ETDM Summary Report

Project #8127 - State Road 7 Extension

Programming Screen - Published on 04/25/2007

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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.

8127 - State Road 7 Extension

District	District 4	**Phase**	Programming Screen
County	Palm Beach County	**From**	SR 704 Okeechobee Blvd.
Planning Organization	FDOT District 4	**To**	Northlake Blvd.
Plan ID	229664-2	**Financial Management No.**	
Contact Name / Phone	Richard Young 954-777-4323	**Contact Email**	richard.young@dot.state.fl.us

Programming Screen Summary Report Published 04/25/2007

Overview

Legend

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	Potential Dispute (Planning)

	Evaluation of Direct Effects																					
	Natural											Cultural			Community							
	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
Alternative #1 **From Persimmon Blvd. To Northlake Blvd.** *- Reviewed from 6/28/2006 to 8/12/2006* *- Published on 4/25/2007*	0	0	0	0	3	0	0	4	4	4	4	0	4	4	2	2	4	1	3	3	4
Alternative #2 **From SR 704 Okeechobee Blvd. To Northlake Blvd.** *- Reviewed from 6/28/2006 to 8/12/2006* *- Published on 4/25/2007*	0	0	0	0	3	0	0	5	4	5	5	0	4	4	2	2	3	1	3	3	4
Alternative #3 **From Persimmon Blvd. To Northlake Blvd.** *- Reviewed from 6/28/2006 to 8/12/2006* *- Published on 4/25/2007*	0	0	2	0	3	0	0	4	4	4	4	0	4	4	2	2	3	1	0	2	4
Alternative #4 **From SR 704 Okeechobee Blvd. To Northlake Blvd.** *- Reviewed from 6/28/2006 to 8/12/2006*	0	0	2	0	3	0	0	5	4	5	5	0	4	4	2	0	4	1	0	0	4

- Published on 4/25/2007

Project Description Data

Description Statement

This project evaluates the need to extend SR 7 from SR 704 (Okeechobee Boulevard) to Northlake Boulevard in Palm Beach County. The project is located west of the Florida's Turnpike between the City of West Palm Beach, Village of Royal Palm Beach, and the Acreage community.

Four corridors and a no-build option have been identified for evaluation. Consideration of ongoing projects within the project study area includes Roebuck Road and the extension of Persimmon Boulevard, both under development by Palm Beach County. The Persimmon Boulevard Extension project will lengthen Persimmon Boulevard from its current termination point at 110th Avenue to the existing intersection of SR 7 and Okeechobee Boulevard. The design phase of this project has been completed. Roebuck Road, currently under design, will be a new facility that runs along the north side of the Baywinds community and connects the extension of Persimmon Boulevard with Jog Road.

The available Right-of-Way within the project area includes an approximate 200-foot-wide section owned by the FDOT that extends from the intersection of Okeechobee Boulevard and SR 7, continues beyond Northlake Boulevard, and terminates at SR 710. This section of Right-of-Way is adjacent to the City of West Palm Beach Water Catchment Area.

Corridor 1 (please note that this corridor is proposed to be discarded)
Beginning at the intersection of Okeechobee Boulevard and SR 7, Corridor 1 follows the County's extension of Persimmon Boulevard and continues north parallel to 110th Avenue. The proposed alignment then crosses over the M Canal and continues north just west of the Ibis Golf and Country Club before terminating at Northlake Boulevard.

Corridor 2 (please note that this corridor is proposed to be discarded)
Beginning at the intersection of Okeechobee Boulevard and SR 7, Corridor 2 proceeds north within the FDOT's existing Right-of-Way. Once adjacent to Section 1, the alignment turns to the northwest, continues through Section 1, and then turns north parallel to 110th Avenue. After crossing the M Canal, Corridor 2 continues along the west side of the Ibis Golf and Country Club before terminating at Northlake Boulevard.

Corridor 3
Beginning at the intersection of Okeechobee Boulevard and SR 7, Corridor 3 follows the County's extension of Persimmon Boulevard and continues north parallel to 110th Avenue. Near 60th Street, the alignment turns east, parallel to the M Canal, and then turns north while crossing the M Canal to tie into the FDOT's existing Right-of-Way. Once within the FDOT Right-of-Way, the alignment continues north along the east side of the Ibis Golf and Country Club before terminating at Northlake Boulevard.

Corridor 4
Beginning at the intersection of Okeechobee Boulevard and SR 7, Corridor 4 proceeds within the FDOT's existing Right-of-Way and crosses the M Canal before terminating at Northlake Boulevard. This alignment is commonly referred to as the "Range Line" alignment since the corridor runs directly over and parallel to the line separating Range 41 and 42.

Summary of Public Comments

Through initial outreach efforts, the community has expressed their support of the project with a preference for Corridor 4. In addition, the community has also expressed their lack of support for Corridor 1 due to impacts associated with potential residential relocations.

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

As one of four major arterial facilities connecting Miami-Dade, Broward, and Palm Beach Counties, SR 7 is a critical inter-regional component of south Florida's transportation network. Other facilities, listed in order from west to east, include the Florida's Turnpike, I-95, and U.S. 1. Palm Beach County is currently experiencing a surge in residential development in the vicinity of the SR 7 project study area, and extending the corridor beyond Okeechobee Boulevard to Northlake Boulevard is vital to satisfying capacity and mobility needs.

The area immediately adjacent to the project study area will benefit from additional capacity and a more efficient north-south connection between Okeechobee Boulevard and Northlake Boulevard. Currently, commuters west of the Florida's Turnpike and traveling between Okeechobee Boulevard and Northlake Boulevard must travel through low-density residential neighborhoods. The discontinuity in north-south access between Okeechobee Boulevard and Northlake Boulevard impacts regional mobility.

Existing traffic conditions illustrate current deficiencies within the transportation network with most facilities operating at or below a LOS D. The primary route between Okeechobee Boulevard and Northlake Boulevard includes Royal Palm Beach Boulevard to Orange Boulevard and Coconut Boulevard. This route currently experiences a LOS D during the a.m. peak hour. During p.m. peak hour, Royal Palm Beach Boulevard operates at a LOS F and both Orange Boulevard and Coconut Boulevard operate at a LOS D. Along Seminole Pratt Whitney Road, a LOS F is experienced during both the a.m. and p.m. peak hours. The existing transportation network between Okeechobee Boulevard and Northlake Boulevard does not adequately support existing demands. As growth in the region continues, providing relief to the existing network is vital to the mobility needs of the region.

On June 17, 2004, the Palm Beach Metropolitan Planning Organization (MPO) filed a motion to direct FDOT to begin a PD&E study for extending SR 7 beyond Okeechobee Boulevard. The motion was carried unanimously. The limits of the project, from Okeechobee Boulevard to Northlake Boulevard, were established during the next meeting on July 15, 2004.

The proposed extension of SR 7 is consistent with the following transportation plans:
Palm Beach County Comprehensive Plan (Transportation Element, Policy 1.4-m);
Palm Beach MPO Year 2030 Long Range Transportation Plan (LRTP), Cost Feasible Plan; and
Palm Beach MPO Transportation Improvement Program (TIP), FY 2006-2010.

Current and future development growth in Palm Beach County is primarily located west of the project study area with two large-scale communities planned within the region. Those include Exploration Pointe and Callery-Judge Groves. A Development of Regional Impact (DRI) application has been submitted for both projects and is currently under review. The combination of both projects will add over 19,000 residential units, 2 million square feet of retail space, and 900,000 square feet of office space near the project study area.

Purpose and Need Reviews

US Fish and Wildlife Service Comments

Agency	Acknowledgment	Review Date
US Fish and Wildlife Service	Understood	6/29/2006

Comments

No purpose and need comments were found.

Miccosukee Tribe Comments

Agency	Acknowledgment	Review Date
Miccosukee Tribe	Understood	7/25/2006

Comments

No purpose and need comments were found.

FL Fish and Wildlife Conservation Commission Comments

Agency	Acknowledgment	Review Date
FL Fish and Wildlife Conservation Commission	Understood	8/4/2006

Comments

No purpose and need comments were found.

Federal Highway Administration Comments

Agency	Acknowledgment	Review Date
Federal Highway Administration	Not Understood	8/10/2006

Comments

A succinct, clearly stated purpose and need statement that speaks directly to the major issues surrounding the need for the project should be provided. The text following the statement can then serve to substantiate the purpose and need and expand on the reasons given for the project being warranted. The project description section makes note that corridors 1 and 2 are proposed to be discarded. Information needs to be included here as to why these two corridors may be dropped from further consideration.

The Executive Summary Section of the Purpose and Need consolidates much of the analysis in this section for the development of a Purpose and Need Statement that can be used in the environmental document. The Purpose and Need Statement should be developed based on input from the public and participating agencies. For the Purpose and Need Statement, SAFETEA-LU requires a clear statement of identified objectives that the proposed project is intended to achieve for improving transportation conditions. The objectives should be derived from needs and may include, but are not limited to, the following outlined in SAFETEA-LU:
Achieving a transportation objective identified in the statewide or metropolitan transportation plan;
Supporting land use, economic development, or growth objectives established in applicable Federal State, local or tribal plans;
Serving national defense, national security, or other national objectives, as established in Federal laws, plans or policies.
From the information provided, it appears that the Purpose and Need Statement should be developed to specifically target identified objectives regarding regional connectivity, land use, congestion relief to nearby roadways, and possibly economic development.

SAFETEA-LU requires an opportunity for involvement by participating agencies and the public in defining the range of alternatives. This opportunity must be provided prior to the lead Federal agencys decision regarding the range of reasonable alternatives to be evaluated. That this project is proceeding using the ETDM planning and programming screens will assist meeting the SAFETEA-LU provisions. The project sponsor should also encourage input regarding how many lanes are needed for each alternative.

Estimated project cost and funding source is not identified. The Project Description Report indicates that the project was added to the LRTP, so presumably this information is available in the LRTP, and should be included in the Project Description Report. This information will be important in the project prioritization process to weigh

the merits of this project against others competing for limited funding.

The project as shown in ETDM ends at North Lake Boulevard. Additional discussions should occur between FDOT and FHWA regarding the selection and justification of these termini for the long range improvement to ensure that it adequately addresses the Purpose and Need statement that is being developed for the environmental document. The reasons for selecting the termini should be discussed to ensure there is justification.

FL Department of State Comments

Agency	Acknowledgment	Review Date
FL Department of State	Understood	8/11/2006

Comments

No purpose and need comments were found.

FL Department of Environmental Protection Comments

Agency	Acknowledgment	Review Date
FL Department of Environmental Protection	Understood	8/11/2006

Comments

No purpose and need comments were found.

US Environmental Protection Agency Comments

Agency	Acknowledgment	Review Date
US Environmental Protection Agency	Understood	8/12/2006

Comments

No purpose and need comments were found.

National Marine Fisheries Service Comments

Agency	Acknowledgment	Review Date
National Marine Fisheries Service	Understood	8/14/2006

Comments

NONE

US Army Corps of Engineers Comments

Agency	Acknowledgment	Review Date

US Army Corps of Engineers	Not Understood	8/22/2006

Comments

I understand the need to extend SR 7 to aid in the increased north-south traffic flow in this area, especially with the proposed new DRI developments. However, the alternatives analysis for each proposal will be extremely important in the Corps' review. We will need to see each alternative proposed, the pros and cons of each alternative, considering the public interest review.

Alternative #1

Alternative Description

From	Persimmon Blvd.
To	Northlake Blvd.
Type	New Alignment
Status	ETAT Review Complete
Total Length	4.241 mi.
Cost	$60,000,000.00
Modes	Roadway Bicycle Pedestrian

Segment Description(s)

Location and Length

Segment No.	Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
Segment 1	SR 7 Extension	SR 704 Okeechobee Blvd.	Northlake Blvd	4.241	Digitized		

Jurisdiction and Class

Segment No.	Jurisdiction	Urban Service Area	Functional Class
Segment 1	FDOT	In	URBAN: Minor Arterial

Base Conditions

Segment No.	Year	AADT	Lanes	Config
Segment 1				

Interim Plan

Segment No.	Year	AADT	Lanes	Config
Segment 1				

Needs Plan

Segment No.	Year	AADT	Lanes	Config
Segment 1	2030	37000	6	Lanes Divided

Cost Feasible Plan

Segment No.	Year	AADT	Lanes	Config
Segment 1	2030	37000	6	Lanes Divided

Funding Sources

Segment No.	FEDERAL	FDOT	Unknown
Segment 1	X	X	

Project Effects Overview

Issue	Degree of Effect		Organization	Date Reviewed
Natural				
Air Quality	0	None	US Environmental Protection Agency	8/12/2006
Contaminated Sites	0	None	US Environmental Protection Agency	8/12/2006
Special Designations	4	Substantial	US Fish and Wildlife Service	7/18/2006
Water Quality and Quantity	4	Substantial	FL Department of Environmental Protection	8/11/2006
Wetlands	4	Substantial	US Army Corps of Engineers	8/22/2006
Wetlands	0	None	National Marine Fisheries Service	8/14/2006
Wetlands	4	Substantial	FL Department of Environmental Protection	8/11/2006
Wetlands	4	Substantial	US Fish and Wildlife Service	7/18/2006
Wildlife and Habitat	3	Moderate	FL Fish and Wildlife Conservation Commission	8/04/2006
Wildlife and Habitat	4	Substantial	US Fish and Wildlife Service	7/18/2006
Cultural				
Historic and Archaeological Sites	0	None	FL Department of State	8/11/2006
Historic and Archaeological Sites	0	None	Miccosukee Tribe	7/25/2006
Recreation Areas	4	Substantial	FL Department of Environmental Protection	8/11/2006
Section 4(f) Potential	4	Substantial	Federal Highway Administration	8/10/2006
Community				
Aesthetics	2	Minimal	Palm Beach MPO	8/04/2006
Economic	2	Minimal	Palm Beach MPO	8/04/2006
Land Use	4	Substantial	Federal Highway Administration	8/10/2006
Land Use	3	Moderate	FL Department of Community Affairs	8/08/2006
Land Use	3	Moderate	Palm Beach MPO	8/04/2006
Mobility	1	Enhanced	Palm Beach MPO	8/04/2006
Relocation	3	Moderate	Palm Beach MPO	8/04/2006
Social	3	Moderate	Federal Highway Administration	8/10/2006
Social	2	Minimal	Palm Beach MPO	8/04/2006
Secondary and Cumulative				
Secondary and Cumulative Effects	3	Moderate	US Army Corps of Engineers	8/22/2006
Secondary and Cumulative Effects	4	Substantial	Federal Highway Administration	8/10/2006

Secondary and Cumulative Effects	4 Substantial	FL Fish and Wildlife Conservation Commission	8/04/2006

ETAT Reviews: Natural

Air Quality

Coordinator Summary

0 Summary Degree of Effect

Air Quality Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The proposed alternative is consistent with Air Quality Conformity as stated through the Project Description. USEPA did not identify any Air Quality issues for this alternative; therefore, the summary degree of effect assigned to Air Quality is none.

ETAT Reviews for Air Quality

0 ETAT Review by Maher Budeir, US Environmental Protection Agency (08/12/2006)

Air Quality Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
None found.

