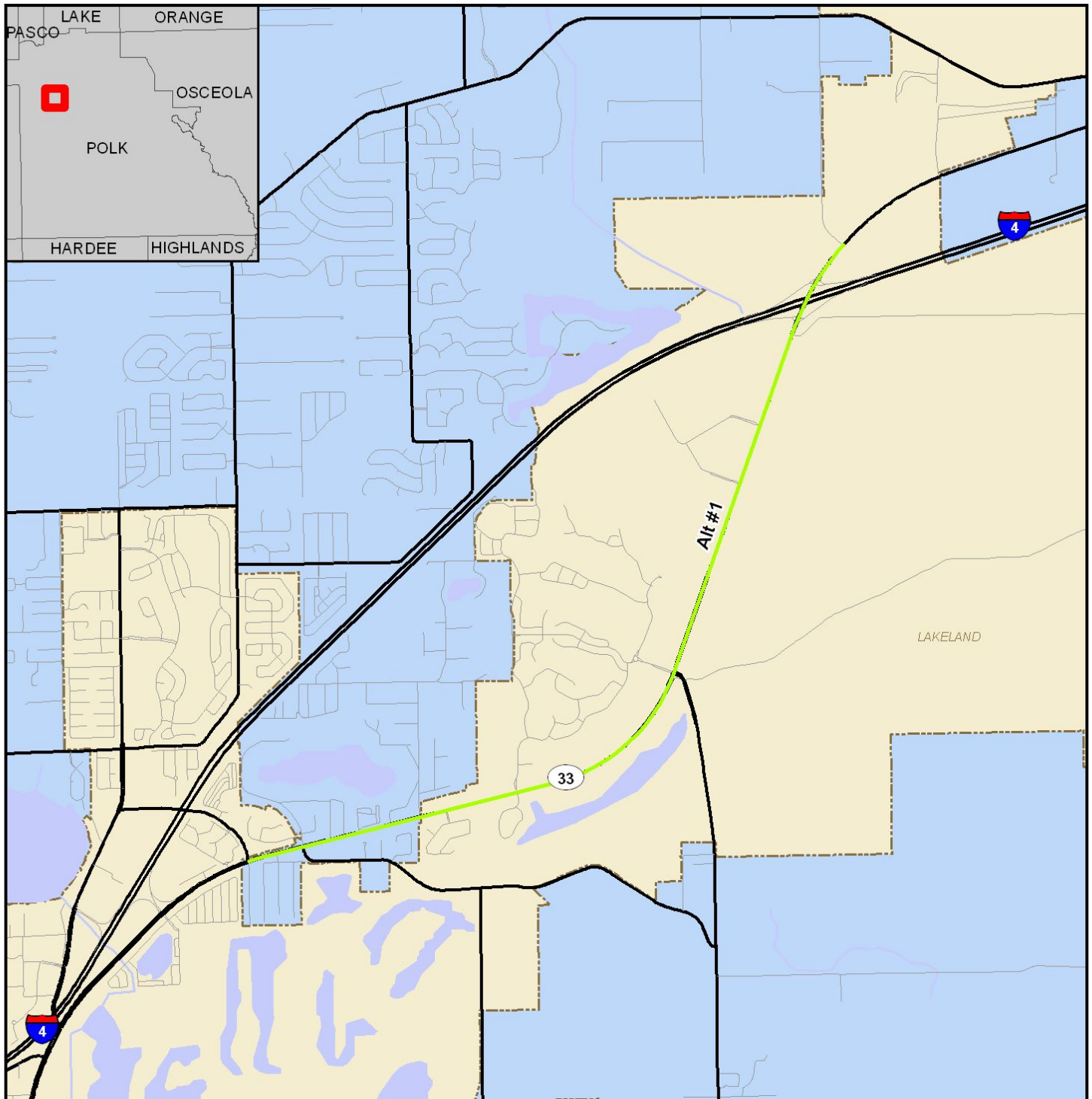


Map Generated on: 4/1/2011



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.8 Miles



Data Sources:
 Geographic Data Technology, Inc.
 US Geological Survey
 Federal Emergency Management Agency

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body
- City Limits
- County Boundaries
- Special Flood Hazard Area

Floodplain Resource Map

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.