Comments on Effects to Resources:
Based on data avaialable, there is no significant impact on air quality.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the Federal Highway Administration

Coastal and Marine

Coordinator Summary

0 Summary Degree of Effect

Coastal and Marine Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative is not located in a coastal or marine area nor is it in the vicinity of any coastal or marine resources. For these reasons, the summary degree effect assigned to Coastal and Marine is none.

ETAT Reviews for Coastal and Marine

No reviews found for the Coastal and Marine Issue.
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the National Marine Fisheries Service
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Contaminated Sites

Coordinator Summary

0 Summary Degree of Effect

Contaminated Sites Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
According to the EST GIS Analysis, no geocoded petroleum tank sites are located within 500 feet of this alternative. In addition, no designated Brownfield sites, geocoded dry cleaners, solid waste facilities, Superfund sites, or Toxic Release Inventory sites are reported within one-half mile of this alternative. The summary degree of effect assigned to Contaminated Sites is none.

ETAT Reviews for Contaminated Sites

0 ETAT Review by Maher Budeir, US Environmental Protection Agency (08/12/2006)

Contaminated Sites Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
soil and grounwater

Comments on Effects to Resources:
Based on data avaialble on the screening tool, no contminated sites were identified on this corridor.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Farmlands

Coordinator Summary

0 Summary Degree of Effect

Farmlands Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative will not impact any prime farmlands. For this reason, the summary degree effect assigned to Farmlands is none.

ETAT Reviews for Farmlands

No reviews found for the Farmlands Issue.
- No review submitted from the Federal Highway Administration
- No review submitted from the Natural Resources Conservation Service

Floodplains

Coordinator Summary

3 Summary Degree of Effect

Floodplains Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The EST GIS Analysis shows the following acreage of FEMA FIRM floodzones within the project's 500-foot buffer. (A 500-foot buffer was used due to the proposed new 6-lane divided alignment):
Zone X500 (532 acres): an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than one square mile.
Based on these results, 100 percent of the 500-foot buffer for this alternative occurs within a designated floodzone. A Location Hydraulics Report will be prepared for the project and the project will be designed to minimize floodplain impacts and compensate for potential floodplain encroachments. For these reasons the summary degree of effect assigned to Floodplains is moderate.

ETAT Reviews for Floodplains

No reviews found for the Floodplains Issue.
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Infrastructure

Coordinator Summary

0 Summary Degree of Effect

Infrastructure Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative will not have any major impacts to infrastructure; therefore, the summary degree effect assigned to Infrastructure is none.

ETAT Reviews for Infrastructure

No reviews found for the Infrastructure Issue.
- No review submitted from the Federal Highway Administration

Navigation

Coordinator Summary

0 Summary Degree of Effect

Navigation Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The EST GIS Analysis did not report the presence of any navigable waterways within one-half mile of this alternative. This alternative crosses the M Canal; however, this canal has not been identified as a navigable waterway by the Army Corps of Engineers or U.S. Coast Guard. For these reasons, the summary degree of effect assigned to Navigation is none.

ETAT Reviews for Navigation

No reviews found for the Navigation Issue.
- No review submitted from the US Army Corps of Engineers
- No review submitted from the Federal Highway Administration
- No review submitted from the US Coast Guard

Special Designations

Coordinator Summary

4 Summary Degree of Effect

Special Designations Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
According to the EST GIS Analysis, the southern terminus of Alternative 1 is located adjacent to the Pond Cypress Natural Area. In addition, the Loxahatchee Slough Natural Area is located within one-quarter mile of the northern terminus of Alternative 1. For these reasons, and because of the concerns stated by the USFWS, the summary degree of effect assigned to Special Designations is substantial.

ETAT Reviews for Special Designations

4 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/18/2006)

Special Designations Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Public Conservation Lands

Comments on Effects to Resources:
Service Comments, Fish and Wildlife Resources, Wetlands, and Special Designations:

Corridor 1 would follow Palm Beach County's Persimmon Boulevard Extension corridor and proceed straight northward from the M-Canal approximately 3 miles to North Lake Avenue. The Service notes that Corridor 1 would impact wetlands and uplands currently protected for conservation purposes at Pond Cypress Natural Area. These lands include the parcel known as Section 1. Section 1 has been purchased by Palm Beach County as mitigation for impacts to wetlands resulting from the proposed Persimmon Boulevard Extension and will be added to the Pond Cypress Natural Area. The Pond Cypress Natural Area and Section 1 are contiguous with a large block (>10,000 acres) of protected native habitat located directly to the east in the City of West Palm Beach's Water Catchment Area (also known as Grassy Waters Preserve). Pond Cypress Natural Area, Section 1, and the Water Catchment Area currently provide important habitat to variety of species including wading birds, small mammals, reptiles, amphibians, and small fishes. Portions of the wetlands and uplands within the Pond Cypress Natural Area and Section 1 have been impacted by the exotic invasive tree melaleuca (Melaleuca quinquenervia). Moreover, some of the wetlands and uplands in Section 1 have been degraded by off-road vehicles. Although these areas have been impacted, the Service notes that they still largely consist of good quality habitat for fish and wildlife. Furthermore, we understand that Palm Beach County intends to develop a

management plan for the entire Pond Cypress Natural Area that will result in the removal of melaleuca and prohibit off-road vehicle use. We expect that the management activities proposed will restore areas of degraded habitat and benefit fish and wildlife in the area.

The Service was involved in the review of the Palm Beach Countys Persimmon Boulevard Extension project (also known as the Acreage Reliever Road). We worked with the County, and the U.S. Army Corps of Engineers (Corps) to develop an alignment that would minimize fragmentation of fish and wildlife habitat by locating the corridor as far to the west as possible. Fragmentation of habitat adversely affects wildlife by reducing the extent and connectivity of remaining habitats, and eliminating habitat for those species requiring large unbroken blocks of habitat. Fragmentation may also increase the likelihood of predation for some species, and over time can lead to the loss of genetic diversity, reduce population size and increase the likelihood of local species extinctions (Forman et al. 2003). Our planning effort resulted in the adoption by Palm Beach County of the Persimmon Boulevard Extension corridor as illustrated in Figures 1-4 provided in the Project Description. It was our understanding that the extension of State Road 7 to Northlake Boulevard would consist of extending the Persimmon Boulevard corridor as illustrated in Alternatives 1 or 3. Accordingly, we were surprised to now see Coridors 2 and 4 proposed as alternatives for the project. Based on information from Palm Beach County's consultant, it was the Service's understanding that the portion of the FDOT right-of-way that is adjacent to the Section 1 mitigation parcel was included as mitigation for the Persimmon Boulevard Extension Project. The inclusion of this portion of the right-of-way was the basis for the Service's concurrence letter to the Corps on the Persimmon Boulevard Extension project (see Attachments 1 and 2 in Additional Comments Section). Without the inclusion of the FDOT right-of-way as part of the mitigation plan, the Service would have not provided a concurrence letter to the Corps at that time.

The Service notes that that the construction of a new roadway to extend State Road 7 in the project area could result in a variety of adverse impacts to fish and wildlife including: the direct loss of habitat, mortality due to collisions with vehicles, increased disturbance and a reduction in habitat quality adjacent to the roadway, and the fragmentation of existing habitat. The Service believes that Corridor 1 would result in the least impacts to fish and wildlife habitat, wetlands, and conservation lands of the four corridors proposed. The Project Description indicates that Corridor 1 is proposed to be discarded. We strongly urge that Corridor 1 be maintained as an alternative and adopted as the preferred alternative for the project.

To reduce the potential for wildlife mortality resulting from collisions with motor vehicles, the Service requests that the roadway corridor be fenced along its eastern boundary to prevent wildlife from entering the roadway. The fence should consist of a 10-foot tall chain-link with a 2-foot-wide section of angled barbed wire at the top. The base of the fence should include a barrier constructed of hardware cloth (or other suitable material) of sufficiently small mesh size and height to prevent small animals (frogs, snakes etc.) from passing through the fence and entering the roadway. In lieu of a fence, a 10-foot tall barrier wall could be constructed along the eastern boundary of the road right-of-way. The construction of a barrier wall is preferable to a fence because it would reduce road noise and disturbance to wildlife. The construction of a barrier wall is also preferable to the construction of a dike because the barrier wall would reduce the size of the project footprint and inturn impacts to valuable natural resources.

LITERATURE CITED

Forman, R.T.T., D. Sperling, J.A. Bissonette, A. Clevenger, C.D. Cutshall, V.H. Dale, L. Fahrig, R. France, C.R. Goldman, K. Heanue, J.A. Jones, F.J. Swanson, T. Turrentine, and T.C. Winter. Road Ecology, Science and Solutions. Island Press, Washington D.C. U.S.A. 481 pages.

Additional Comments (optional):
Attachment 1. Email dated December 1, 2005, from Jim Schnelle, environmental consultant for Palm Beach County to John Wrublik, Fish and Wildlife Service.

To john-wrublik@fws.gov
cc Brandon.Howard@saj02.usace.army.mil
bcc

Subject FDOT ROW
John:
Sorry for any confusion. The FDOT ROW has always been intended to be released to Palm Beach County as we discussed in the field. My e-mail on July 25 was not meant to confuse you. Deeded Conservation easement contains 544 acres=/-. The FDOT ROW -- 80.6 acres (24-25 acres lie in Section 1 and the balance in Sections 12 & 13) will be incorporated into the Pond Cypress Preserve .The Corps draft SOF states this ROW is forthcoming. I spoke with Brandon yesterday and he told me we have enough mitigation. I tried to get a conference call to you not realizing your office was holding an all day staff meeting. Let me know if I can do anything to clear up any miscommunication I am responsible for, Thanks for calling me this morning at my office. I have been in the field and the best way to reach me is my cell at 561 -662-8849.
Regards,
Jim

Attachment 2. Letter from Service to Corps dated December 13, 2005, on the Acreage Reliever Road project proposed by Palm Beach County.
December 13, 2005
Lawrence C. Evans
US. Army Corps of Engineers
Palm Beach Gardens Regulatory Office
4400 PGA Boulevard, Suite 500
Palm Beach Gardens, Florida 3341 0

Attention: Brandon Howard

Service Log No.: 4-1-05-1 -9856
Corps Application No.: SAJ-2002-8273 (IP-KBH)
Date Received: August 14,2005
Project : Acreage Reliever Road
Applicant: Palm Beach County
County:Palm Beach County

Dear Mrs. Evans:

The Fish and Wildlife Service (Service) has reviewed your Public Notice and other information submitted by the U.S. Army Corps of Engineers (Corps) for the application referenced above. This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 et seq.) and the provisions of the Fish and Wildlife Coordination Act of 1958, as amended (48 Stat. 401 ; 16 U.S.C. 661 et seq.).

PROJECT DESCRIPTION

The applicant proposes to construct a new four-lane roadway, known as the "Acreage Reliever Road," from Okeechobee Boulevard to 60th Street. The purpose of the project is to improve traffic flow in the area. The project will impact a total of 106 acres of wetlands. Wetlands at the project site consist of hydric pine (Pinus elliottii) flatwoods, wet prairie, and cypress (Taxodium distichurn) wetlands. Some of the wetlands in the project site have been impacted by melaleuca (Melaleuca quinquenewia). As compensation for impacts to wetlands, the applicant had proposed to preserve and enhance 624.6 acres of high-quality wetlands and uplands within Sections 1, 12, 13, and 24, Township 43 South, Range 41 East, and to preserve and enhance 33.3 acres of uplands and wetlands west of the project corridor from 40th Street to 60th Street. Enhancement activities will consist of removal of exotic vegetation. The entire mitigation area will be added to Palm Beach County's Pond Cypress Natural Area. The project is located in Sections 1, 12, 13, 14, an4 24, Township 43 South, Range 41 East, Palm Beach County, Florida.
Lawrence C. Evans

THREATENED AND ENDANGERED SPECIES
Page 2

Wood stork

The project site is located within the core foraging areas (CFA) (i,e., within 18.6 miles) of four active breeding colonies of the endangered wood stork (Mycteria americana). The Service believes that the loss of wetlands within a CFA may reduce foraging opportunities for wood storks. To minimize adverse effects to the wood stork, the Service's Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Horida Ecological Services Consultation Area (Service 2002) (Guidelines) recommends that the applicant replace wetlands lost due to the action. The compensation plan should include a temporal lag factor, if necessary, to ensure that wetlands provided as compensation adequately replace the wetland functions lost due to the project. Moreover, wetlands offered as compensation should be of the same hydroperiod, and located within the CFA of the affected wood stork colony. 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.

The Corps has determined the project "may affect, but is not likely to adversely affect" the wood stork. In our letter to the Corps, dated December 10,2005, the Service noted information provided to the Service by the applicant's consultant indicated the wetlands mitigation proposed for the project had been reduced from 624.6 to 544.0 acres. A total of 80.6 acres of land (currently owned by the Florida Department of Transportation) located along the east side of the mitigation parcel had been removed from the mitigation proposal. The Service stated: (1) the compensation was not adequate to offset the loss of foraging habitat to the wood stork, (2) we could not provide concurrence for the Corps' determination, and (3) we recommended the applicant provide an additional 80.6 acres of mitigation in order to fulfill the original mitigation proposal. Based on recent discussions with the applicant's consultant and the Corps, we now understand this information was incorrect and the parcel is still included in the mitigation proposal. The Corps will require the applicant to preserve the 80.6-acre parcel within 1 year of issuance of the permit, and this will be included as a condition of the permit. Based on this new

information, the Service believes the wetlands mitigation proposal is now adequate to compensate for the loss of wood stork foraging habitat, and we concur with the Corps' determination for the wood stork.

FISH AND WILDLIFE RESOURCES

The project will result in impacts to 106 acres of wetlands. The applicant proposes to mitigate the loss of wetlands by preserving and enhancing 624.6 acres of high-quality wetlands and uplands near the project site. The Service believes the proposed mitigation is adequate to compensate for the loss of wetlands resulting from the project.

Lawrence C. Evans Page 3

Thank you for allowing us to provide these comments and for your cooperation and effort in protecting federally listed species. If you have any questions regarding this project, please contact John Wrublik at 772-562-3909, extension 282.

Sincerely yours,
James J. Slack
Field Supervisor
South Florida Ecological Services
cc:
DEP, West Palm Beach, Florida
EPA, West Palm Beach, Florida
FWC, Vero Beach, Florida

LITERATURE CITED
U.S. Fish and Wildlife Service (Service). 2002. Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Florida Ecological Services Consultation Area. Fish and Wildlife Service, South Florida Ecological Services Office; Vero Beach, Florida.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Water Quality and Quantity

Coordinator Summary

4 Summary Degree of Effect

Water Quality and Quantity Summary Degree of Effect: Substantial

Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Because of the concerns stated by FDEP, notably the presence of the City of West Palm Beach Water Catchment Area immediately adjacent to the project, the summary degree of effect assigned to Water Quality and Quantity is substantial.

ETAT Reviews for Water Quality and Quantity

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Water Quality and Quantity Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Stormwater runoff from the road surface may alter adjacent wetlands and surface waters through increased pollutant loading. 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. 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 pre-development hydroperiod and water quality, as well as to protect the natural functions of adjacent wetlands.

Comments on Effects to Resources:
We recommend that the 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. Increased stormwater runoff carrying oils, greases, metals, sediment, and other pollutants from the increased impervious surface would be of significant concern.