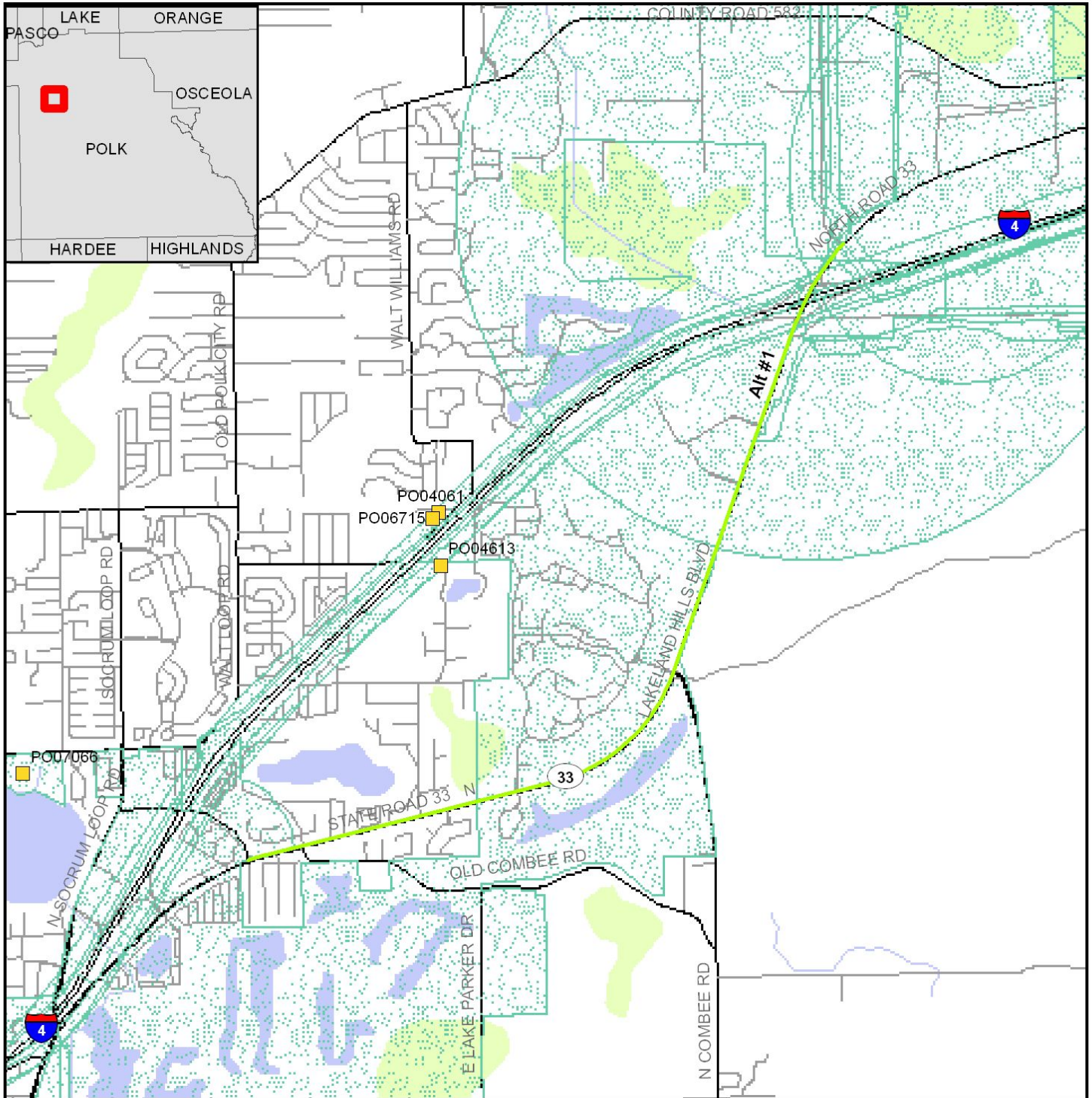


Map Generated on: 4/1/2011



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 1 Miles

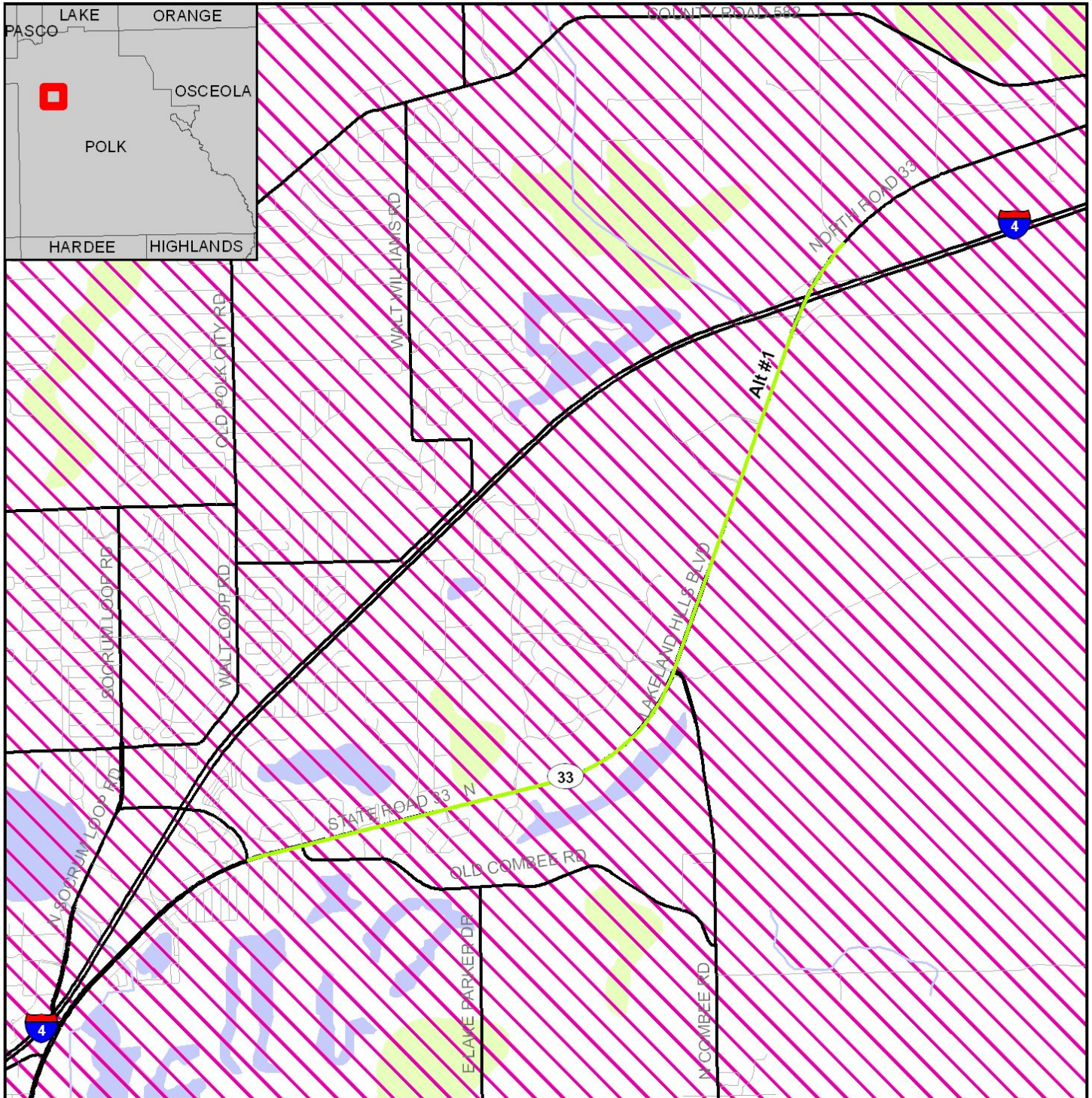
Historic Resources Map

- | | | | |
|---|---------------------------|------------------------|-------------------------------------|
| <p>Data Sources:
 Geographic Data Technology, Inc.
 US Geological Survey
 Florida Department of Transportation
 Florida Department of State,
 Bureau of Archaeological Research</p> | ETDM Alternative Point | Water Body | Historic Cemetery |
| | ETDM Alternative Terminus | Swamp/Marsh | Historic Bridge |
| | ETDM Alternative Segment | Major Road | Historic Resource Group |
| | ETDM Alternative Polygon | Local Road or Trail | Cultural Resource Field Survey Area |
| River, Stream or Canal | Railroad | State Historic Highway | |
| | Historic Structure | | |

Note: Historic properties depicted on this map represent resources listed in the Florida Master Site File excluding archeological site locations, which, pursuant to Chapter 267.135, Florida Statutes, may be exempt from public record (Chapter 119.07, Florida Statutes). Absence of features on the map does not necessarily indicate an absence of resources in the project vicinity.

13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Hydrogeology Resource Map

0 0.5 Miles



- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Swamp/Marsh

- #### Recharge Areas of the Floridan Aquifer
- Discharge 1 TO 5
 - Discharge > 5
 - Discharge < 1
 - Recharge 1 TO 10
 - Recharge > 10
 - Recharge < 1

- #### Geological Epoch
- Oligocene/Miocene
 - Pleistocene
 - Pleistocene & Holocene
 - Pliocene
 - Pliocene/Pleistocene
 - Eocene
 - Holocene
 - Miocene
 - Miocene/Pliocene
 - Oligocene

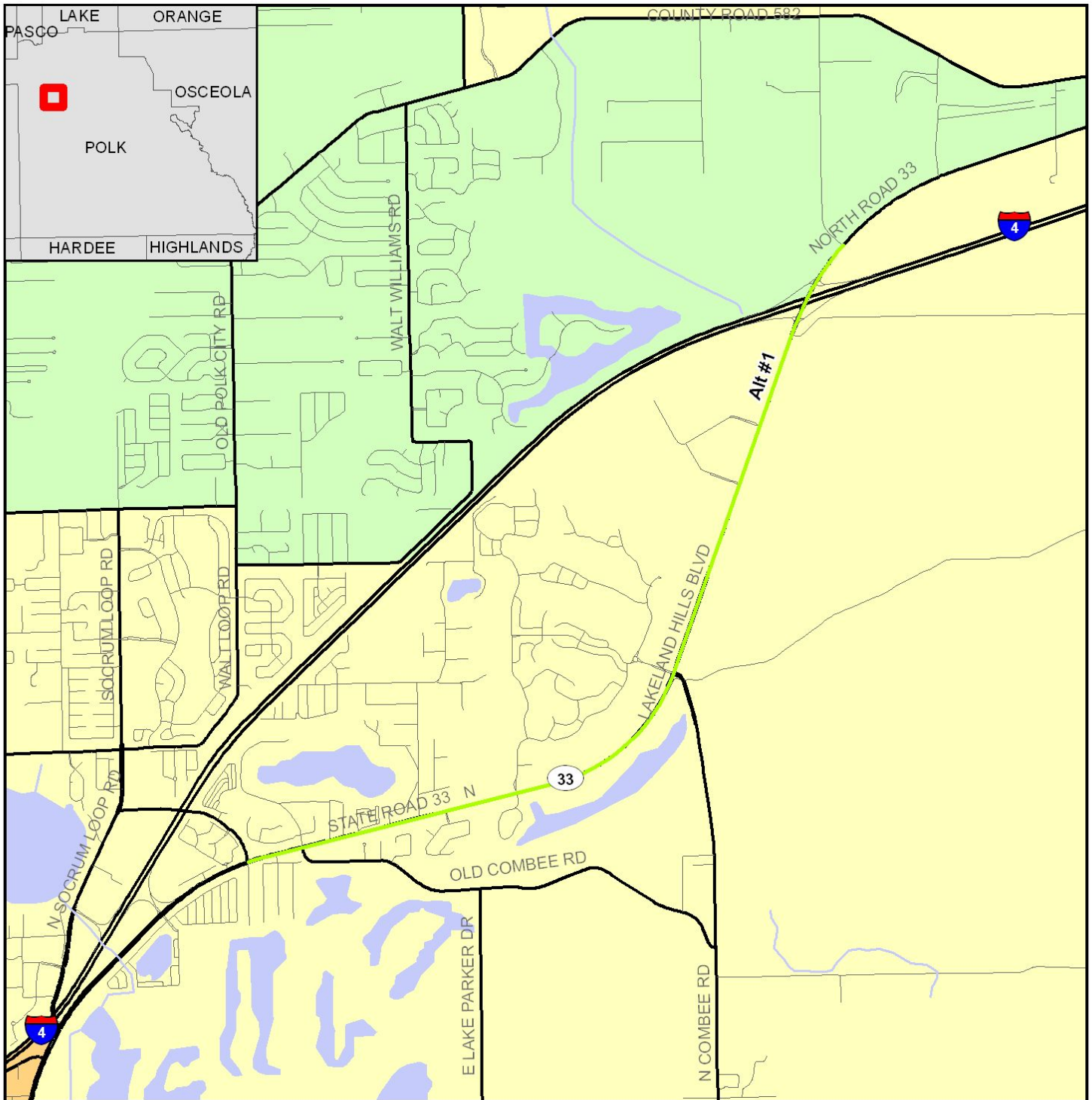
Data Sources: Geographic Data Technology, Inc.; US Geological Survey; Florida Department of Transportation; South West Florida Water Management District; Florida Geological Survey

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 1 Miles

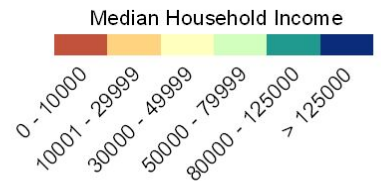


Data Sources:
 US Geological Survey
 FL Department of Transportation
 Geographic Data Technology, Inc.
 US Census Bureau

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.