Additional Comments (optional):
The Water Catchment Area for the City of West Palm Beach is immediately adjacent to the project. All activities must be designed to prevent stormwater pollutant contamination of the City's water supply. DEP recommends that the FDOT work to include the City on all decisions affecting this critical area.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Wetlands

Coordinator Summary

4 Summary Degree of Effect

Wetlands Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The acreage of wetlands and open water habitats reported by the ETDM GIS Analysis within the 500-foot buffer for this alternative is as follows:
National Wetlands Inventory database - 135.1 acres; Wetlands 2000 database - 76.2 acres; 2003 FFWCC Habitat and Landcover Grid database - 117.3 acres.
The proposed project is a 6-lane divided highway that would occupy much of the 500-foot buffer. Because of the large area of wetlands occurring within the 500-foot buffer, the summary degree of effect assigned to Wetlands is substantial.

ETAT Reviews for Wetlands

4 ETAT Review by Alisa Zarbo, US Army Corps of Engineers (08/22/2006)

Wetlands Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
Wetlands: This area was evaluated and considered in the permitting of the Acreage Reliever Road and has an extremely high level of importance to the Corps. Wildlife corridors were incorporated into the allignment of the Acreage Reliever Road. The Corps would try to keep the same continuity of the corridors when permitting this extension.

Comments on Effects to Resources:
If the roadway was constructed through corridor 4, it would fragment an extremely sensitive greenway and wildlife corridor that exists between the PCNA, the WCA and Section 1. The alignment would isolate the PCNA and the WCA to the extent that reptiles, amphibians and small and large mammals could not easily access the adjacent natural areas. Large natural areas are necessary for certain wildlife to carry out life functions such as feeding and nesting. Smaller isolated areas may accommodate only a few individuals with modest home range requirements. Small mammals and other forest dwelling wildlife have shown an aversion to using areas with less vegetative cover. This would be the case with a four-lane roadway that has a shoulder and median. Although some animals have an aversion to roadways, many attempt to cross and result in collisions that impact both wildlife and humans. During 1990, 431 vehicle collisions with animals (wild and domestic) were serious enough to be reported to the Florida Department of Highway Safety and Motor Vehicles. These accidents resulted in 4 human fatalities and 380 injuries. The average estimated property damage for each accident was $3,395. Corridor 4 could result in extensions, as shown in the Conceptual Analysis Matrix, to access the Acreage. These extensions further fragment the ecosystem and isolate Section 1. Placing the roadway down the Rangeline would put it adjacent to the WCA. The WCA is a Class I potable water supply for the City of West Palm Beach. The roadway run-off would pose serious threats to the Citys drinking water supply. The alternative of using a bridge along the Rangeline would not be a feasible alternative due to it being adjacent to the WCA.

Up to 60th Street, Corridor 3 has been approved by the Corps. From 60th Street the roadway is shown going east along the M-Canal. This portion and the following north south portion of the roadway that ends at Northlake Boulevard would isolate the mitigation area for the Ibis Golf and Country Club. Requirements

for the portion of the roadway adjacent to the mitigation area would include fencing on both sides of the roadway, culverts to maintain adequate hydrology, slower speed limits, wildlife crossing signs and culverts for wildlife crossings or bridges. The wildlife crossings should be placed above the seasonal high water elevation of wetlands but adjacent to wetlands. Wildlife crossings should be placed just above the ecotone of the wetland. The median should also be devoid of vegetation that would give the illusion of a narrow roadway to wildlife. Wildlife is more adverse to crossing wider roadways. Median landscaping plants should not provide a food source for wildlife. This would entice wildlife to cross the roadway and go into the median for food resulting in road kill. This area is within the Loxahatchee River Watershed and to a limited extent the Lake Worth Lagoon.

Additional Comments (optional):
Mitigation efforts should be concentrated in the same watershed. Mitigation options could include widening of the M-Canal and planting a flow through marsh to improve water quality. Mitigation in the WCA may also be appropriate for this project.

Coordinator Feedback: None

0 ETAT Review by Madelyn T Martinez, National Marine Fisheries Service (08/14/2006)

Wetlands Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
NONE

Comments on Effects to Resources:
NONE

Additional Comments (optional):
Based on the project location and information provided on the ETDM website, NOAAs National Marine Fisheries Service (NOAA Fisheries) concludes the proposed work would not directly impact areas that support NOAA trust resources. We have no comments or recommendations to provide pursuant to the essential fish habitat (EFH) requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) P.L. 104-297. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Coordinator Feedback: None

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Wetlands Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The National Wetlands Inventory GIS report indicates that there are 135.13 acres of palustrine and 1.67 acres of riverine wetlands within the 500-ft. project buffer zone. The Wetlands 2000 Inventory indicates that there are 3.87, 19.91, 929.43, 144.87, 173.97, 712.39 and 18.29 acres of cypress, emergent aquatic vegetation, freshwater marsh, mixed shrubs, mixed wetland hardwoods, wet pinelands and wet prairies wetlands, respectively, within the 5,280-ft. buffer of the project area.

Comments on Effects to Resources:
The project will require an environmental resource permit (ERP) from the South Florida Water Management District. The ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of the roadway extension project to the greatest extent practicable:
- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging 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. All stormwater treatment should be located in upland sites.
- 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 road improvement projects in the vicinity of the subject project should also be addressed.

Additional Comments (optional):
DEP ranks the Corridor 1 Alternative as # 1. The Department strongly recommends bridging ALL wetland crossings to minimize impacts to wetland connectivity and hydroperiod. Additionally, all stormwater should be conveyed to treatment sites located in upland areas.

Coordinator Feedback: None

4 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/18/2006)

Wetlands Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Wetlands

Comments on Effects to Resources:
Service Comments, Fish and Wildlife Resources, Wetlands, and Special Designations:

Corridor 1 would follow Palm Beach County's Persimmon Boulevard Extension corridor and proceed straight northward from the M-Canal approximately 3 miles to North Lake Avenue. The Service notes that Corridor 1 would impact wetlands and uplands currently protected for conservation purposes at Pond Cypress Natural Area. These lands include the parcel known as Section 1. Section 1 has been purchased by Palm Beach County as mitigation for impacts to wetlands resulting from the proposed Persimmon

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The Service was involved in the review of the Palm Beach Countys Persimmon Boulevard Extension project (also known as the Acreage Reliever Road). We worked with the County, and the U.S. Army Corps of Engineers (Corps) to develop an alignment that would minimize fragmentation of fish and wildlife habitat by locating the corridor as far to the west as possible. Fragmentation of habitat adversely affects wildlife by reducing the extent and connectivity of remaining habitats, and eliminating habitat for those species requiring large unbroken blocks of habitat. Fragmentation may also increase the likelihood of predation for some species, and over time can lead to the loss of genetic diversity, reduce population size and increase the likelihood of local species extinctions (Forman et al. 2003). Our planning effort resulted in the adoption by Palm Beach County of the Persimmon Boulevard Extension corridor as illustrated in Figures 1-4 provided in the Project Description. It was our understanding that the extension of State Road 7 to Northlake Boulevard would consist of extending the Persimmon Boulevard corridor as illustrated in Alternatives 1 or 3. Accordingly, we were surprised to now see Coridors 2 and 4 proposed as alternatives for the project. Based on information from Palm Beach County's consultant, it was the Service's understanding that the portion of the FDOT right-of-way that is adjacent to the Section 1 mitigation parcel was included as mitigation for the Persimmon Boulevard Extension Project. The inclusion of this portion of the right-of-way was the basis for the Service's concurrence letter to the Corps on the Persimmon Boulevard Extension project (see Attachments 1 and 2 in Additional Comments section). Without the inclusion of the FDOT right-of-way as part of the mitigation plan, the Service would have not provided a concurrence letter to the Corps at that time.

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December 13, 2005
Lawrence C. Evans
US. Army Corps of Engineers
Palm Beach Gardens Regulatory Office
4400 PGA Boulevard, Suite 500
Palm Beach Gardens, Florida 3341 0

Attention: Brandon Howard

Service Log No.: 4-1-05-1 -9856
Corps Application No.: SAJ-2002-8273 (IP-KBH)
Date Received: August 14,2005
Project : Acreage Reliever Road
Applicant: Palm Beach County
County:Palm Beach County

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THREATENED AND ENDANGERED SPECIES
Page 2

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Lawrence C. Evans Page 3

Thank you for allowing us to provide these comments and for your cooperation and effort in protecting federally listed species. If you have any questions regarding this project, please contact John Wrublik at 772-562-3909, extension 282.

Sincerely yours,
James J. Slack
Field Supervisor
South Florida Ecological Services
cc:
DEP, West Palm Beach, Florida
EPA, West Palm Beach, Florida
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LITERATURE CITED
U.S. Fish and Wildlife Service (Service). 2002. Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Florida Ecological Services Consultation Area. Fish and Wildlife Service, South Florida Ecological Services Office; Vero Beach, Florida.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Wildlife and Habitat

Coordinator Summary

4 Summary Degree of Effect

Wildlife and Habitat Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Both the FFWCC and USFWS indicated that several state and federally listed species may occur within the project area. Although no listed species occurrences are reported within the 500-foot buffer for this alternative, there is a high likelihood of occurrence of listed wading birds and wood storks because of the large area of wetlands present along this alignment. This alternative is also adjacent to publicly owned conservation lands. In addition, the 500-foot buffer for this alternative contains pineland that requires prescribed burning for habitat management. For these reasons, the summary degree of effect assigned to Wildlife and Habitat is substantial.

ETAT Reviews for Wildlife and Habitat

3 ETAT Review by Scott Sanders, FL Fish and Wildlife Conservation Commission (08/04/2006)

Wildlife and Habitat Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

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 #8127 in Palm Beach County, and provides the following comments related to potential impacts to fish and wildlife resources for this Programming Phase project.

The proposed project involves an evaluation of need to extend SR 7 from SR 704 (Okeechobee Boulevard) to Northlake Boulevard in Palm Beach County. Four corridors and a No-Build option have been identified for the project.

The Corridor 1 alternative would begin at the intersection of Okeechobee Boulevard and SR 7, follow the Countys extension of Persimmon Boulevard, and continue north parallel to 110th Avenue. The alignment crosses over the M Canal and continues north adjacent to the Ibis Golf and Country Club, and terminates at Northlake Boulevard.

This project was reviewed under the Advanced Notification process through the Florida State Clearinghouse at the Florida Department of Environmental Protection under SAI FL200506231187C (letter dated August 10, 2005, attached), and SAI# 9811160726C (letter dated December 2, 1998 attached). These FWC letters provide a detailed overview of project resources, including listed wildlife and plant species, potential impacts, and a course of action to reduce these impacts. We have reviewed these letters, and our previous comments remain applicable to the currently proposed project.

A GIS analysis of fish and wildlife and habitat resources was conducted using the Environmental Screening Tool (EST), and those results indicate that very similar upland and wetland habitat types are present along all four corridors. Uplands within 500 feet of the proposed Corridor 1 include mixed pine-hardwood forest, pinelands, upland hardwood hammock, and dry prairie. Wetlands along this corridor include cypress swamp, cypress/pine/cabbage palm, freshwater marsh and wet prairie, hardwood swamp, mixed wetlands forests, open water, sawgrass marsh, and shrub swamp. Approximately 58.1 percent of

the land within 500 feet of the road is in high and low impact urban land uses. An overall accounting of the species listed by FWC which may occur in and adjacent to the project area include the eastern indigo snake (Threatened [T]), Florida pine snake (Species of Special Concern [SSC]), gopher tortoise (SSC), Shermans fox squirrel (SSC), Florida mouse (SSC), little blue heron (SSC), tricolored heron (SSC), white ibis (SSC), wood stork (E), snail kite (E), bald eagle (T), crested caracara (T), southeastern kestrel (T), limpkin (SSC), Florida sandhill crane (T), Florida burrowing owl (SSC), and red-cockaded woodpecker (SSC). The presence or absence of some of these species within the project area is highly dependent on habitat type, plant successional stage, habitat quality, and site drainage conditions.

Habitat quality within 500 feet of the Right-of-way (ROW) for Corridor 1 was evaluated using five natural resource data layers in the EST. FWCs Biodiversity Hotspots data layer shows that 20 percent of the area is capable of supporting three to four focal species. Based on FWCs Integrated Wildlife and Habitat Ranking System map, a total of 21 percent of this zone along the corridor has been assigned a score of from 6 to 8 (Scale 1 = Low, 10 = High), which ranks as good to excellent quality. According to FWCs Priority Wetlands Map for wetlands dependent listed species, 20.6 percent of the habitat along the proposed roadway zone is ranked as capable of supporting 1 to 3 species in uplands, and 4 to 6 species in wetlands. Within this zone, public and managed lands include the Pond Cypress Natural Area. FWC has also designated Strategic Habitat Conservation Areas for the limpkin and wading birds within approximately 30 percent of the corridor zone. The zone within 500 feet of Corridor 1, contains by far, the lowest acreage percentage for lands evaluated within the five data layers above, therefore less high quality habitat and public lands would be at risk from direct and secondary impacts.

Comments on Effects to Resources:
Direct impacts of the project could be minimal to moderate depending on avoidance and minimization measures implemented, and include habitat loss from roadway and Drainage Retention Area (DRAs) construction, which could adversely affect a number of listed wildlife species. Due to the close proximity of one public land tract, this corridor will potentially have a moderate direct impact on public lands.

Additional Comments (optional):
In order to reduce the impacts to fish and wildlife resources and important habitat, we continue to recommend that the existing road network be improved in order to resolve the current transportation need. If through further study, this proves not to be feasible, we would recommend the selection of Corridor 1, which would have significantly lower impacts on natural resources.

We recommend the following measures be considered during the Project Development and Environment (PD&E) Study to avoid, minimize, and mitigate project impacts to listed species and habitat:

1. A vegetative cover map and accounting by acreage for each plant community type should be made for the affected project area. Compensatory mitigation for all upland and wetlands habitat loss should be required. If wetlands are mitigated under the provisions of Chapter 373.4137 F.S., the proposed mitigation sites should be located within the immediate or same regional area, functionally equivalent, equal to or of higher functional value, and as or more productive as the wetlands impacted by the project.

2. Surveys for listed species should be performed within and adjacent to the ROW and proposed sites for DRAs during the PD&E Study. The methodology for these surveys should be coordinated with FWC, and follow appropriate survey techniques or guidelines to determine presence, absence or probability of occurrence of various species, and to assess habitat quality. These study methods should be designed considering the potential listed species discussed above.

3. Based on the survey results, a plan should also be developed to address direct, secondary, and cumulative impacts of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures, including compensatory replacement for both upland and wetlands habitat loss, should also be addressed. Land acquisition and restoration of appropriate tracts adjacent to existing public lands, or tracts placed under conservation easement located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas, would be biologically appropriate

and supported by our agency.

4. The PD&E Study should also include an investigation of the design, cost, location, and construction techniques for longer bridges over streams or sloughs, canals and their floodplains, and wetlands, which would improve hydrological and floodplain functioning, and minimize wetlands fill. These improved structures would also reduce roadkills and provide improved habitat connectivity for wildlife species such as whitetail deer, bobcat, river otter, and other upland, transitional, and aquatic species that use wetlands riparian systems within the project area.

5. Habitat impacts in both uplands and wetlands may be avoided where possible by interchangeably designing the road expansion through those areas where less habitat resources occur. In addition, using the median and roadside swales for treating roadside runoff would reduce the need for some off-site DRAs, and assist in reducing habitat loss.

6. Construction equipment staging areas; storage of oils, greases, and fuel; fill and roadbed material; and vehicle maintenance activities should be sited in previously disturbed areas far removed from streams, wetlands, or surface water bodies. Staging areas, along with borrow areas, should also be surveyed for listed species.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Steve Lau in our Vero Beach Office at (772) 778-5094 for further coordination on this project.

Coordinator Feedback: None

4 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/18/2006)

Wildlife and Habitat Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Federally Listed Species and Fish and Wildlife Resources

Comments on Effects to Resources:
Service Comments, 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.

The Service believes that the following federally listed species have the potential to occur in or near the project site: wood stork, Everglade snail kite (Rostrhamus sociabilis plumbeus) and eastern indigo snake (Drymarchon corais couperi), as well as the federally protected plants listed at the link for Palm Beach County at our web site (http://www.fws.gov /verobeach/ Species_lists/ PDF-lists/Palm Beach County.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.

Service Comments, Fish and Wildlife Resources, Wetlands, and Special Designations:

Corridor 1 would follow Palm Beach County's Persimmon Boulevard Extension corridor and proceed straight northward from the M-Canal approximately 3 miles to North Lake Avenue. The Service notes that Corridor 1 would impact wetlands and uplands currently protected for conservation purposes at Pond Cypress Natural Area. These lands include the parcel known as Section 1. Section 1 has been purchased by Palm Beach County as mitigation for impacts to wetlands resulting from the proposed Persimmon Boulevard Extension and will be added to the Pond Cypress Natural Area. The Pond Cypress Natural Area and Section 1 are contiguous with a large block (>10,000 acres) of protected native habitat located directly to the east in the City of West Palm Beach's Water Catchment Area (also known as Grassy Waters Preserve). Pond Cypress Natural Area, Section 1, and the Water Catchment Area currently provide important habitat to variety of species including wading birds, small mammals, reptiles, amphibians, and small fishes. Portions of the wetlands and uplands within the Pond Cypress Natural Area and Section 1 have been impacted by the exotic invasive tree melaleuca (Melaleuca quinquenervia). Moreover, some of the wetlands and uplands in Section 1 have been degraded by off-road vehicles. Although these areas have been impacted, the Service notes that they still largely consist of good quality habitat for fish and wildlife. Furthermore, we understand that Palm Beach County intends to develop a management plan for the entire Pond Cypress Natural Area that will result in the removal of melaleuca and prohibit off-road vehicle use. We expect that the management activities proposed will restore areas of degraded habitat and benefit fish and wildlife in the area.

The Service was involved in the review of the Palm Beach Countys Persimmon Boulevard Extension project (also known as the Acreage Reliever Road). We worked with the County, and the U.S. Army Corps of Engineers (Corps) to develop an alignment that would minimize fragmentation of fish and wildlife habitat by locating the corridor as far to the west as possible. Fragmentation of habitat adversely affects wildlife by reducing the extent and connectivity of remaining habitats, and eliminating habitat for those species requiring large unbroken blocks of habitat. Fragmentation may also increase the likelihood of predation for some species, and over time can lead to the loss of genetic diversity, reduce population size and increase the likelihood of local species extinctions (Forman et al. 2003). Our planning effort resulted in the adoption by Palm Beach County of the Persimmon Boulevard Extension corridor as illustrated in Figures 1-4 provided in the Project Description. It was our understanding that the extension of State Road 7 to Northlake Boulevard would consist of extending the Persimmon Boulevard corridor as illustrated in Alternatives 1 or 3. Accordingly, we were surprised to now see Coridors 2 and 4 proposed as alternatives for the project. Based on information from Palm Beach County's consultant, it was the Service's understanding that the portion of the FDOT right-of-way that is adjacent to the Section 1 mitigation parcel was included as mitigation for the Persimmon Boulevard Extension Project. The inclusion of this portion of the right-of-way was the basis for the Service's concurrence letter to the Corps on the Persimmon Boulevard Extension project (see Attachments 1 and 2 in Additional Comments section). Without the inclusion of the FDOT right-of-way as part of the mitigation plan, the Service would have not provided a concurrence letter to the Corps at that time.

The Service notes that that the construction of a new roadway to extend State Road 7 in the project area could result in a variety of adverse impacts to fish and wildlife including: the direct loss of habitat, mortality due to collisions with vehicles, increased disturbance and a reduction in habitat quality adjacent to the roadway, and the fragmentation of existing habitat. The Service believes that Corridor 1 would result in the least impacts to fish and wildlife habitat, wetlands, and conservation lands of the four corridors proposed. The Project Description indicates that Corridor 1 is proposed to be discarded. We strongly urge that Corridor 1 be maintained as an alternative and adopted as the preferred alternative for the project.

To reduce the potential for wildlife mortality resulting from collisions with motor vehicles, the Service requests that the roadway corridor be fenced along its eastern boundary to prevent wildlife from entering the roadway. The fence should consist of a 10-foot tall chain-link with a 2-foot-wide section of angled barbed wire at the top. The base of the fence should include a barrier constructed of hardware cloth (or other suitable material) of sufficiently small mesh size and height to prevent small animals (frogs, snakes etc.) from passing through the fence and entering the roadway. In lieu of a fence, a 10-foot tall barrier wall could be constructed along the eastern boundary of the road right-of-way. The construction of a barrier wall is preferable to a fence because it would reduce road noise and disturbance to wildlife. The construction of a barrier wall is also preferable to the construction of a dike because the barrier wall would reduce the size of the project footprint and inturn impacts to valuable natural resources.

LITERATURE CITED

Forman, R.T.T., D. Sperling, J.A. Bissonette, A. Clevenger, C.D. Cutshall, V.H. Dale, L. Fahrig, R. France, C.R. Goldman, K. Heanue, J.A. Jones, F.J. Swanson, T. Turrentine, and T.C. Winter. Road Ecology, Science and Solutions. Island Press, Washington D.C. U.S.A. 481 pages.

Additional Comments (optional):
Attachment 1. Email dated December 1, 2005, from Jim Schnelle, environmental consultant for Palm Beach County to John Wrublik, Fish and Wildlife Service.

To john-wrublik@fws.gov
cc Brandon.Howard@saj02.usace.army.mil
bcc
Subject FDOT ROW
John:
Sorry for any confusion. The FDOT ROW has always been intended to be released to Palm Beach County as we discussed in the field. My e-mail on July 25 was not meant to confuse you. Deeded Conservation easement contains 544 acres=/-. The FDOT ROW -- 80.6 acres (24-25 acres lie in Section 1 and the balance in Sections 12 & 13) will be incorporated into the Pond Cypress Preserve .The Corps draft SOF states this ROW is forthcoming. I spoke with Brandon yesterday and he told me we have enough mitigation. I tried to get a conference call to you not realizing your office was holding an all day staff meeting. Let me know if I can do anything to clear up any miscommunication I am responsible for, Thanks for calling me this morning at my office. I have been in the field and the best way to reach me is my cell at 561 -662-8849.
Regards,
Jim

Attachment 2. Letter from Service to Corps dated December 13, 2005, on the Acreage Reliever Road project proposed by Palm Beach County.
December 13, 2005
Lawrence C. Evans
US. Army Corps of Engineers
Palm Beach Gardens Regulatory Office
4400 PGA Boulevard, Suite 500
Palm Beach Gardens, Florida 3341 0

Attention: Brandon Howard

Service Log No.: 4-1-05-1 -9856
Corps Application No.: SAJ-2002-8273 (IP-KBH)
Date Received: August 14,2005
Project : Acreage Reliever Road
Applicant: Palm Beach County
County:Palm Beach County

Dear Mrs. Evans:

The Fish and Wildlife Service (Service) has reviewed your Public Notice and other information submitted by the U.S. Army Corps of Engineers (Corps) for the application referenced above. This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 et seq.) and the provisions of the Fish and Wildlife Coordination Act of 1958, as amended (48 Stat. 401 ; 16 U.S.C. 661 et seq.).

PROJECT DESCRIPTION

The applicant proposes to construct a new four-lane roadway, known as the "Acreage Reliever Road," from Okeechobee Boulevard to 60th Street. The purpose of the project is to improve traffic flow in the area. The project will impact a total of 106 acres of wetlands. Wetlands at the project site consist of hydric pine (Pinus elliottii) flatwoods, wet prairie, and cypress (Taxodium distichurn) wetlands. Some of the wetlands in the project site have been impacted by melaleuca (Melaleuca quinquenewia). As compensation for impacts to wetlands, the applicant had proposed to preserve and enhance 624.6 acres of high-quality wetlands and uplands within Sections 1, 12, 13, and 24, Township 43 South, Range 41 East, and to preserve and enhance 33.3 acres of uplands and wetlands west of the project corridor from 40th Street to 60th Street. Enhancement activities will consist of removal of exotic vegetation. The entire mitigation area will be added to Palm Beach County's Pond Cypress Natural Area. The project is located in Sections 1, 12, 13, 14, an4 24, Township 43 South, Range 41 East, Palm Beach County, Florida.
Lawrence C. Evans

THREATENED AND ENDANGERED SPECIES
Page 2

Wood stork

The project site is located within the core foraging areas (CFA) (i,e., within 18.6 miles) of four active breeding colonies of the endangered wood stork (Mycteria americana). The Service believes that the loss of wetlands within a CFA may reduce foraging opportunities for wood storks. To minimize adverse effects to the wood stork, the Service's Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Horida Ecological Services Consultation Area (Service 2002) (Guidelines) recommends that the applicant replace wetlands lost due to the action. The compensation plan should include a temporal lag factor, if necessary, to ensure that wetlands provided as compensation adequately replace the wetland functions lost due to the project. Moreover, wetlands offered as compensation should be of the same hydroperiod, and located within the CFA of the affected wood stork colony. 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.

The Corps has determined the project "may affect, but is not likely to adversely affect" the wood stork. In our letter to the Corps, dated December 10,2005, the Service noted information provided to the Service by the applicant's consultant indicated the wetlands mitigation proposed for the project had been reduced from 624.6 to 544.0 acres. A total of 80.6 acres of land (currently owned by the Florida Department of Transportation) located along the east side of the mitigation parcel had been removed from the mitigation proposal. The Service stated: (1) the compensation was not adequate to offset the loss of foraging habitat to the wood stork, (2) we could not provide concurrence for the Corps' determination, and (3) we recommended the applicant provide an additional 80.6 acres of mitigation in order to fulfill the original mitigation proposal. Based on recent discussions with the applicant's consultant and the Corps, we now understand this information was incorrect and the parcel is still included in the mitigation proposal. The Corps will require the applicant to preserve the 80.6-acre parcel within 1 year of issuance of the permit, and this will be included as a condition of the permit. Based on this new information, the Service believes the wetlands mitigation proposal is now adequate to compensate for the loss of wood stork foraging habitat, and we concur with the Corps' determination for the wood stork.

FISH AND WILDLIFE RESOURCES

The project will result in impacts to 106 acres of wetlands. The applicant proposes to mitigate the loss of wetlands by preserving and enhancing 624.6 acres of high-quality wetlands and uplands near the project site. The Service believes the proposed mitigation is adequate to compensate for the loss of wetlands resulting from the project.

Lawrence C. Evans Page 3

Thank you for allowing us to provide these comments and for your cooperation and effort in protecting federally listed species. If you have any questions regarding this project, please contact John Wrublik at 772-562-3909, extension 282.

Sincerely yours,
James J. Slack
Field Supervisor
South Florida Ecological Services
cc:

DEP, West Palm Beach, Florida
EPA, West Palm Beach, Florida
FWC, Vero Beach, Florida

LITERATURE CITED

U.S. Fish and Wildlife Service (Service). 2002. Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Florida Ecological Services Consultation Area. Fish and Wildlife Service, South Florida Ecological Services Office; Vero Beach, Florida.

Coordinator Feedback: None

- No review submitted from the FL Department of Agriculture and Consumer Services
- No review submitted from the Federal Highway Administration
- No review submitted from the US Forest Service

ETAT Reviews: Cultural

Historic and Archaeological Sites

Coordinator Summary

0 Summary Degree of Effect

Historic and Archaeological Sites Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The 2000 Cultural Resource Assessment Survey (DHR Survey #6173), the GIS analysis, and comments from FDOS and the Miccosukee Tribe of Indians of Florida indicate that this alignment will have no effect on any archaeological or historic resources.

ETAT Reviews for Historic and Archaeological Sites

0 ETAT Review by Sherry Anderson, FL Department of State (08/11/2006)

Historic and Archaeological Sites Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Historic Standing Structures

NONE.

Archaeological or Historic Sites

NONE.

Comments on Effects to Resources:
The project corridor along with eight alternate routes was subject to a cultural resource assessment survey in 2000 (DHR Survey #6173). As a result of the survey, no archaeological or historic resources were identified. At that time, our office concurred that the undertaking would have no effect on any historic properties eligible for listing. It appears that the alternatives presented in the Environmental Screening Tool are the same alternatives surveyed as part of this earlier study. As long as this is verified, no additional cultural resource assessment survey will be necessary.

Coordinator Feedback: None

0 ETAT Review by Steve Terry, Miccosukee Tribe (07/25/2006)

Historic and Archaeological Sites Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
None found.

Comments on Effects to Resources:
None found.

Coordinator Feedback: None

- No review submitted from the Federal Highway Administration
- No review submitted from the Seminole Tribe

Recreation Areas

Coordinator Summary

4 Summary Degree of Effect

Recreation Areas Summary Degree of Effect: Substantial
Reviewed By:

FDOT District 4 (4/25/2007)
Comments:
The GIS Analysis and comments from FDEP indicate that three designated public conservation lands are located within the vicinity of this alignment. As indicated by the Florida Natural Areas Inventory, these lands contain significant natural communities and numerous element occurrences of listed species. These lands are also important in terms of natural function such as flood control, filtering storm water runoff, aquifer recharge, etc. The potential effect of this alignment to these lands is determined to be substantial. If selected, the final design for this alignment will avoid or minimize impacts to these lands, including any proposed acquisition sites in the project area, to the greatest extent practicable, and appropriate mitigation will be provided for unavoidable impacts. In addition, a biological assessment/evaluation (BA/BE) will be completed as part of the project development phase to capture any primary or indirect effects to the public lands and any proposed acquisition sites in the project area.

ETAT Reviews for Recreation Areas

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Recreation Areas Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The following public conservation lands are located in the vicinity of this project: the Grassy Waters Preserve, Loxahatchee Slough Natural Area and Pond Cypress Natural Area.

Comments on Effects to Resources:
These lands contain significant natural communities and numerous element occurrences of listed species, as indicated by the Florida Natural Areas Inventory. The Department is interested in preserving the area's natural communities, wildlife corridor functions, natural flood control, stormwater runoff filtering capabilities, aquifer recharge potential, contributions to regional spring complexes, and recreational trail opportunities. Therefore, future environmental documentation should include an evaluation of the primary, secondary, and cumulative impacts of the proposed roadway widening construction on the above public lands and any proposed acquisition sites.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District
- No review submitted from the National Park Service

Section 4(f) Potential

Coordinator Summary

4 Summary Degree of Effect

Section 4(f) Potential Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
The GIS Analysis and comments from FHWA indicate that this alignment will cross conservation land and that a Section 4(f) Determination of Applicability will be required. For these reasons, the summary degree of effect for this alignment is determined to be substantial. If selected, the final design for this alignment will avoid or minimize impacts to this area to the greatest extent practicable, and appropriate mitigation will be provided for unavoidable impacts.