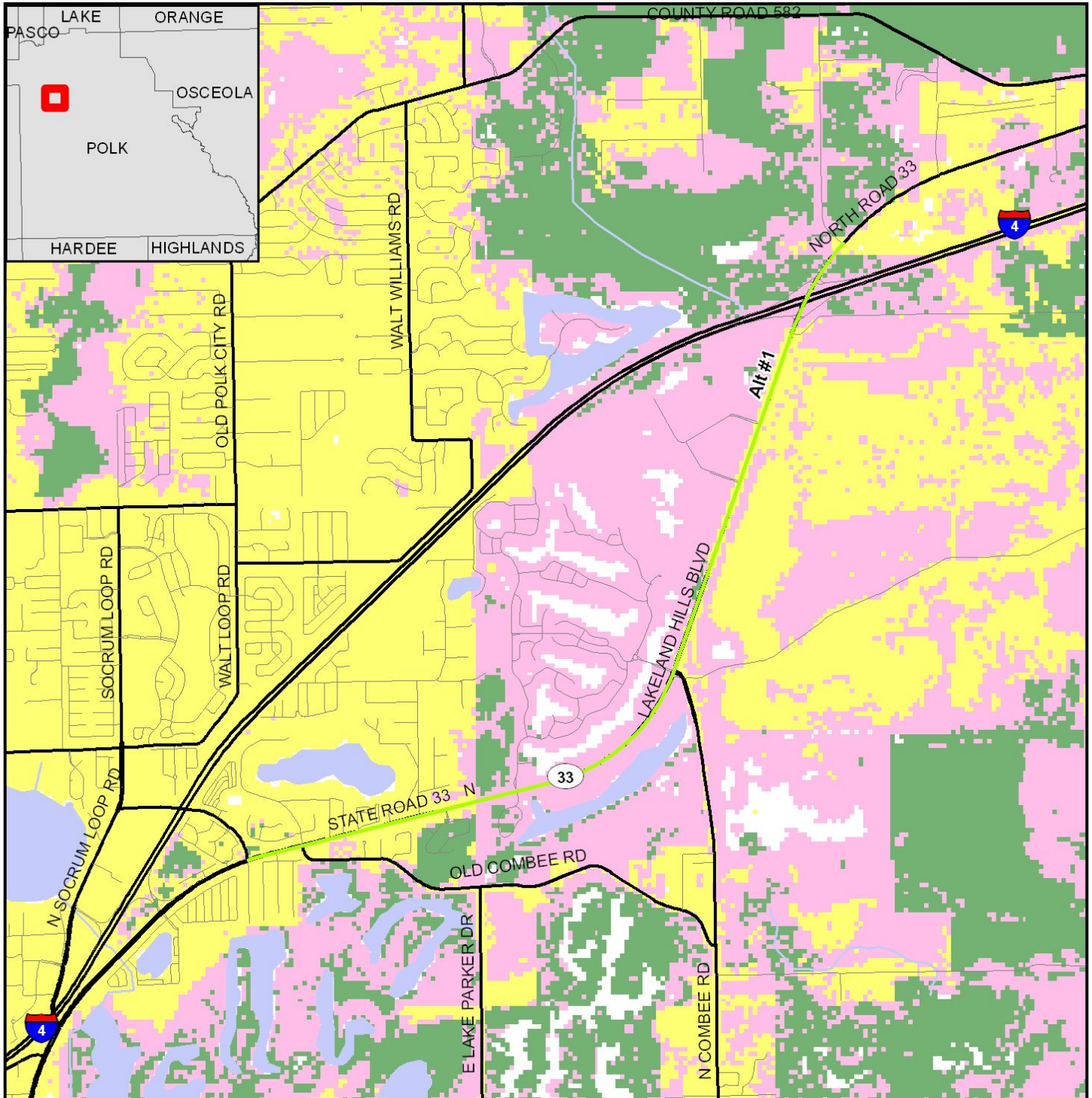
Income Distribution Map

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- > 20% Below Poverty
- Water Body



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Integrated Wildlife Habitat Ranking System Map

Data Sources:
 Geographic Data Technology, Inc.
 US Geological Survey
 Florida Department of Transportation
 Florida Fish & Wildlife Conservation Commission

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body
- Low Habitat Quality
- Medium Habitat Quality
- High Habitat Quality

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.

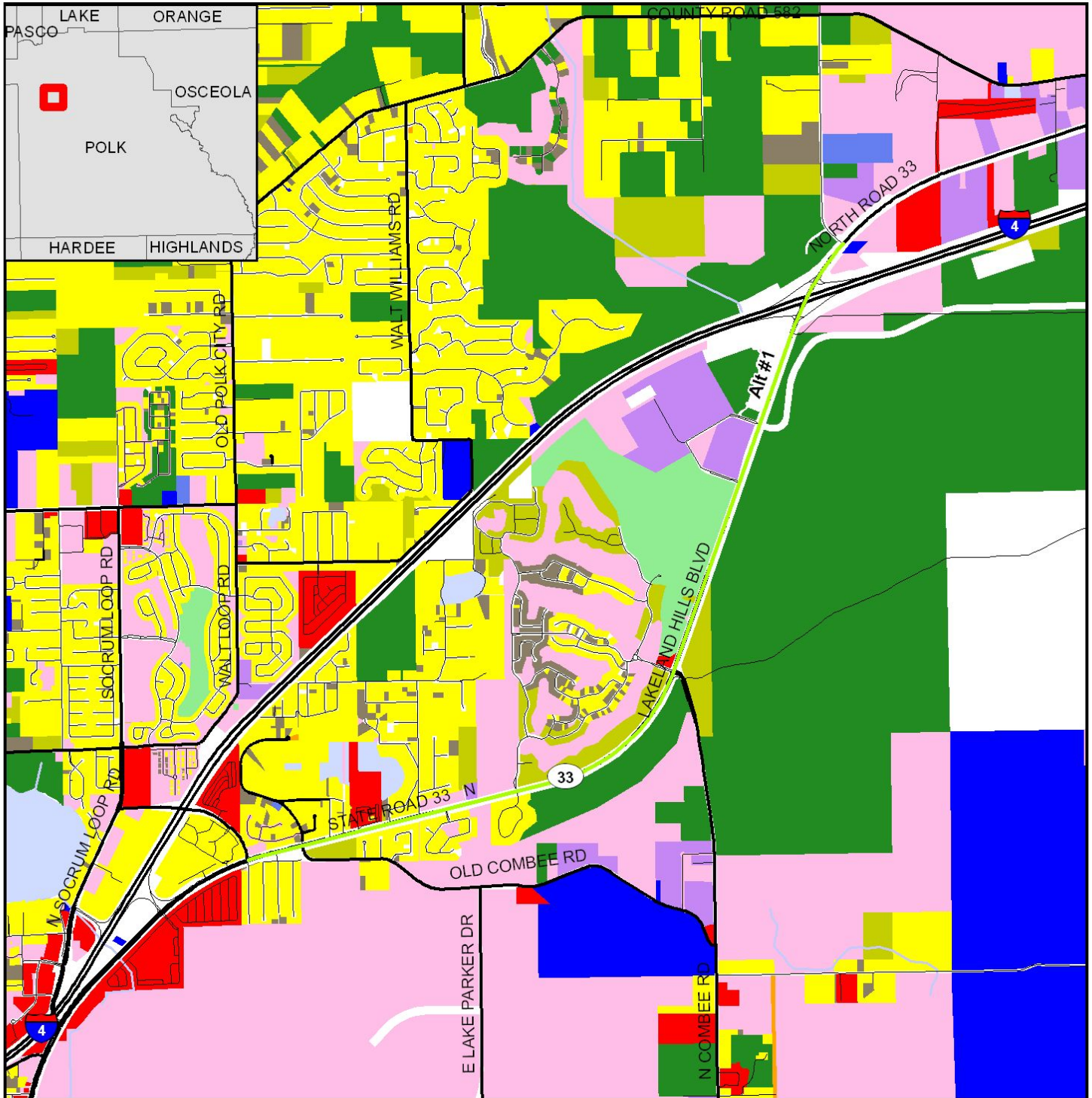


Map Generated on: 4/1/2011



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.25 Miles



Data Sources:
 Geographic Data Technology, Inc.
 US Geological Survey
 Florida Department of Revenue
 Florida Department of Transportation
 Florida County Property Appraiser Offices