ETAT Reviews for Section 4(f) Potential

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Section 4(f) Potential Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Pond Cypress Natural Area

Comments on Effects to Resources:
The EST indicates that this alignment will cross the resource as the proposed Persimmon Boulevard Extension. A Section 4 (f) determination of applicability will be required.

Coordinator Feedback: None

ETAT Reviews: Community

Aesthetics

Coordinator Summary

2 Summary Degree of Effect

Aesthetics Summary Degree of Effect: Minimal
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
Comments from the Palm Beach County MPO indicate that this alignment is not anticipated to have a major impact on community aesthetics; therefore, the summary degree of effect assigned to Aesthetics for this

alignment is minimal.

ETAT Reviews for Aesthetics

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Aesthetics Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
This alignment will impact 445 noise sensitive receivers.

Comments on Effects to Resources:
None.

Additional Comments (optional):
N/A

CLC Commitments and Recommendations:
Landscaping along the corridor would enhance viewshed.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Economic

Coordinator Summary

2 Summary Degree of Effect

Economic Summary Degree of Effect: Minimal
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that there are no businesses located along this alignment that would be negatively impacted. Therefore, the summary degree of effect assigned to Economics for this alignment is minimal.

ETAT Reviews for Economic

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Economic Effect: Minimal
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
There are no businesses located along this corridor that would be negatively impacted by this alignment.

Comments on Effects to Resources:
There may be some increases in the opportunity for residents to obtain employment a distance from living community as a result of the roadway.

Additional Comments (optional):
N/A

CLC Commitments and Recommendations:
N/A
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Land Use

Coordinator Summary

4 Summary Degree of Effect

Land Use Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
Comments from the agencies indicate that this alignment will directly impact 19 acres of wetlands, 12 acre-feet of floodplain, and recreation/open space of the community. Residential areas within the vicinity of this alignment will also be negatively impacted. In addition, this alignment is not addressed within the county's comprehensive plan. Based on these reasons, the summary degree of effect assigned to Land Use for this alignment is substantial. If selected, the final design for this alignment will avoid or minimize land use impacts to the greatest extent practicable, and appropriate mitigation will be provided for unavoidable impacts. FDOT will also coordinate with the local government to ensure the project is consistent with the county's comprehensive plan.

ETAT Reviews for Land Use

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Land Use Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
Residential areas.

Comments on Effects to Resources:
See secondary and cumulative impacts comments.

Coordinator Feedback: None

3 ETAT Review by Gary Donaldson, FL Department of Community Affairs (08/08/2006)

Land Use Effect: Moderate
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
The Department of Community Affairs (DCA) has reviewed the referenced project and, based on current information, this project (Alternatives 1 and 2) are not addressed within the local governments comprehensive plan. However, Alternative 4 is consistent with the Palm Beach County Future Transportation Map.

The Department is supportive of Alternative 3 as the preferred alignment because adverse environmental impacts to Grassy Waters Preserve and Pond Cypress Natural Area are minimized. Additionally, the proposed alignment is consistent with the recently approved Notice of Proposed Change (NOPC) for the Fox Property Development of Regional Impact (DRI). However, this alternative has not been identified in the local government comprehensive plan. Therefore, if Alternative 3 is selected as the preferred alignment, as per DCA preference, the project should not be advanced into the Department of Transportations Five Year Work Program until the comprehensive plan is amended to reflect the proposed roadway modification.

Staff will make a determination of the consistency of the proposed roadway with the respective comprehensive plan when the comprehensive plan is amended to include the selected roadway alternative on an adopted future transportation map and improvement five year schedule.

Comments on Effects to Resources:
see above

Coordinator Feedback: None

3 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Land Use Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Directly impacts 19 acres of wetlands.

Comments on Effects to Resources:
This alignment will also impact 12 acre-feet of floodplain encroachment as well as slightly decrease recreation/open space.

Additional Comments (optional):
None.

CLC Commitments and Recommendations:
This corridor is in compliance with adopted land use plans and compatibile with Local Growth Management Plans.
Coordinator Feedback: None

Mobility

Coordinator Summary

1 Summary Degree of Effect

Mobility Summary Degree of Effect: Enhanced
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that this alignment will enhance connectivity between communities, as well as travel and accessibility for pedestrians, cyclists, and Transportation Disadvantaged citizens. Therefore, the summary degree of effect assigned to Mobility for this alignment is enhanced.

ETAT Reviews for Mobility

1 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Mobility Effect: Enhanced
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Connectivity betweeen Royal Palm Beach and communities to the north would be enhanced.

Comments on Effects to Resources:
Pedestrian and bicycle travel would be enhanced with the building of this roadway.

Additional Comments (optional):
Transportation Disadvantaged citizens would have more accessibility between medical facilties located along Okeechobee Blvd and Northlake Blvd.

CLC Commitments and Recommendations:
It is recommended that bicycle/pedestrian paths be built along the corridor to enhance mobility for bicyclist and pedestrians and to ensure their safety.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration
- No review submitted from the Federal Transit Administration

Relocation

Coordinator Summary

3 Summary Degree of Effect

Relocation Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that there is strong public opposition to this alignment as the need for right-of-way will relocate 107 residential property owners. Based on these reasons, the summary degree of effect assigned to Relocation for this alignment is moderate.

ETAT Reviews for Relocation

3 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Relocation Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
This alignment will cause the relocation of 107 residential property owners.

Comments on Effects to Resources:
The need for up to 160 acres of right-of-way will create the need for residential relocation.

Additional Comments (optional):
None.

CLC Commitments and Recommendations:
Public workshops held in the community indicates overwhelming opposition to the development of this corridor.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Social

Coordinator Summary

3 Summary Degree of Effect

Social Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
No major social issues are associated with this alignment; however, this alignment is closest to residential areas and public opposition to this alignment has been expressed. As a result, the summary degree of effect assigned to Social for this alignment is determined to be moderate. FDOT will conduct a noise study during project development to assess (and then avoid or minimize) potential noise impacts to residences located within the vicinity of the project.

ETAT Reviews for Social

3 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Social Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The western alignment (Alternative 1) is closest to residential areas.

Comments on Effects to Resources:
A noise analysis will be needed to determine the level of noise impacts at the noise sensitive locations.

Coordinator Feedback: None

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Social Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
No impact is indicated by this alignment on underserved populations, minorities, or low income citizens.

Comments on Effects to Resources:
There does not appear to be a major impact on populations falling into minority or low income, and there has not been an issue with moving residents in the past. There may be an impact on traffic patterns through established neighborhoods in the Village of Royal Palm Beach.

Additional Comments (optional):
This alignment may enhance emergency services response time for fire, police and EMS.

CLC Commitments and Recommendations:
Public input has been obtained with some residents objecting to the alignment of roadway.
Coordinator Feedback: None

- No review submitted from the FL Department of Community Affairs
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency

ETAT Reviews: Secondary and Cumulative

Secondary and Cumulative Effects

Coordinator Summary

4 Summary Degree of Effect

Secondary and Cumulative Effects Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
Although this alignment will have lower impacts on natural resources than the other three alignments, the potential indirect and cumulative effects to the environment and community is determined to be substantial. Therefore, the summary degree of effect assigned to Secondary and Cumulative Impacts for this alignment is substantial. If selected, the final design for this alignment will avoid or minimize impacts to natural resources

and the community to the greatest extent practicable, and appropriate mitigation will be provided for unavoidable impacts.

ETAT Reviews for Secondary and Cumulative Effects

3 ETAT Review by Alisa Zarbo, US Army Corps of Engineers (08/22/2006)

Secondary and Cumulative Effects Effect: Moderate
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

At-Risk Resource: Wetlands

Comments on Effects:
Depending on the alternative, the secondary effects to the wetlands and aquatic habitat could be great.

Recommended Avoidance, Minimization, and Mitigation Measures:
The Corps must first agree on the preferred alternative for the allignment, then avoid and minimize wetland impacts, and finally mitigate. Early coordination on the preferred alternative is extremely important in this project so that the Corps can continue to process the application and demonstrate avoidance and minimization.

Recommended Actions to Improve At-Risk Resources:
Initial coordination with the Corps on the selected alternative is important.

Coordinator Feedback: None

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Secondary and Cumulative Effects Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

At-Risk Resource: Wetlands

Comments on Effects:
Each of the alternatives have varying amounts of secondary impacts on land use and cumulative impacts on wetlands/water and habitat resources.

The environmental document should assess these secondary impacts of the alternatives, as well as cumulative impacts to the areas wetland/water and habitat resources from all area development that is reasonably foreseeable to occur.

Recommended Avoidance, Minimization, and Mitigation Measures:
None found.

Recommended Actions to Improve At-Risk Resources:
None found.

At-Risk Resource: Wildlife and Habitat

Comments on Effects:
Each of the alternatives have varying amounts of secondary impacts on land use and cumulative impacts on wetlands/water and habitat resources.

The environmental document should assess these secondary impacts of the alternatives, as well as cumulative impacts to the areas wetland/water and habitat resources from all area development that is reasonably foreseeable to occur.

Recommended Avoidance, Minimization, and Mitigation Measures:
None found.

Recommended Actions to Improve At-Risk Resources:
None found.

At-Risk Resource: Land Use

Comments on Effects:
The Alternative 1 (western) alignment has substantial secondary land use impacts primarily on the residential areas.

Recommended Avoidance, Minimization, and Mitigation Measures:
None found.

Recommended Actions to Improve At-Risk Resources:
None found.

Coordinator Feedback: None

4 ETAT Review by Scott Sanders, FL Fish and Wildlife Conservation Commission (08/04/2006)

Secondary and Cumulative Effects Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

At-Risk Resource: Wildlife and Habitat

Comments on Effects:
Secondary and cumulative impacts would be substantial due to increased residential and commercial development on land along the highway due to improved access. The roadway extension will also result in increased roadkills for many species of mammals, amphibians and reptiles, and some wading bird species. The expanded roadway would create a more formidable barrier to wildlife movement, and also result in habitat fragmentation and isolation. Increased stormwater runoff from the expanded impervious roadway surface could degrade the water quality of existing wetlands along the ROW in the project area. Since one public land tract is immediately adjacent to the corridor, this action will potentially have moderate secondary impacts on public lands.

Recommended Avoidance, Minimization, and Mitigation Measures:
In order to reduce the impacts to fish and wildlife resources and important habitat, we continue to recommend that the existing road network be improved in order to resolve the current transportation need. If through further study, this proves not to be feasible, we recommend the selection of Corridor 1, which will have significantly lower impacts on natural resources.

Recommended Actions to Improve At-Risk Resources:
Avoidance, minimization, and mitigation measures, including compensatory replacement for both upland and wetlands habitat loss, should also be addressed. Land acquisition and restoration of appropriate tracts adjacent to existing public lands, or tracts placed under conservation easement located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas, would be biologically appropriate and supported by our agency. The PD&E Study should also include an investigation of the design, cost, location, and construction techniques for longer bridges over streams or sloughs, canals and their floodplains, and wetlands, which would improve hydrological and floodplain functioning, and minimize wetlands fill. These improved structures would also reduce roadkills and provide improved habitat connectivity for wildlife species such as whitetail deer, bobcat, river otter, and other upland, transitional, and aquatic species that use wetlands riparian systems within the project area.

Coordinator Feedback: None

Alternative #2

Alternative Description

From	SR 704 Okeechobee Blvd.
To	Northlake Blvd.
Type	New Alignment
Status	ETAT Review Complete
Total Length	7.592 mi.
Cost	$100,000,000.00
Modes	Roadway Bicycle Pedestrian

Segment Description(s)

Location and Length

Segment No.	Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
Segment 2	SR 7	SR 704 Okeechobee Blvd.	Northlake Blvd.	7.592	Digitized		

Jurisdiction and Class

Segment No.	Jurisdiction	Urban Service Area	Functional Class
Segment 2		In	URBAN: Minor Arterial

Base Conditions

Segment No.	Year	AADT	Lanes	Config
Segment 2				

Interim Plan

Segment No.	Year	AADT	Lanes	Config
Segment 2				

Needs Plan

Segment No.	Year	AADT	Lanes	Config
Segment 2	2030	37000	6	Lanes Divided

Cost Feasible Plan

Segment No.	Year	AADT	Lanes	Config
Segment 2	2030	37000	6	Lanes Divided

Funding Sources

Segment No.	FEDERAL	FDOT	Unknown
Segment 2	X	X	

Project Effects Overview

Issue	Degree of Effect		Organization	Date Reviewed
Natural				
Air Quality	0	None	US Environmental Protection Agency	8/12/2006
Contaminated Sites	0	None	US Environmental Protection Agency	8/12/2006
Special Designations	5	Dispute Resolution	US Fish and Wildlife Service	7/05/2006
Water Quality and Quantity	4	Substantial	FL Department of Environmental Protection	8/11/2006
Wetlands	4	Substantial	US Army Corps of Engineers	8/22/2006
Wetlands	0	None	National Marine Fisheries Service	8/14/2006
Wetlands	4	Substantial	FL Department of Environmental Protection	8/11/2006
Wetlands	5	Dispute Resolution	US Fish and Wildlife Service	7/05/2006
Wildlife and Habitat	4	Substantial	FL Fish and Wildlife Conservation Commission	8/04/2006
Wildlife and Habitat	5	Dispute Resolution	US Fish and Wildlife Service	7/05/2006
Cultural				
Historic and Archaeological Sites	0	None	Miccosukee Tribe	7/25/2006
Recreation Areas	4	Substantial	FL Department of Environmental Protection	8/11/2006
Section 4(f) Potential	4	Substantial	Federal Highway Administration	8/10/2006
Community				
Aesthetics	2	Minimal	Palm Beach MPO	8/04/2006
Economic	2	Minimal	Palm Beach MPO	8/04/2006
Land Use	3	Moderate	FL Department of Community Affairs	8/08/2006
Land Use	3	Moderate	Palm Beach MPO	8/04/2006
Mobility	1	Enhanced	Palm Beach MPO	8/04/2006
Relocation	3	Moderate	Palm Beach MPO	8/04/2006
Social	2	Minimal	Palm Beach MPO	8/04/2006
Secondary and Cumulative				
Secondary and Cumulative Effects	3	Moderate	US Army Corps of Engineers	8/22/2006
Secondary and Cumulative Effects	4	Substantial	FL Fish and Wildlife Conservation Commission	8/04/2006

ETAT Reviews: Natural

Air Quality

Coordinator Summary

0 Summary Degree of Effect

Air Quality Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The proposed alternative is consistent with Air Quality Conformity as stated through the Project Description. USEPA did not identify any Air Quality issues for this alternative; therefore, the summary degree of effect assigned to Air Quality is none.

ETAT Reviews for Air Quality

0 ETAT Review by Maher Budeir, US Environmental Protection Agency (08/12/2006)

Air Quality Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
None found.

Comments on Effects to Resources:
Based on data avaialable, there is no significant impact on air quality.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the Federal Highway Administration

Coastal and Marine

Coordinator Summary

0 Summary Degree of Effect

Coastal and Marine Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative is not located in a coastal or marine area nor is it in the vicinity of any coastal or marine resources. For these reasons, the summary degree effect assigned to Coastal and Marine is none.