Land Use Map

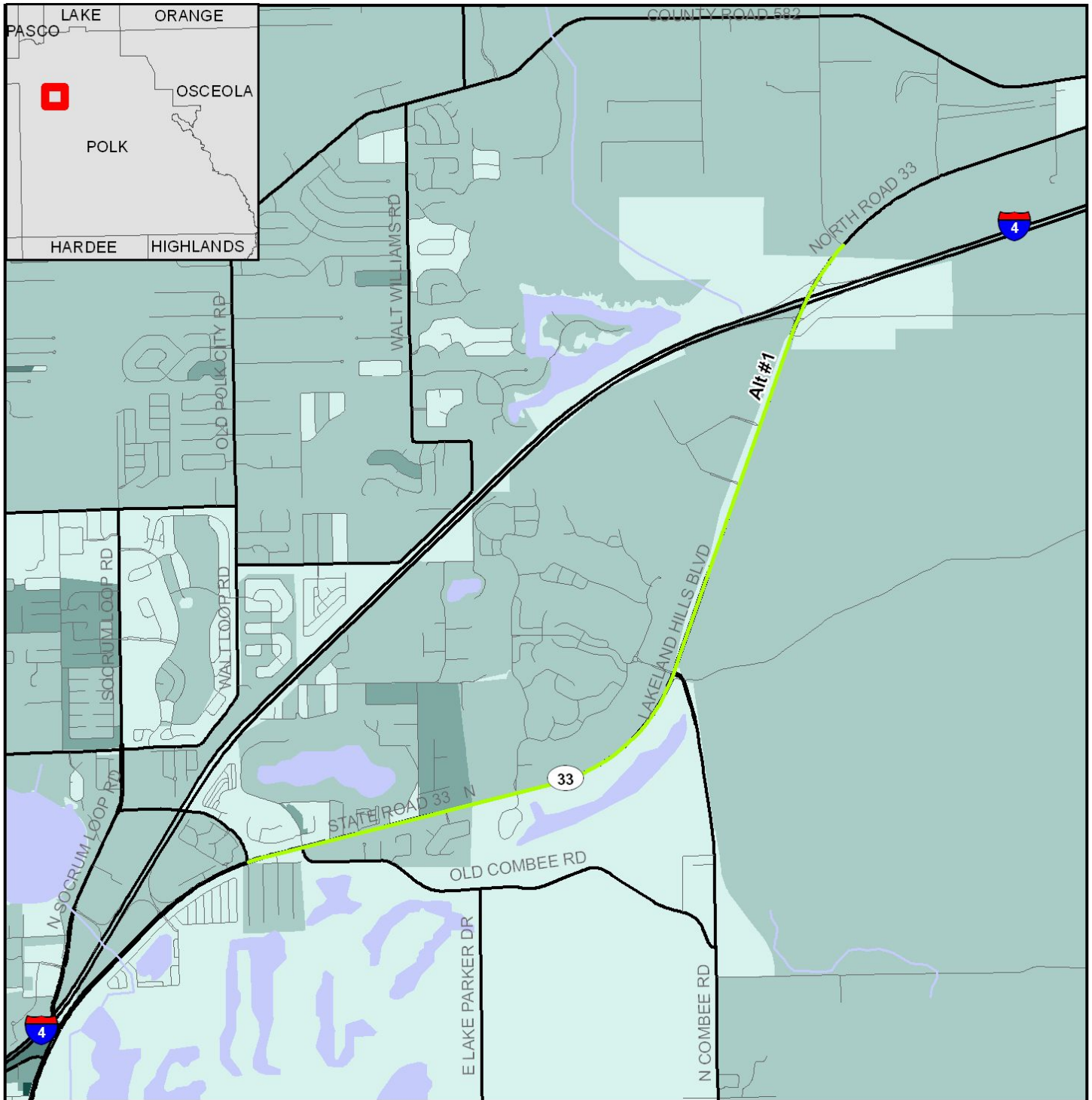
- | | | | |
|---------------------------|------------------------|-------------------------|-------------------------|
| ETDM Alternative Point | Railroad | Open (Not Agricultural) | Retail/Office |
| ETDM Alternative Terminus | River, Stream or Canal | Other | Vacant (Residential) |
| ETDM Alternative Segment | Agricultural | Public | Vacant (Nonresidential) |
| ETDM Alternative Polygon | Industrial | Right-of-Way | Water |
| Major Road | Institutional | No Data | |
| Local Road or Trail | Mining | Recreational | |
| | | Residential | |

This map and its content is made available by the Florida Department of Transportation on an "as is." "as available" basis without warranties of any kind, express or implied.



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.25 Miles

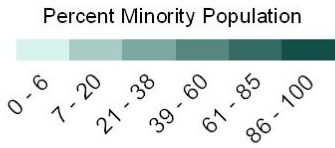


Data Sources:
 US Geological Survey
 FL Department of Transportation
 Geographic Data Technology, Inc.
 US Census Bureau

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.

Minority Population Distribution Map

- █ ETDM Alternative Point
- ETDM Alternative Terminus
- ▬ ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

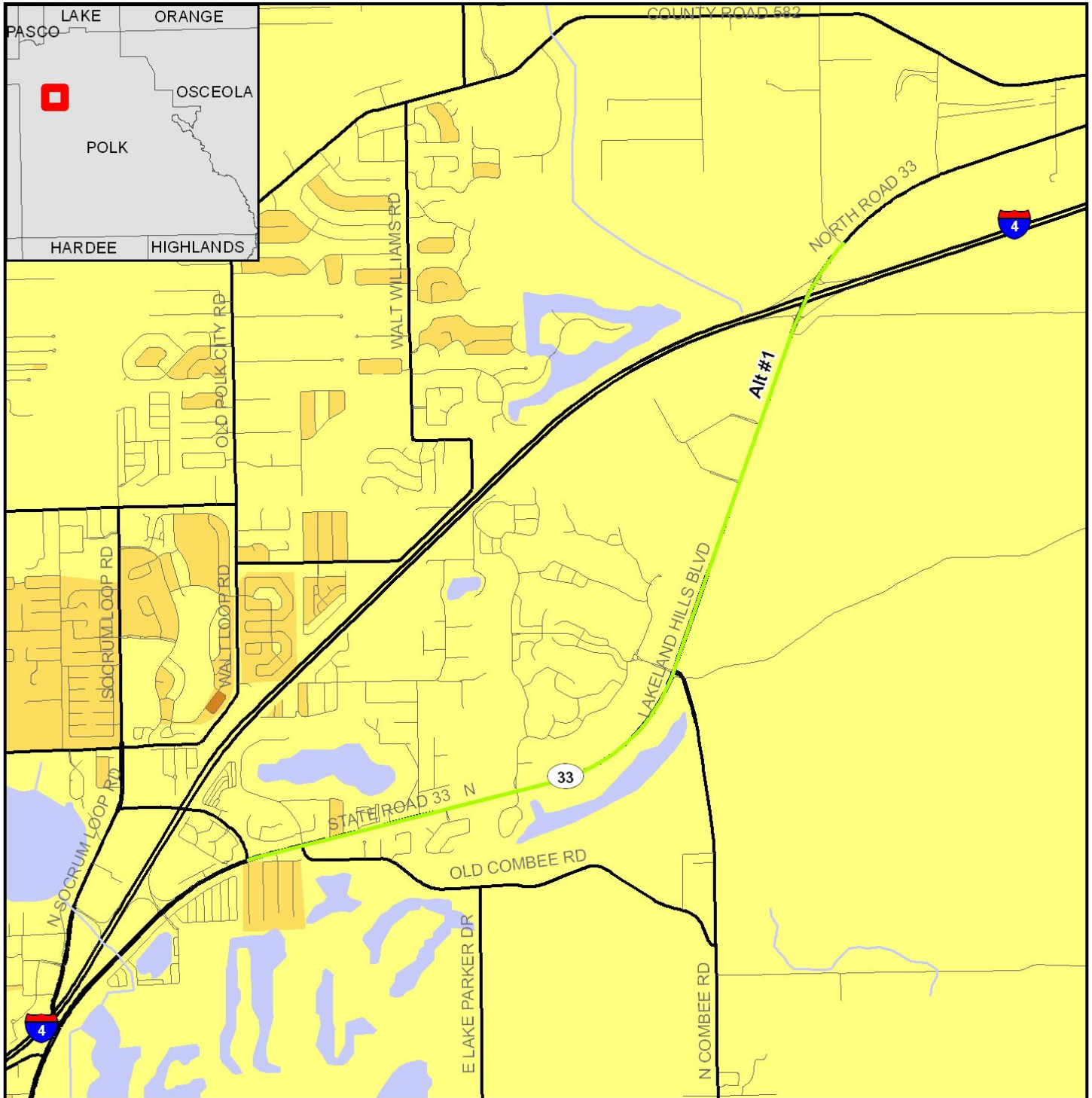


Map Generated on: 4/1/2011



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



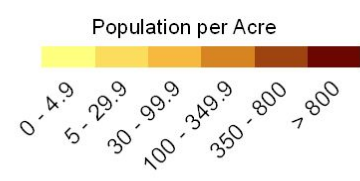
0 0.25 Miles



Data Sources:
 US Geological Survey
 FL Department of Transportation
 Geographic Data Technology, Inc.
 US Census Bureau

Population Density Map

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

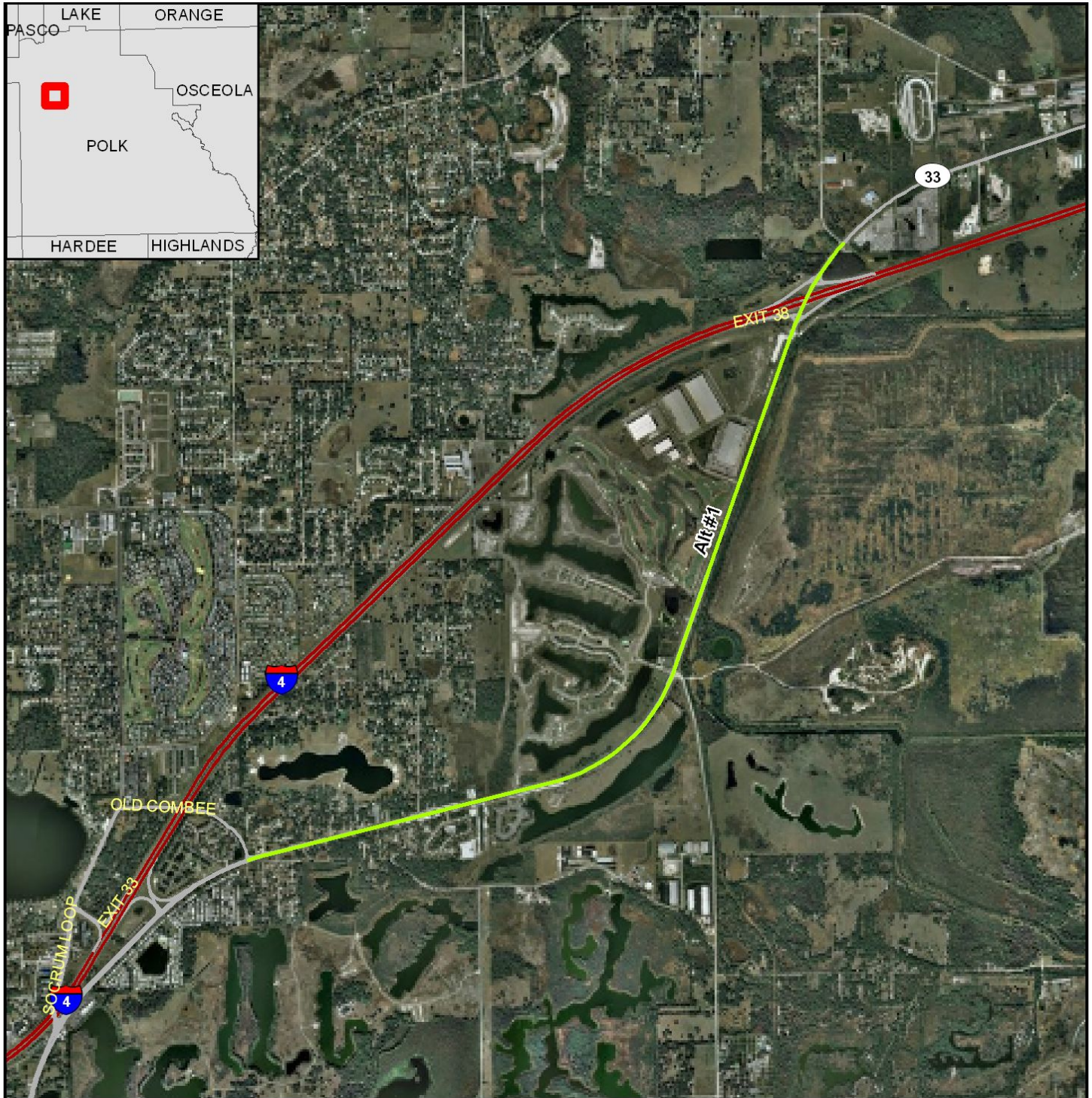


Map Generated on: 4/1/2011



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Project Aerial Map

0 1 Miles



- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Primary and Limited Access Highway
- Secondary, Unlimited Access Highway
- Other Highway Feature

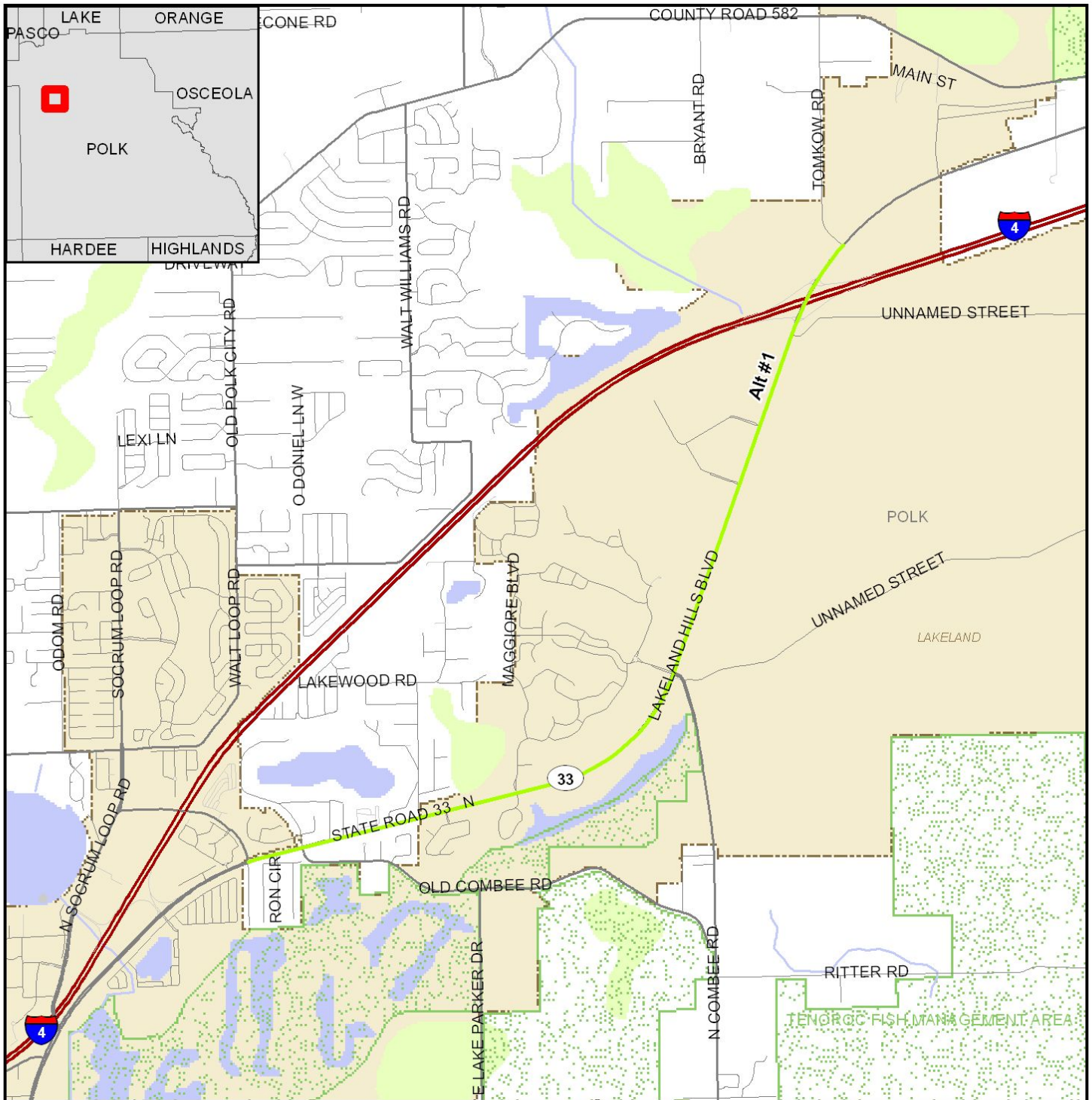
Data Sources:
 Highways - Geographic Data Technology, Inc.
 Digital Orthophotograph - US Geological Survey

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Project Location Map

0 0.5 Miles



Data Sources:

- Geographic Data Technology, Inc.
- US Geological Survey
- US Census Bureau
- County Property Appraisers
- Florida Natural Areas Inventory

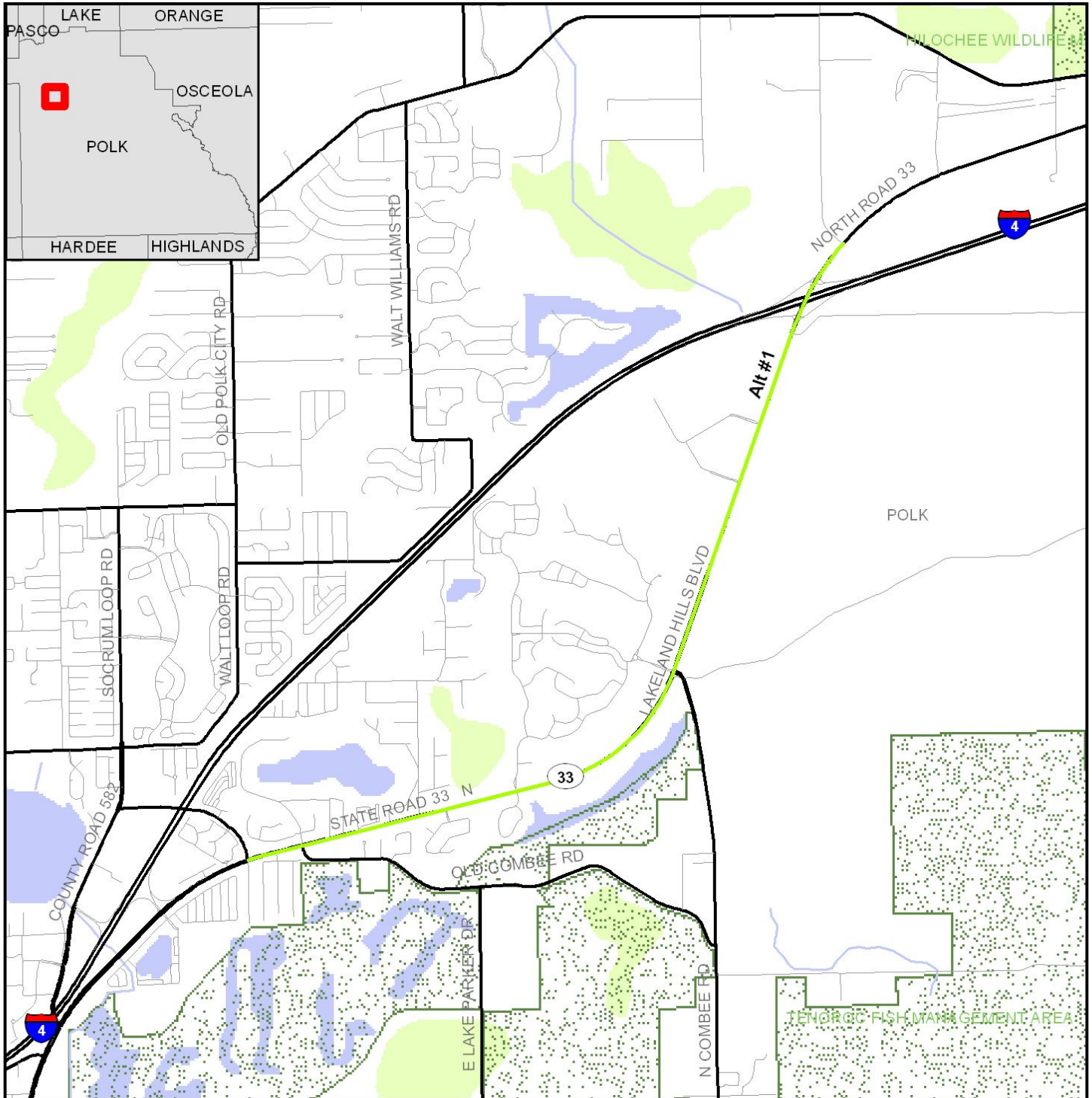
- | | | |
|---------------------------|-------------------------------------|-------------------|
| ETDM Alternative Point | Managed Conservation Lands | Toll Road |
| ETDM Alternative Terminus | Primary and Limited Access Highway | Railroad |
| ETDM Alternative Segment | Secondary, Unlimited Access Highway | Airport |
| ETDM Alternative Polygon | Connecting Road | City Limits |
| River, Stream or Canal | Local Road or Trail | County Boundaries |
| Water Body | Other Roadway Feature | |
| Swamp/Marsh | | |