ETAT Reviews for Coastal and Marine

No reviews found for the Coastal and Marine Issue.
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the National Marine Fisheries Service
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Contaminated Sites

Coordinator Summary

0 Summary Degree of Effect

Contaminated Sites Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
According to the EST GIS Analysis, no geocoded petroleum tank sites are located within 500 feet of this alternative. In addition, no designated Brownfield sites, geocoded dry cleaners, solid waste facilities, Superfund sites, or Toxic Release Inventory sites are reported within one-half mile of this alternative. The summary degree of effect assigned to Contaminated Sites is none.

ETAT Reviews for Contaminated Sites

0 ETAT Review by Maher Budeir, US Environmental Protection Agency (08/12/2006)

Contaminated Sites Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Soiol and groundwater

Comments on Effects to Resources:
Based on data avaialble on the screening tool, no contminated sites were identified on this corridor

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Farmlands

Coordinator Summary

0 Summary Degree of Effect

Farmlands Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative will not impact any prime farmlands. For this reason, the summary degree effect assigned to Farmlands is none.

ETAT Reviews for Farmlands

No reviews found for the Farmlands Issue.
- No review submitted from the Federal Highway Administration
- No review submitted from the Natural Resources Conservation Service

Floodplains

Coordinator Summary

3 Summary Degree of Effect

Floodplains Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The EST GIS Analysis shows the following acreage of a FEMA FIRM floodzone within the project's 500-foot buffer. (A 500-foot buffer was used due to the proposed new 6-lane divided alignment):
Zone A (113 acres): an area inundated by 100-year flooding for which no base elevations have been determined. Zone AO (53 acres): an area inundated by 100-year flooding for which average depths have been determined. Zone X500 (772 acres): an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than one square mile.
Based on these results, 100 percent of the 500-foot buffer for this alternative occurs within a designated floodzone. A Location Hydraulics Report will be prepared for the project and the project will be designed to minimize floodplain impacts and compensate for potential floodplain encroachments. For these reasons, the summary degree of effect assigned to Floodplains is moderate.

ETAT Reviews for Floodplains

No reviews found for the Floodplains Issue.
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Infrastructure

Coordinator Summary

0 Summary Degree of Effect

Infrastructure Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative will not have any major impacts to infrastructure; therefore, the summary degree effect assigned to Infrastructure is none.

ETAT Reviews for Infrastructure

No reviews found for the Infrastructure Issue.
- No review submitted from the Federal Highway Administration

Navigation

Coordinator Summary

0 Summary Degree of Effect

Navigation Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The EST GIS Analysis did not report the presence of any navigable waterways within one-half mile of this alternative. This alternative crosses the M Canal; however, this canal has not been identified as a navigable waterway by the Army Corps of Engineers or U.S. Coast Guard. For these reasons, the summary degree of effect assigned to Navigation is none.

ETAT Reviews for Navigation

No reviews found for the Navigation Issue.
- No review submitted from the US Army Corps of Engineers
- No review submitted from the Federal Highway Administration
- No review submitted from the US Coast Guard

Special Designations

Coordinator Summary

5 Summary Degree of Effect

Special Designations Summary Degree of Effect: Dispute Resolution
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
According to the EST GIS Analysis, Alternative 2 is immediately adjacent to both the Pond Cypress Natural Area and Grassy Waters Preserve for most of its length. In addition, the Loxahatchee Slough Natural Area is located within one-quarter mile of the northern terminus of Alternative 2. For these reasons, and as a result of the Dispute Resolution process, Alternative 2 has been dropped as an alternative.

ETAT Reviews for Special Designations

5 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/05/2006)

Special Designations Effect: Dispute Resolution
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information:
"Dispute Support" options were not available at the time of the review.

Identified Resources and Level of Importance:
Public Conservation Lands

Comments on Effects to Resources:
Corridor 2 begins at the northwest corner of the Baywinds development and the intersection of the proposed Roebuck Road and proceeds northward along the Florida Department of Transportation (FDOT) right-of-way for about 2.5 miles. The corridor then heads diagonally to the northwest through the middle of Section 1 to approximately the intersection of 60th Street and the M-Canal. From the M-Canal the corridor proceeds north approximately 3 miles to North Lake Avenue. The project description indicates that Corridor 2 is proposed to be discarded. The Service notes that Corridor 2 would result in significant adverse impacts to fish and wildlife habitat located in the Pond Cypress Natural Area and Section 1. We further note that Section 1 was offered as mitigation by Palm Beach County for impacts to wetlands resulting the Persimmon Boulevard Extension. We do not believe that it is appropriate to construct a new roadway through a wetlands mitigation area. Accordingly, we cannot support the use of Corridor 2 for the project and strongly urge that it be eliminated from further consideration.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Water Quality and Quantity

Coordinator Summary

4 Summary Degree of Effect

Water Quality and Quantity Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Because of the concerns stated by FDEP, notably the presence of the City of West Palm Beach Water Catchment Area immediately adjacent to the project, the summary degree of effect assigned to Water Quality and Quantity is substantial.

ETAT Reviews for Water Quality and Quantity

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Water Quality and Quantity Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Stormwater runoff from the road surface may alter adjacent wetlands and surface waters through increased pollutant loading. 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. 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 pre-development hydroperiod and water quality, as well as to protect the natural functions of adjacent wetlands.

Comments on Effects to Resources:
We recommend that the 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. Increased stormwater runoff carrying oils, greases, metals, sediment, and other pollutants from the increased impervious surface would be of significant concern.

Additional Comments (optional):
The Water Catchment Area for the City of West Palm Beach is immediately adjacent to the project. All activities must be designed to prevent stormwater pollutant contamination of the City's water supply. DEP recommends that the FDOT work to include the City on all decisions affecting this critical area.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Wetlands

Coordinator Summary

5 Summary Degree of Effect

Wetlands Summary Degree of Effect: Dispute Resolution
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The following acreage of wetlands and open water habitats are reported by the ETDM GIS Analysis within the 500-foot buffer for this alternative:
National Wetlands Inventory database - 419.2 acres; Wetlands 2000 database - 346.9 acres; 2003 FFWCC Habitat and Landcover Grid database - 443.4 acres.
The proposed project is a 6-lane divided highway that would occupy much of the 500-foot buffer. Because of the concerns expressed by the agencies, the large area of wetlands occurring within the 500-foot buffer, and as a result of the Dispute Resolution process, Alternative 2 has been dropped as an alternative.

ETAT Reviews for Wetlands

4 ETAT Review by Alisa Zarbo, US Army Corps of Engineers (08/22/2006)

Wetlands Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Wetlands: This area was evaluated and considered in the permitting of the Acreage Reliever Road and has an extremely high level of importance to the Corps. Wildlife corridors were incorporated into the alignment of the Acreage Reliever Road. The Corps would try to keep the same continuity of the corridors when permitting this extension.

Comments on Effects to Resources:
If the roadway was constructed through corridor 4, it would fragment an extremely sensitive greenway and wildlife corridor that exists between the PCNA, the WCA and Section 1. The alignment would isolate the PCNA and the WCA to the extent that reptiles, amphibians and small and large mammals could not easily access the adjacent natural areas. Large natural areas are necessary for certain wildlife to carry out life functions such as feeding and nesting. Smaller isolated areas may accommodate only a few individuals with modest home range requirements. Small mammals and other forest dwelling wildlife have shown an aversion to using areas with less vegetative cover. This would be the case with a four-lane roadway that has a shoulder and median. Although some animals have an aversion to roadways, many attempt to cross and result in collisions that impact both wildlife and humans. During 1990, 431 vehicle collisions with animals (wild and domestic) were serious enough to be reported to the Florida Department of Highway Safety and Motor Vehicles. These accidents resulted in 4 human fatalities and 380 injuries. The average estimated property damage for each accident was $3,395. Corridor 4 could result in extensions, as shown in the Conceptual Analysis Matrix, to access the Acreage. These extensions further fragment the ecosystem and isolate Section 1. Placing the roadway down the Rangeline would put it adjacent to the WCA. The WCA is a Class I potable water supply for the City of West Palm Beach. The roadway run-off would pose serious threats to the Citys drinking water supply. The alternative of using a bridge along the Rangeline would not be a feasible alternative due to it being adjacent to the WCA.

Up to 60th Street, Corridor 3 has been approved by the Corps. From 60th Street the roadway is shown going east along the M-Canal. This portion and the following north south portion of the roadway that ends

at Northlake Boulevard would isolate the mitigation area for the Ibis Golf and Country Club. Requirements for the portion of the roadway adjacent to the mitigation area would include fencing on both sides of the roadway, culverts to maintain adequate hydrology, slower speed limits, wildlife crossing signs and culverts for wildlife crossings or bridges. The wildlife crossings should be placed above the seasonal high water elevation of wetlands but adjacent to wetlands. Wildlife crossings should be placed just above the ecotone of the wetland. The median should also be devoid of vegetation that would give the illusion of a narrow roadway to wildlife. Wildlife is more adverse to crossing wider roadways. Median landscaping plants should not provide a food source for wildlife. This would entice wildlife to cross the roadway and go into the median for food resulting in road kill. This area is within the Loxahatchee River Watershed and to a limited extent the Lake Worth Lagoon.

Additional Comments (optional):
Mitigation efforts should be concentrated in the same watershed. Mitigation options could include widening of the M-Canal and planting a flow through marsh to improve water quality. Mitigation in the WCA may be appropriate for this project.

Coordinator Feedback: None

0 ETAT Review by Madelyn T Martinez, National Marine Fisheries Service (08/14/2006)

Wetlands Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
NONE

Comments on Effects to Resources:
NONE

Additional Comments (optional):
Based on the project location and information provided on the ETDM website, NOAAs National Marine Fisheries Service (NOAA Fisheries) concludes the proposed work would not directly impact areas that support NOAA trust resources. We have no comments or recommendations to provide pursuant to the essential fish habitat (EFH) requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) P.L. 104-297. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Coordinator Feedback: None

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Wetlands Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
The National Wetlands Inventory GIS report indicates that there are 419.22 acres of palustrine and 1.72 acres of riverine wetlands within the 500-ft. project buffer zone. The Wetlands 2000 report indicates that there are 371.70, 24.75, 19.54, 1,947.87, 204.38, 406.89, 25.98, 868.61, 17.36 and 488.65 acres of cypress, cypress domes, emergent aquatic vegetation, freshwater marsh, mixed schrubs, mixed wetland hardwoods, wet melaleuca, wet pinelands, wet prairies and mixed wetland forests, respectively, within the 5,280-ft. buffer of the project area.

Comments on Effects to Resources:
The project will require an environmental resource permit (ERP) from the South Florida Water Management District. The ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of the roadway extension project to the greatest extent practicable:
- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging 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. All stormwater treatment should be located in upland sites.
- 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 road improvement projects in the vicinity of the subject project should also be addressed.

Additional Comments (optional):
DEP ranks the Corridor 2 Alternative as # 4. Staff has expressed concerns regarding the extreme fragmentation of wildlife habitat by the proposed roadway. The Department strongly recommends bridging ALL wetland crossings to minimize impacts to wetland connectivity/hydroperiod and wildlife corridor functions. Additionally, all stormwater should be conveyed to treatment sites located in upland areas.

Coordinator Feedback: None

5 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/05/2006)

Wetlands Effect: Dispute Resolution
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information:
"Dispute Support" options were not available at the time of the review.

Identified Resources and Level of Importance:
wetlands

Comments on Effects to Resources:
Corridor 2 begins at the northwest corner of the Baywinds development and the intersection of the proposed Roebuck Road and proceeds northward along the Florida Department of Transportation (FDOT)

right-of-way for about 2.5 miles. The corridor then heads diagonally to the northwest through the middle of Section 1 to approximately the intersection of 60th Street and the M-Canal. From the M-Canal the corridor proceeds north approximately 3 miles to North Lake Avenue. The project description indicates that Corridor 2 is proposed to be discarded. The Service notes that Corridor 2 would result in significant adverse impacts to fish and wildlife habitat located in the Pond Cypress Natural Area and Section 1. We further note that Section 1 was offered as mitigation by Palm Beach County for impacts to wetlands resulting the Persimmon Boulevard Extension. We do not believe that it is appropriate to construct a new roadway through a wetlands mitigation area. Accordingly, we cannot support the use of Corridor 2 for the project and strongly urge that it be eliminated from further consideration.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Wildlife and Habitat

Coordinator Summary

5 Summary Degree of Effect

Wildlife and Habitat Summary Degree of Effect: Dispute Resolution
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Both the FFWCC and USFWS indicated that several state and federally listed species may occur within the project area. Although no listed species occurrences are reported within the 500-foot buffer for this alternative, there is a high likelihood of occurrence of listed wading birds and wood storks because of the large area of wetlands present along this alignment. This alternative is also located within publicly owned conservation lands. In addition, the 500-foot buffer for this alternative contains pineland that requires prescribed burning for habitat management. For these reasons, and as a result of the Dispute Resolution process, Alternative 2 has been dropped as an alternative.

ETAT Reviews for Wildlife and Habitat

4 ETAT Review by Scott Sanders, FL Fish and Wildlife Conservation Commission (08/04/2006)

Wildlife and Habitat Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

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 #8127 in Palm Beach County, and provides the following comments related to potential impacts to fish and wildlife resources for this Programming Phase project.

The proposed project involves the evaluation of the need to extend SR 7 from SR 704 (Okeechobee Boulevard) to Northlake Boulevard in Palm Beach County. Four corridors and a No-Build option have been identified for the project.

Corridor 2 would begin at the intersection of Okeechobee Boulevard and SR 7, and proceed north within FDOTs existing Right-of-way (ROW). The alignment first turns to the northwest, and then north, adjacent to and parallel to 110th Avenue. The alignment crosses the M canal, and continues north on the west side of the Ibis Golf and Country Club, and terminates at Northlake Boulevard.

This project was reviewed under the Advanced Notification process through the Florida State Clearinghouse at the Florida Department of Environmental Protection under SAI FL200506231187C (letter dated August 10, 2005, attached), and SAI# 9811160726C (letter dated December 2, 1998, attached). These FWC letters provide a detailed overview of project resources, including listed wildlife and plant species, potential impacts, and a course of action to reduce these impacts. We have reviewed these letters, and our previous comments remain applicable to the currently proposed project.

A GIS analysis of fish and wildlife and habitat resources was conducted using the Environmental Screening Tool (EST), and those results indicate that very similar upland and wetland habitat types are present along all four corridors. Uplands within 500 feet of the proposed Corridor 2 include mixed pine-hardwood forest, pinelands, upland hardwood hammock, and dry prairie. Wetlands along this corridor include cypress swamp, cypress/pine/cabbage palm, freshwater marsh and wet prairie, hardwood swamp, mixed wetlands forests, open water, sawgrass marsh, and shrub swamp. Approximately 36.0 percent of the land within 500 feet of the corridor is in high and low impact urban land uses.