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Conservation and Recreation Area Map



Data Sources:
 Geographic Data Technology, Inc.
 US Geological Survey
 Florida Natural Areas Inventory

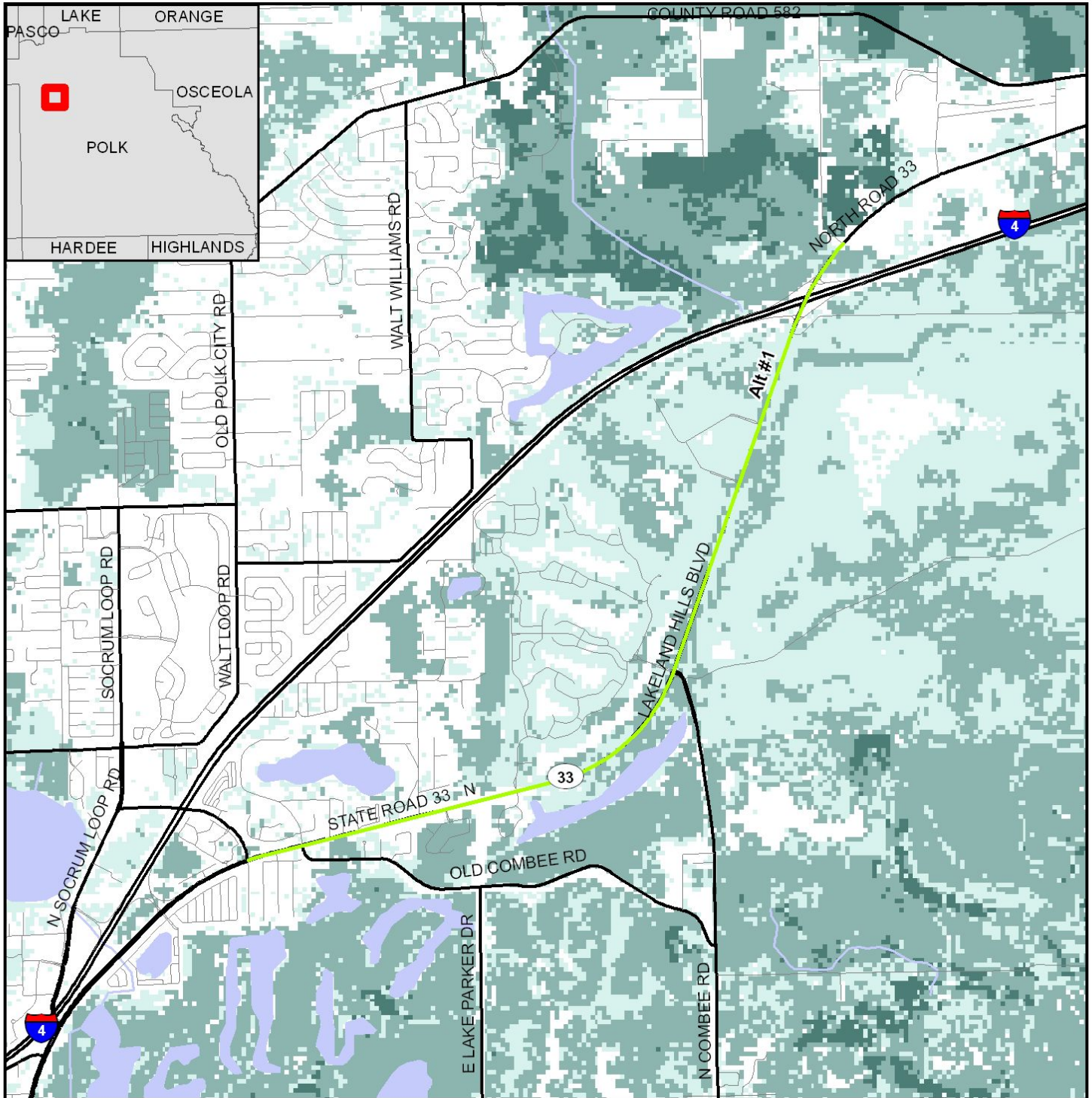
- | | | |
|---|--|--|
| ■ ETDM Alternative Point | — River, Stream or Canal | Conservation or Recreation Area |
| — ETDM Alternative Segment | Water Body | Major Road |
| ETDM Alternative Polygon | Swamp/Marsh | Local Road or Trail |
| ● ETDM Alternative Terminus | | Railroad |
| | | County Boundary |

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Species Potential Habitat Model Map



- | | | |
|---------------------------|------------------------|-----------------------------------|
| ETDM Alternative Point | Major Road | Potential Habitat Richness |
| ETDM Alternative Terminus | Local Road or Trail | |
| ETDM Alternative Segment | Railroad | |
| ETDM Alternative Polygon | River, Stream or Canal | |
| Water Body | | |
| | | 1 - 2 Species |
| | | 3 - 5 Species |
| | | 6 - 8 Species |
| | | 9 - 10 Species |
| | | 11 - 13 Species |

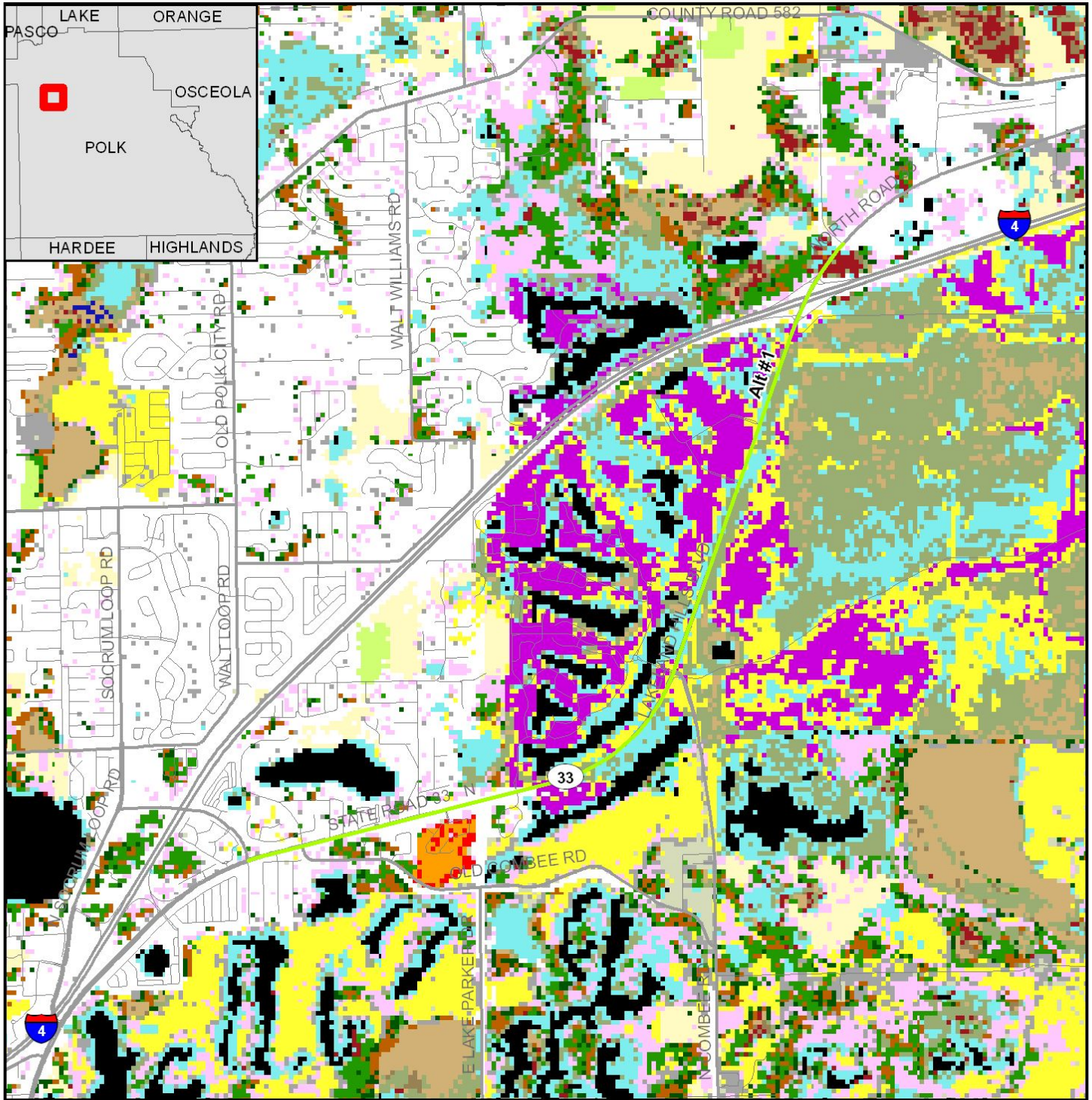
Data Sources:
 Geographic Data Technology, Inc.
 US Geological Survey
 Florida Department of Transportation
 Florida Fish & Wildlife Conservation Commission

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Vegetation and Land Cover Map

- | | | | | | | |
|---------------------------|----------------------------|----------------------------------|----------------------------|---------------------|---------------------|-------------------|
| ETDM Alternative Polygon | Not Classified | Hardwood Hammocks and Forests | Bay Swamp | Mangrove Swamp | Unimproved Pasture | Brazilian Pepper |
| ETDM Alternative Segment | Coastal Strand | Pinelands | Cypress Swamp | Scrub Mangrove | Sugarcane | High Impact Urban |
| ETDM Alternative Terminus | Sand/Beach | Cabbage Palm-live Oak Hammock | Cypress/Pine/Cabbage Palm | Tidal Flats | Citrus | Low Impact Urban |
| ETDM Alternative Point | Xeric Oak Scrub | Tropical Hardwood Hammock | Mixed Wetland Forest | Open Water | Row and Field Crops | Extractive |
| Major Road | Sand Pine Scrub | Freshwater Marsh and Wet Prairie | Hardwood Swamp | Shrub and Brushland | Other Agriculture | |
| Local Road or Trail | Sandhill | Sawgrass Marsh | Hydric Hammock | Grassland | Exotic Plants | |
| | Dry Prairie | Cattail Marsh | Bottomland Hardwood Forest | Bare Soil/Clearcut | Australian Pine | |
| | Mixed Hardwood-pine Forest | Shrub Swamp | Salt Marsh | Improved Pasture | Melaleuca | |

Data Sources:

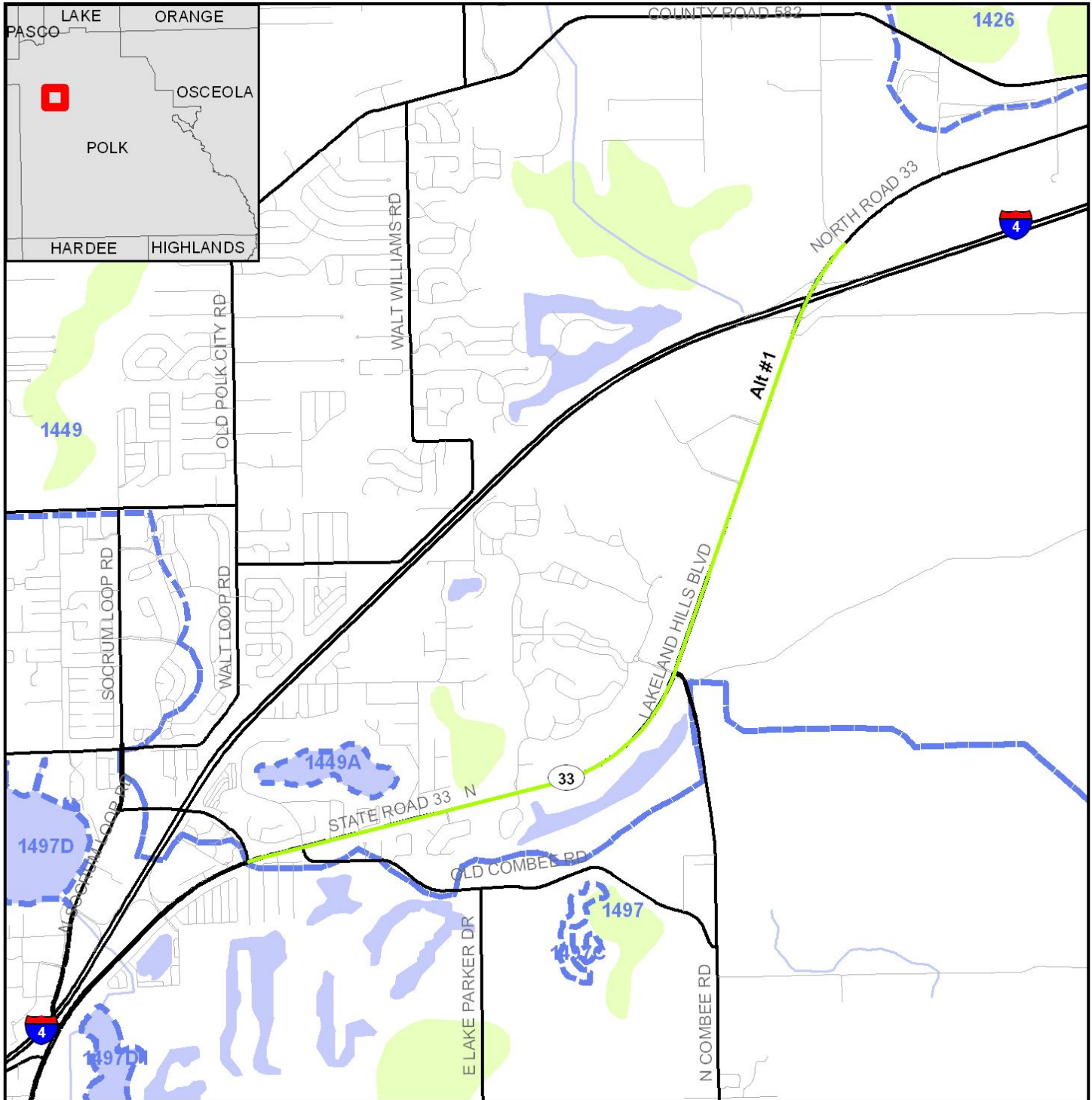
Geographic Data Technology, Inc.; Florida Department of Transportation; Florida Fish and Wildlife Conservation Commission

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Water Resources Map

- | | | | |
|---------------------------|---------------------|---------------------------|------------------------|
| ETDM Alternative Point | Major Road | 1st Magnitude Spring | Surface Water Class I |
| ETDM Alternative Terminus | Local Road or Trail | River, Stream or Canal | Surface Water Class II |
| ETDM Alternative Segment | Railroad | Navigable Water Way | Water Body |
| ETDM Alternative Polygon | | Drainage Basin | Swamp/Marsh |
| | | Outstanding Florida Water | |

Data Sources:

Geographic Data Technology, Inc. Florida Department of Transportation Florida Geological Survey
 US Geological Survey Florida Department of Environmental Protection US Bureau of Transportation Statistics

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.