An overall accounting of the species listed by FWC which may occur in and adjacent to the project area include the eastern indigo snake (Threatened [T]), Florida pine snake Species of Special Concern [SSC]), gopher tortoise (SSC), Shermans fox squirrel (SSC), Florida mouse (SSC), little blue heron (SSC), tricolored heron (SSC), white ibis (SSC), wood stork (E), snail kite (E), bald eagle (T), crested caracara (T), southeastern kestrel (T), limpkin (SSC), Florida sandhill crane (T), Florida burrowing owl (SSC), and red-cockaded woodpecker (SSC). The presence or absence of some of these species within the project area is highly dependent on habitat type, plant successional stage, habitat quality, and site drainage conditions.

Habitat quality within 500 feet of the Right-of-way (ROW) for Corridor 2 was evaluated using natural resource data layers in the EST. FWCs Biodiversity Hotspots data layer shows that 33.0 percent of the area is capable of supporting three to four focal species. According to FWCs Integrated Wildlife Habitat Ranking System map, a total of 45.0 percent of this zone along the corridor has been assigned a score of from 6 to 8 (Scale 1 = Low, 10 = High), which ranks as good to excellent quality. According to FWCs Priority Wetlands Map for wetlands dependent listed species, approximately 47.8 percent of the habitat along the proposed roadway zone is ranked as capable of supporting 1 to 3 focal species in uplands, and 4 to 6 focal species in wetlands. Within this zone, public and managed lands include the Grassy Waters Preserve, and the Pond Cypress Natural Area. Strategic Habitat Conservation Areas for the limpkin and wading birds have also been designated within approximately 32.2 percent of this zone along Corridor 2. Corridor 2 has the second highest acreage of wetlands of the four corridors.

Comments on Effects to Resources:
Direct impacts to fish and wildlife from this proposed project corridor would be substantial due to the significant amount of quality wetlands and uplands found along the corridor. Impacts would include habitat

loss from roadway and Drainage Retention Area (DRAs) construction, which could adversely affect a number of listed wildlife species. Due to the close proximity of two public land tracts, this corridor would potentially have a high direct impact on public lands.

Additional Comments (optional):
In order to reduce the impacts to fish and wildlife resources and important habitat, we continue to recommend that the existing road network be improved in order to resolve the current transportation need. If through further study, this proves not to be feasible, we recommend the selection of Corridor 1, which would have less impact on natural resources.

We recommend the following measures be considered during the Project Development and Environment (PD&E) Study to avoid, minimize, and mitigate project impacts to listed species and habitat:

1. A vegetative cover map and accounting by acreage for each plant community type should be made for the affected project area. Compensatory mitigation for all upland and wetlands habitat loss should be required. If wetlands are mitigated under the provisions of Chapter 373.4137 F.S., the proposed mitigation sites should be located within the immediate or same regional area, functionally equivalent, equal to or of higher functional value, and as or more productive as the wetlands impacted by the project.

2. Surveys for listed species should be performed within and adjacent to the ROW and proposed sites for DRAs during the PD&E Study. The methodology for these surveys should be coordinated with FWC, and follow appropriate survey techniques or guidelines to determine presence, absence or probability of occurrence of various species, and to assess habitat quality. These study methods should be designed considering the potential listed species discussed above.

3. Based on the survey results, a plan should also be developed to address direct, secondary, and cumulative impacts of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures, including compensatory replacement for both upland and wetlands habitat loss, should also be addressed. Land acquisition and restoration of appropriate tracts adjacent to existing public lands, or tracts placed under conservation easement located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas, would be biologically appropriate and supported by our agency.

4. The PD&E Study should also include an investigation of the design, cost, location, and construction techniques for longer bridges over sloughs, canals and their floodplains, and wetlands, which would improve hydrological and floodplain functioning, and minimize wetlands fill. These improved structures would also reduce roadkills and provide improved habitat connectivity for wildlife species such as whitetail deer, bobcat, river otter, and other upland, transitional, and aquatic species that use wetlands riparian systems within the project area.

5. Habitat impacts in both uplands and wetlands may be avoided where possible by interchangeably designing the road expansion along those areas where less habitat resources occur. In addition, using the median and roadside swales for treating roadside runoff would reduce the need for some off-site DRAs, and assist in reducing habitat loss.

6. Construction equipment staging areas; storage of oils, greases, and fuel; fill and roadbed material; and vehicle maintenance activities should be sited in previously disturbed areas far removed from streams, wetlands, or surface water bodies. Staging areas, along with borrow areas, should also be surveyed for listed species.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Steve Lau in our Vero Beach Office at (772) 778-5094 for further coordination on this project.

Coordinator Feedback: None

5 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/05/2006)

Wildlife and Habitat Effect: Dispute Resolution
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:
"Dispute Support" options were not available at the time of the review.

Identified Resources and Level of Importance:
Federally Listed Species and Fish and Wildlife Habitat

Comments on Effects to Resources:
Service Comments, 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.

The Service believes that the following federally listed species have the potential to occur in or near the project site: wood stork, Everglade snail kite (Rostrhamus sociabilis plumbeus) and eastern indigo snake (Drymarchon corais couperi), as well as the federally protected plants listed at the link for Palm Beach County at our web site (http://www.fws.gov /verobeach/ Species_lists/ PDF-lists/Palm Beach County.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 FDOTs Project Development and Environment process.

Service Comments, Fish and Wildlife Resources, Wetlands, and Special Designations:

Corridor 2 begins at the northwest corner of the Baywinds development and the intersection of the proposed Roebuck Road and proceeds northward along the Florida Department of Transportation (FDOT) right-of-way for about 2.5 miles. The corridor then heads diagonally to the northwest through the middle of Section 1 to approximately the intersection of 60th Street and the M-Canal. From the M-Canal the corridor proceeds north approximately 3 miles to North Lake Avenue. The project description indicates that Corridor 2 is proposed to be discarded. The Service notes that Corridor 2 would result in significant

adverse impacts to fish and wildlife habitat located in the Pond Cypress Natural Area and Section 1. We further note that Section 1 was offered as mitigation by Palm Beach County for impacts to wetlands resulting the Persimmon Boulevard Extension. We do not believe that it is appropriate to construct a new roadway through a wetlands mitigation area. Accordingly, we cannot support the use of Corridor 2 for the project and strongly urge that it be eliminated from further consideration.

Coordinator Feedback: None

- No review submitted from the FL Department of Agriculture and Consumer Services
- No review submitted from the Federal Highway Administration
- No review submitted from the US Forest Service

ETAT Reviews: Cultural

Historic and Archaeological Sites

Coordinator Summary

0 Summary Degree of Effect

Historic and Archaeological Sites Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The 2000 Cultural Resource Assessment Survey (DHR Survey #6173), the GIS analysis, and comments from FDOS and the Miccosukee Tribe of Indians of Florida indicate that this alignment will have no effect on any archaeological or historic resources.

ETAT Reviews for Historic and Archaeological Sites

0 ETAT Review by Steve Terry, Miccosukee Tribe (07/25/2006)

Historic and Archaeological Sites Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
None found.

Comments on Effects to Resources:
None found.

Coordinator Feedback: None

- No review submitted from the FL Department of State
- No review submitted from the Federal Highway Administration
- No review submitted from the Seminole Tribe

Recreation Areas

Coordinator Summary

4 Summary Degree of Effect

Recreation Areas Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
The GIS Analysis and comments from FDEP indicate that three designated public conservation lands are located within the vicinity of this alignment. As indicated by the Florida Natural Areas Inventory, these lands contain significant natural communities and numerous element occurrences of listed species. These lands are also important in terms of natural function such as flood control, filtering storm water runoff, aquifer recharge, etc. The potential impact of this alignment to these lands is determined to be substantial as it will cause wildlife habitat fragmentation.

ETAT Reviews for Recreation Areas

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Recreation Areas Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The following public conservation lands are located in the vicinity of this project: the Grassy Waters Preserve, Loxahatchee Slough Natural Area and Pond Cypress Natural Area.

Comments on Effects to Resources:
These lands contain significant natural communities and numerous element occurrences of listed species, as indicated by the Florida Natural Areas Inventory. The Department is interested in preserving the area's natural communities, wildlife corridor functions, natural flood control, stormwater runoff filtering capabilities, aquifer recharge potential, contributions to regional spring complexes, and recreational trail opportunities. Therefore, future environmental documentation should include an evaluation of the primary, secondary, and cumulative impacts of the proposed roadway widening construction on the above public lands and any proposed acquisition sites.

Additional Comments (optional):
Staff has expressed concerns regarding the extreme fragmentation of wildlife habitat by the proposed roadway. The Department strongly recommends bridging ALL wetland crossings to minimize impacts to wetland connectivity/hydroperiod and wildlife corridor functions.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District
- No review submitted from the National Park Service

Section 4(f) Potential

Coordinator Summary

4 Summary Degree of Effect

Section 4(f) Potential Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
The GIS Analysis and comments from FHWA indicate that this alignment will cross conservation land and that a Determination of Applicability will be required. Section 4(f) involvement could also be anticipated. For these reasons, the summary degree of effect for this alignment is determined to be substantial.

ETAT Reviews for Section 4(f) Potential

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Section 4(f) Potential Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Pond Cypress Natural Area and Grassy Waters Preserve.

Comments on Effects to Resources:
The EST indicates that the alignment crosses Pond Cypress Natural Area within a mitigation area. The alignment is also adjacent tot the Grassy Waters Preserve. Section 4(f) involvement could be anticipated and a determination of applicability is required.

Coordinator Feedback: None

ETAT Reviews: Community

Aesthetics

Coordinator Summary

2 Summary Degree of Effect

Aesthetics Summary Degree of Effect: Minimal
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
Comments from the Palm Beach County MPO indicate that this alignment is anticipated to have impacts to the natural environment; however, it will have a slightly lower impact on noise sensitive receivers in the project area. The summary degree of effect assigned to Aesthetics for this alignment is minimal.

ETAT Reviews for Aesthetics

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Aesthetics Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
There would be approximately 360 noise sensitive receivers. The alignment would directly affect 81 acres of wetlands, 79 acre-feet of floodplain encroachment.

Comments on Effects to Resources:
This alignment would bisect a PBC mitigation site and divide the natural area created by the Pond Cypress Natural Area and the West Palm Beach Water Catchment Area.

Additional Comments (optional):
None.

CLC Commitments and Recommendations:
A buffer created by landscaping would aleviate some of the noise to residents.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Economic

Coordinator Summary

2 Summary Degree of Effect

Economic Summary Degree of Effect: Minimal
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that there are no businesses located along this alignment that would be negatively impacted. Therefore, the summary degree of effect assigned to Economics for this alignment is minimal.

ETAT Reviews for Economic

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Economic Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
There are no businesses located along this corridor alignment.

Comments on Effects to Resources:
None

Additional Comments (optional):
None

CLC Commitments and Recommendations:
An opportunity for local residents to have easier access to employment sites located to the north and south of the living communities may be increased
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Land Use

Coordinator Summary

3 Summary Degree of Effect

Land Use Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
Comments from the agencies indicate that this alignment will directly impact 81 acres of wetlands, 79 acre-feet of floodplain, and recreation/open space of the community. Residential areas within the vicinity of this alignment will also be negatively impacted. In addition, this alignment is not addressed within the county's comprehensive plan. Based on these reasons, the summary degree of effect assigned to Land Use for this alignment is moderate.

ETAT Reviews for Land Use

3 ETAT Review by Gary Donaldson, FL Department of Community Affairs (08/08/2006)

Land Use Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The Department of Community Affairs (DCA) has reviewed the referenced project and, based on current information, this project (Alternatives 1 and 2) are not addressed within the local governments comprehensive plan. However, Alternative 4 is consistent with the Palm Beach County Future Transportation Map.

The Department is supportive of Alternative 3 as the preferred alignment because adverse environmental impacts to Grassy Waters Preserve and Pond Cypress Natural Area are minimized. Additionally, the proposed alignment is consistent with the recently approved Notice of Proposed Change (NOPC) for the Fox Property Development of Regional Impact (DRI). However, this alternative has not been identified in the local government comprehensive plan. Therefore, if Alternative 3 is selected as the preferred alignment, as per DCA preference, the project should not be advanced into the Department of Transportations Five Year Work Program until the comprehensive plan is amended to reflect the proposed roadway modification.

Staff will make a determination of the consistency of the proposed roadway with the respective comprehensive plan when the comprehensive plan is amended to include the selected roadway alternative on an adopted future transportation map and improvement five year schedule.

Comments on Effects to Resources:
see above

Coordinator Feedback: None

3 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Land Use Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Corridor Alternative 2 would directly impact 81 acres of wetlands, 79 acre-feet of floodplain encroachment and require relocation of 107 residential properties.

Comments on Effects to Resources:
The alignment will cause a decrease in recreation/open space use and directly impact wetlands.

Additional Comments (optional):
Additional 107 acres of right-of-way needed for alignment.

CLC Commitments and Recommendations:
Public Information Workshops indicate opposition of residents to this alignment due to negative human and environmental impacts.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Mobility

Coordinator Summary

1 Summary Degree of Effect

Mobility Summary Degree of Effect: Enhanced
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that this alignment will enhance connectivity between communities, as well as travel and accessibility for pedestrians, cyclists, and Transportation Disadvantaged citizens. Therefore, the summary degree of effect assigned to Mobility for this alignment is enhanced.

ETAT Reviews for Mobility

1 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Mobility Effect: Enhanced
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Connectivity between Royal Palm Beach and communities to the north may be enhanced.

Comments on Effects to Resources:
This alignment would create a connection between communities to the north and south of existing communities.

Additional Comments (optional):
Pedestrian/bicycle traffic would be enhanced. Citizens from the Transportation Disadvantaged communities would have easier access to medical facilties located along Okeechobee and Northlake Boulevards.

CLC Commitments and Recommendations:
Bicycle and pedestrian paths should be included along the roadway for safety and accessibility to communities located to the north and south.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration
- No review submitted from the Federal Transit Administration

Relocation

Coordinator Summary

3 Summary Degree of Effect

Relocation Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that there is strong public opposition to this alignment as the need for right-of-way, like Alt. #1, will relocate 107 residential property owners. Based on these reasons, the summary degree of effect assigned to Relocation for this alignment is moderate.

ETAT Reviews for Relocation

3 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Relocation Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Approximatley 107 residential properties would need to be relocated for right-of-way purposes.

Comments on Effects to Resources:
Relocation of residents may be cost prohibitative.

Additional Comments (optional):
None.

CLC Commitments and Recommendations:
Public Workshops reveal a great deal of opposition to this alignment by local residents.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Social

Coordinator Summary

3 Summary Degree of Effect

Social Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
No major social issues are associated with this alignment; however, this alignment, like Alt. #1, is close to residential areas and public opposition to this alignment has been expressed. The summary degree of effect assigned to Social for this alignment is determined to be moderate. FDOT will conduct a noise study during project development to assess (and then avoid or minimize) potential noise impacts to residences located within the vicinity of the project.

ETAT Reviews for Social

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Social Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The project will not displace any underserved, low income or minority populations.

Comments on Effects to Resources:
This alignment may impact traffic patterns through established neighborhoods in the Village of Royal Palm

Beach.

Additional Comments (optional):
Emergency Response by fire, police and EMS services may be enhanced with the building of this roadway.