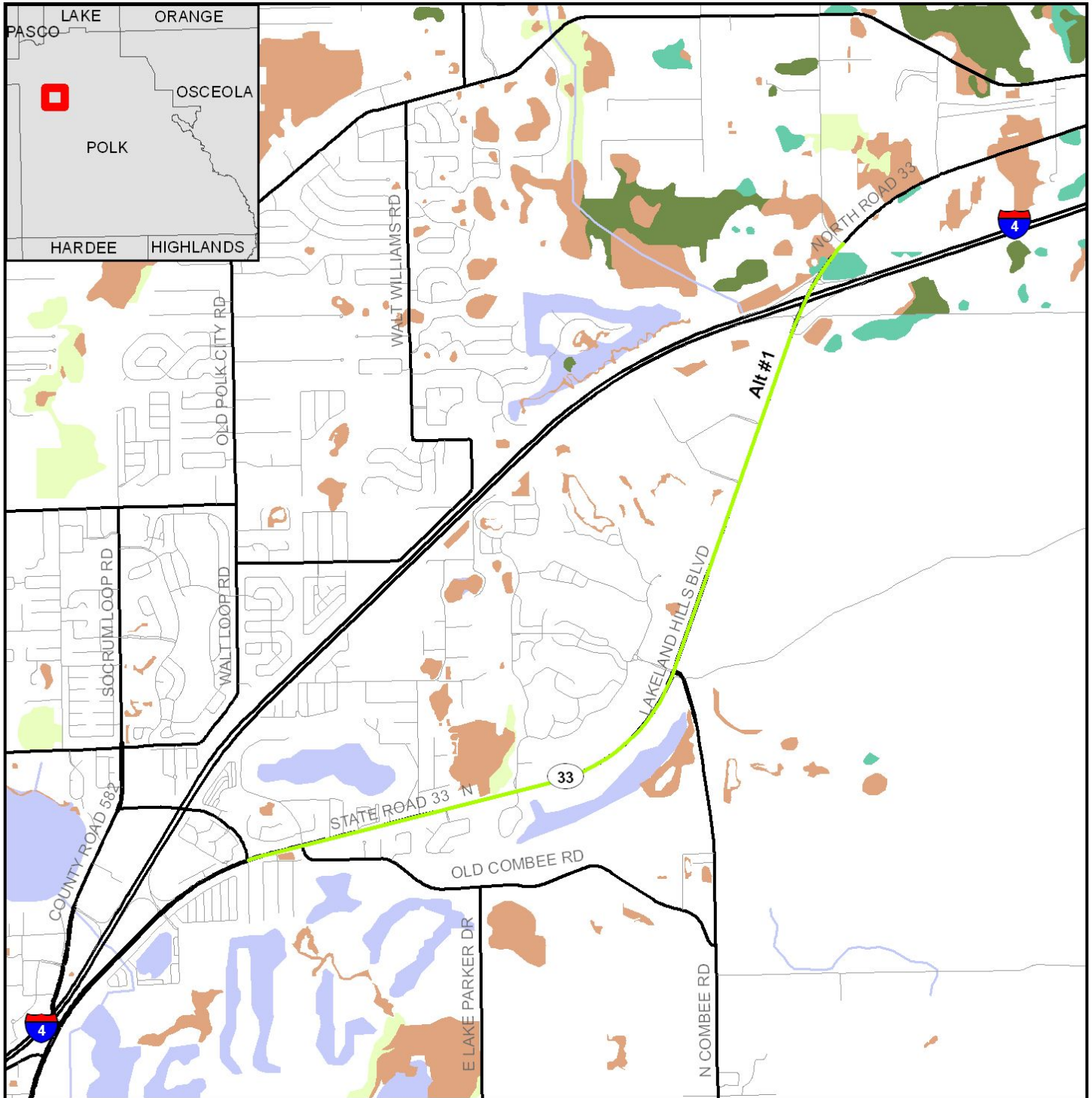


Map Generated on: 4/1/2011



13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Wetland Resource Map

0 0.5 Miles



- | | | |
|---------------------------|------------------------|--------------------------------|
| ETDM Alternative Polygon | River, Stream or Canal | Non-vegetated Wetland |
| ETDM Alternative Segment | Water Body | Vegetated Non-forested Wetland |
| ETDM Alternative Terminus | | Wetland Forested Mixed |
| ETDM Alternative Point | | Wetland Coniferous Forest |
| Major Road | | Wetland Hardwood Forest |
| Local Road or Trail | | |

Data Sources: Geographic Data Technology, Inc.; Florida Water Management Districts; US Geological Survey

This map and its content is made available by the Florida Department of Transportation on an "as is," "as available" basis without warranties of any kind, express or implied.



Appendices

Degree of Effect Legend

Legend			
Color Code	Meaning	ETAT	Public Involvement
N/A	Not Applicable / No Involvement	There is no presence of the issue in relationship to the project, or the issue is irrelevant in relationship to the proposed transportation action.	
0	None (after 12/5/2005)	The issue is present, but the project will have no impact on the issue; project has no adverse effect on ETAT resources; permit issuance or consultation involves routine interaction with the agency. The <i>None</i> degree of effect is new as of 12/5/2005.	No community opposition to the planned project. No adverse effect on the community.
1	Enhanced	Project has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement.	Affected community supports the proposed project. Project has positive effect.
2	Minimal	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
2	Minimal to None (assigned prior to 12/5/2005)	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
3	Moderate	Agency resources are affected by the proposed project, but avoidance and minimization options are available and can be addressed during development with a moderated amount of agency involvement and moderate cost impact.	Project has adverse effect on elements of the affected community. Public Involvement is needed to seek alternatives more acceptable to the community. Moderate community interaction will be required during project development.
4	Substantial	The project has substantial adverse effects but ETAT understands the project need and will be able to seek avoidance and minimization or mitigation options during project development. Substantial interaction will be required during project development and permitting.	Project has substantial adverse effects on the community and faces substantial community opposition. Intensive community interaction with focused Public Involvement will be required during project development to address community concerns.
5	Potential Dispute (Planning Screen)	Project may not conform to agency statutory requirements and may not be permitted. Project modification or evaluation of alternatives is required before advancing to the LRTP Programming Screen.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
5	Dispute Resolution (Programming Screen)	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
	No ETAT Consensus	ETAT members from different agencies assigned a different degree of effect to this project, and the ETDM coordinator has not assigned a summary degree of effect.	
	No ETAT Reviews	No ETAT members have reviewed the corresponding issue for this project, and the ETDM coordinator has not assigned a summary degree of effect.	

GIS Analyses

Since there are so many GIS Analyses available for Project #13188 - State Road 33: from Old Combee Road to north of Tomkow Road, they have not been included in this ETDM Summary Report. GIS Analyses, however, are always available for this project on the Public ETDM Website. Please click on the link below (or copy this link into your Web Browser) in order to view detailed GIS tabular information for this project:

<http://etdmpub.fl-a-etat.org/est/index.jsp?tpID=13188&startPageName=GIS%20Analysis%20Results>

Special Note: Please be sure that when the GIS Analysis Results page loads, the **Programming Screen Summary Report Re-published on 09/07/2011 by Scott Swarengen Milestone** is selected. GIS Analyses snapshots have been taken for Project #13188 at various points throughout the project's life-cycle, so it is important that you view the correct snapshot.

Appendix D

Agency Coordination



Florida Fish
and Wildlife
Conservation
Commission

Commissioners

Richard A. Corbett
Chairman
Tampa

Brian S. Yablonski
Vice Chairman
Tallahassee

Ronald M. Bergeron
Fort Lauderdale

Aliese P. "Liesa" Priddy
Immokalee

Bo Rivard
Panama City

Charles W. Roberts III
Tallahassee

Executive Staff

Nick Wiley
Executive Director

Eric Sutton
Assistant Executive Director

Karen Ventimiglia
Chief of Staff

Office of the
Executive Director
Nick Wiley
Executive Director

(850) 487-3796
(850) 921-5786 FAX

*Managing fish and wildlife
resources for their long-term
well-being and the benefit
of people.*

620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: (850) 488-4676

Hearing/speech-impaired:
(800) 955-8771 (T)
(800) 955-8770 (V)

MyFWC.com

November 18, 2013

Mr. Martin Horwitz
Environmental Project Manager
Florida Department of Transportation (FDOT) District One
801 North Broadway Avenue
Bartow, FL 33830
Martin.Horwitz@DOT.state.fl.us

Re: SR 33 multi-laning from Old Combee Road to north of Tomkow Road, Polk County,
Wetland Evaluation Report

Dear Mr. Horwitz:

The Florida Fish and Wildlife Conservation Commission staff has reviewed the Wetland Evaluation Report (WER) for the above-referenced project, prepared as part of the Project Development and Environment Study. We agree with the findings of the WER, and support the recommendations and commitments for the project.

If you need further assistance, please do not hesitate to contact Jane Chabre either by phone at (850) 410-5367 or at FWCConservationPlanningServices@MyFWC.com. If you have specific technical questions regarding the content of this letter, contact Brian Barnett at (772) 579-9746 or email at brian.barnett@MyFWC.com.

Sincerely,

A handwritten signature in blue ink that reads "Jennifer D. Goff".

Jennifer D. Goff
Land Use Planning Program Administrator
Office of Conservation Planning Services

jdg/bb
ENV 1-13-2
SR 33 from Old Combee Rd to N of Tomkow Rd_18339_111813

Nathan Chambers

From: Horwitz, Martin <Martin.Horwitz@dot.state.fl.us>
Sent: Tuesday, October 22, 2013 10:57 AM
To: David Dangel
Cc: Laura Clark; Sherrard, Antone N
Subject: FW: NMFS response to SR 33 Wetland Evaluation Report

David,

Please see email below from NMFS for your records.

Martin Horwitz
Environmental Project Manager

FDOT District 1
801 N. Broadway Avenue
P.O. Box 1249
Bartow, Florida 33830
(863)519-2805

From: David Rydene - NOAA Federal [mailto:david.rydene@noaa.gov]
Sent: Tuesday, October 22, 2013 10:19 AM
To: Horwitz, Martin
Subject: NMFS response to SR 33 Wetland Evaluation Report

NMFS staff had reviewed the Wetland Evaluation Report (part of the PD&E Study) for the proposed widening and improvement of State Road 33 from Old Combee Road to North of Tomkow Road in Polk County, Florida (Financial Project Number 430185-1-22-01). It does not appear that there will be any direct or indirect impacts to NMFS trust resources. Since the resources affected are not ones for which NMFS is responsible, we have no comment to provide regarding the report.

--

David Rydene, Ph.D.
Fish Biologist
National Marine Fisheries Service
Habitat Conservation Division
263 13th Avenue South
St. Petersburg, FL 33701
Office (727) 824-5379
Cell (813) 992-5730
Fax (727) 824-5300