CLC Commitments and Recommendations:
Public opposition to the roadway by those living in the surrounding communities has been obtained through public workshops.
Coordinator Feedback: None

- No review submitted from the FL Department of Community Affairs
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration

ETAT Reviews: Secondary and Cumulative

Secondary and Cumulative Effects

Coordinator Summary

4 Summary Degree of Effect

Secondary and Cumulative Effects Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
Comments from FFWCC and FHWA indicate that this alignment is anticipated to have significant indirect and cumulative effects on the environment and community. Therefore, the summary degree of effect assigned to Secondary and Cumulative Impacts for this alignment is substantial.

ETAT Reviews for Secondary and Cumulative Effects

3 ETAT Review by Alisa Zarbo, US Army Corps of Engineers (08/22/2006)

Secondary and Cumulative Effects Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

At-Risk Resource: Wetlands

Comments on Effects:
Depending on the alternative, the secondary effects to the wetlands and aquatic habitat could be great.

The Corps assesses secondary effects by evaluating the change in wetland function and value both before and after the road is constructed.

Recommended Avoidance, Minimization, and Mitigation Measures:
The Corps must first agree on the preferred alternative for the alignment, then avoid and minimize wetland impacts, and finally mitigate. Early coordination on the preferred alternative is extremely important in this project so that the Corps can continue to process the application and demonstrate avoidance and minimization.

Recommended Actions to Improve At-Risk Resources:
Initial coordination with the Corps on the selected alternative is important.

Coordinator Feedback: None

4 ETAT Review by Scott Sanders, FL Fish and Wildlife Conservation Commission (08/04/2006)

Secondary and Cumulative Effects Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

At-Risk Resource: Wildlife and Habitat

Comments on Effects:
Secondary and cumulative impacts would be substantial due to increased residential and commercial development along the highway due to improved access. The roadway extension will also result in increased roadkills for many species of mammals, amphibians and reptiles, and some wading bird species. The expanded roadway will create a more formidable barrier to wildlife movement, and also result in habitat fragmentation and isolation. Increased stormwater runoff from the expanded impervious roadway surface could degrade the water quality of existing wetlands and streams along the ROW in the project area. Due to the close proximity of two public land tracts, this corridor will potentially have high secondary impacts on public lands.

Recommended Avoidance, Minimization, and Mitigation Measures:
In order to reduce the impacts to fish and wildlife resources and important habitat, we continue to recommend that the existing road network be improved in order to resolve the current transportation need. If through further study, this proves not to be feasible, we recommend the selection of Corridor 1, which will have less impact on natural resources.

Recommended Actions to Improve At-Risk Resources:
Avoidance, minimization, and mitigation measures, including compensatory replacement for both upland and wetlands habitat loss, should also be addressed. Land acquisition and restoration of appropriate tracts adjacent to existing public lands, or tracts placed under conservation easement located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas, would be biologically appropriate and supported by our agency.

The PD&E Study should also include an investigation of the design, cost, location, and construction techniques for longer bridges over sloughs, canals and their floodplains, and wetlands, which would improve hydrological and floodplain functioning, and minimize wetlands fill. These improved structures would also reduce roadkills and provide improved habitat connectivity for wildlife species such as whitetail

deer, bobcat, river otter, and other upland, transitional, and aquatic species that use wetlands riparian systems within the project area.

Coordinator Feedback: None

Alternative #3

Alternative Description

From	Persimmon Blvd.
To	Northlake Blvd.
Type	New Alignment
Status	ETAT Review Complete
Total Length	5.02 mi.
Cost	$70,000,000.00
Modes	Roadway Bicycle Pedestrian

Segment Description(s)

Location and Length

Segment No.	Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
Segment 3	SR 7	Persimmon Blvd.	Northlake Blvd.	5.02	Digitized		

Jurisdiction and Class

Segment No.	Jurisdiction	Urban Service Area	Functional Class
Segment 3	FDOT	In	URBAN: Minor Arterial

Base Conditions

Segment No.	Year	AADT	Lanes	Config
Segment 3				

Interim Plan

Segment No.	Year	AADT	Lanes	Config
Segment 3				

Needs Plan

Segment No.	Year	AADT	Lanes	Config
Segment 3	2030	37000	6	Lanes Divided

Cost Feasible Plan

Segment No.	Year	AADT	Lanes	Config
Segment 3	2030	37000	6	Lanes Divided

Funding Sources

Segment No.	FEDERAL	FDOT	Unknown
Segment 3	X	X	

Project Effects Overview

Issue	Degree of Effect	Organization	Date Reviewed

Natural				
Air Quality	0	None	US Environmental Protection Agency	8/12/2006
Contaminated Sites	2	Minimal	US Environmental Protection Agency	8/12/2006
Special Designations	4	Substantial	US Fish and Wildlife Service	7/05/2006
Water Quality and Quantity	4	Substantial	FL Department of Environmental Protection	8/11/2006
Wetlands	4	Substantial	US Army Corps of Engineers	8/22/2006
Wetlands	0	None	National Marine Fisheries Service	8/14/2006
Wetlands	4	Substantial	FL Department of Environmental Protection	8/11/2006
Wildlife and Habitat	4	Substantial	Federal Highway Administration	8/10/2006
Wildlife and Habitat	4	Substantial	FL Fish and Wildlife Conservation Commission	8/04/2006
Wildlife and Habitat	4	Substantial	US Fish and Wildlife Service	7/05/2006
Cultural				
Historic and Archaeological Sites	0	None	Miccosukee Tribe	7/25/2006
Recreation Areas	4	Substantial	FL Department of Environmental Protection	8/11/2006
Section 4(f) Potential	4	Substantial	Federal Highway Administration	8/10/2006
Community				
Aesthetics	2	Minimal	Palm Beach MPO	8/04/2006
Economic	2	Minimal	Palm Beach MPO	8/04/2006
Land Use	3	Moderate	FL Department of Community Affairs	8/08/2006
Land Use	3	Moderate	Palm Beach MPO	8/04/2006
Mobility	1	Enhanced	Palm Beach MPO	8/04/2006
Relocation	0	None	Palm Beach MPO	8/04/2006
Social	2	Minimal	Palm Beach MPO	8/04/2006
Secondary and Cumulative				
Secondary and Cumulative Effects	4	Substantial	Federal Highway Administration	8/10/2006
Secondary and Cumulative Effects	4	Substantial	FL Fish and Wildlife Conservation Commission	8/04/2006

ETAT Reviews: Natural

Air Quality

Coordinator Summary

0 Summary Degree of Effect

Air Quality Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The proposed alternative is consistent with Air Quality Conformity as stated through the Project Description. USEPA did not identify any Air Quality issues for this alternative; therefore, the summary degree of effect assigned to Air Quality is none.

ETAT Reviews for Air Quality

0 ETAT Review by Maher Budeir, US Environmental Protection Agency (08/12/2006)

Air Quality Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
None found.

Comments on Effects to Resources:
Based on data avaialable, there is no significant impact on air quality.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the Federal Highway Administration

Coastal and Marine

Coordinator Summary

0 Summary Degree of Effect

Coastal and Marine Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative is not located in a coastal or marine area nor is it in the vicinity of any coastal or marine resources. For these reasons, the summary degree effect assigned to Coastal and Marine is none.

ETAT Reviews for Coastal and Marine

No reviews found for the Coastal and Marine Issue.
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the National Marine Fisheries Service
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Contaminated Sites

Coordinator Summary

2 Summary Degree of Effect

Contaminated Sites Summary Degree of Effect: Minimal
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
According to the EST GIS Analysis, one geocoded petroleum tank site is located within 100 feet of Alternative 3. In addition, one hazardous waste site (AT&T Cellular One Lake Park) is located within 500 feet of Alternative 3. However, no designated Brownfield sites, geocoded dry cleaners, solid waste facilities, Superfund sites, or Toxic Release Inventory sites are reported within one-half mile of this alternative. For the above stated reasons and potential unknown contamination issues, the summary degree of effect assigned to Contaminated Sites is minimal.

ETAT Reviews for Contaminated Sites

2 ETAT Review by Maher Budeir, US Environmental Protection Agency (08/12/2006)

Contaminated Sites Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Soil and groundwater.

Comments on Effects to Resources:
Two petroleum tanks (Ibis Golf Mantainance and Northern Palm Beach Water Control)and one hazardous waste managemebt site were identified with the 500-ft buffer of Alternative 3. Site specific survey/assessment should be conducted to determine if any contamination exist on the project buffer zone.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection

- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Farmlands

Coordinator Summary

0 Summary Degree of Effect

Farmlands Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative will not impact any prime farmlands. For this reason, the summary degree effect assigned to Farmlands is none.

ETAT Reviews for Farmlands

No reviews found for the Farmlands Issue.
- No review submitted from the Federal Highway Administration
- No review submitted from the Natural Resources Conservation Service

Floodplains

Coordinator Summary

3 Summary Degree of Effect

Floodplains Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The EST GIS Analysis shows the following acreage of a FEMA FIRM floodzone within the project's 500-foot buffer. (A 500-foot buffer was used due to the proposed new 6-lane divided alignment):
Zone A (158 acres): an area inundated by 100-year flooding for which no base elevations have been determined. Zone X500 (469 acres): an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than one square mile.
Based on these results, 100 percent of the 500-foot buffer for this alternative occurs within a designated floodzone. A Location Hydraulics Report will be prepared for the project and the project will be designed to minimize floodplain impacts and compensate for potential floodplain encroachments. For these reasons, the summary degree of effect assigned to Floodplains is moderate.

ETAT Reviews for Floodplains

No reviews found for the Floodplains Issue.

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Infrastructure

Coordinator Summary

0 Summary Degree of Effect

Infrastructure Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative will not have any major impacts to infrastructure; therefore, the summary degree effect assigned to Infrastructure is none.

ETAT Reviews for Infrastructure

No reviews found for the Infrastructure Issue.
- No review submitted from the Federal Highway Administration

Navigation

Coordinator Summary

0 Summary Degree of Effect

Navigation Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The EST GIS Analysis did not report the presence of any navigable waterways within one-half mile of this alternative. This alternative crosses the M Canal; however, this canal has not been identified as a navigable waterway by the Army Corps of Engineers or U.S. Coast Guard. For these reasons, the summary degree of effect assigned to Navigation is none.

ETAT Reviews for Navigation

No reviews found for the Navigation Issue.
- No review submitted from the US Army Corps of Engineers
- No review submitted from the Federal Highway Administration
- No review submitted from the US Coast Guard

Special Designations

Coordinator Summary

4 Summary Degree of Effect

Special Designations Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
According to the EST GIS Analysis, the southern terminus of Alternative 3 is adjacent to the Pond Cypress Natural Area. This alternative is also immediately adjacent to the Grassy Waters Preserve for most of its length. In addition, the northern terminus of Alternative 3 is located within 200 feet of the Loxahatchee Slough Natural Area. For these reasons, and because of the concerns stated by the USFWS, the summary degree of effect assigned to Special Designations is substantial.

ETAT Reviews for Special Designations

4 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/05/2006)

Special Designations Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Public Conservation Lands

Comments on Effects to Resources:
Corridor 3 would follow Palm Beach Countys Persimmon Boulevard Extension and proceed east at the M-Canal for about 0.75 miles. The Corridor would then head northward for about 3 miles along the FDOT alignment to Northlake Avenue. The Service notes that Corridor 3 would directly impact uplands and wetlands currently protected for conservation purposes at Pond Cypress Natural Area. These lands include the parcel known as Section 1. Section 1 has been purchased by Palm Beach County as mitigation for impacts to wetlands resulting from the Persimmon Boulevard Extension and will be added to the Pond Cypress Natural Area. The Pond Cypress Natural Area and Section 1 are contiguous with a large block (>10,000 acres) of protected native habitat located directly to the east in the City of West Palm Beachs Water Catchment Area (also known as Grassy Waters Preserve). Pond Cypress Natural Area, Section 1, and the Water Catchment Area currently provide important habitat to variety of species including wading birds, small mammals, reptiles, amphibians, and small fishes. Portions of the wetlands and uplands within the Pond Cypress Natural Area and Section 1 have been impacted by the exotic invasive tree melaleuca (Melaleuca quinquenervia). Moreover, some of the wetlands in Section 1 have been degraded by off-road vehicles. Although these areas have been impacted, the Service notes that they still largely consist of good quality habitat for fish and wildlife. Furthermore, we understand that Palm Beach County intends to develop a management plan for the entire Pond Cypress Natural Area that will result in the removal of melaleuca and prohibit off-road vehicle use. We expect that the management activities proposed will restore areas of degraded habitat and benefit fish and wildlife in the area.

The northern segment of Corridor 3 borders the City of Palm Beachs Water Catchment Area. The Service believes that Corridor 3 will result in the direct loss of moderate quality habitat within the this section of the FDOT right-of-way. The Service also believes that Corridor 3 will result in significant adverse indirect

effects to Fish and Wildlife in the City of West Palm Beachs Water Catchment Area. These effects would consist of disturbance from vehicle noise and vehicle and roadway lights.

Based on the impacts of to fish and wildlife habitat, wetlands, and public conservation lands, we cannot support Corridor 3 as the preferred alternative for the project. We recommend that the FDOT adopt Corridor 1 as the preferred alternative for the project.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Water Quality and Quantity

Coordinator Summary

4 Summary Degree of Effect

Water Quality and Quantity Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Because of the concerns stated by FDEP, notably the presence of the City of West Palm Beach Water Catchment Area immediately adjacent to the project, the summary degree of effect assigned to Water Quality and Quantity is substantial.

ETAT Reviews for Water Quality and Quantity

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Water Quality and Quantity Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Stormwater runoff from the road surface may alter adjacent wetlands and surface waters through increased pollutant loading. 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. 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 pre-development hydroperiod and water quality, as well as to protect the natural functions of adjacent wetlands.

Comments on Effects to Resources:
We recommend that the 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. Increased stormwater runoff carrying oils, greases, metals, sediment, and other pollutants from the increased impervious surface would be of significant concern.

Additional Comments (optional):
The Water Catchment Area for the City of West Palm Beach is immediately adjacent to the project. All activities must be designed to prevent stormwater pollutant contamination of the City's water supply. DEP recommends that the FDOT work to include the City on all decisions affecting this critical area.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Wetlands

Coordinator Summary

4 Summary Degree of Effect

Wetlands Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The following acreage of wetlands and open water habitats are reported by the ETDM GIS Analysis within the 500-foot buffer for each alternative:
National Wetlands Inventory database - 312.8 acres; Wetlands 2000 database - 314.1 acres; 2003 FFWCC Habitat and Landcover Grid database - 204.4 acres.
The proposed project is a 6-lane divided highway and would occupy much of the 500-foot buffer. Because of the large area of wetlands occurring within the 500-foot buffer, a Wetlands DOE of Substantial is recommended for this project alternative.

ETAT Reviews for Wetlands

4 ETAT Review by Alisa Zarbo, US Army Corps of Engineers (08/22/2006)

Wetlands Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
Wetlands: This area was evaluated and considered in the permitting of the Acreage Reliever Road and has an extremely high level of importance to the Corps. Wildlife corridors were incorporated into the alignment of the Acreage Reliever Road. The Corps would try to keep the same continuity of the corridors when permitting this extension.

Comments on Effects to Resources:
If the roadway was constructed through corridor 4, it would fragment an extremely sensitive greenway and wildlife corridor that exists between the PCNA, the WCA and Section 1. The alignment would isolate the PCNA and the WCA to the extent that reptiles, amphibians and small and large mammals could not easily access the adjacent natural areas. Large natural areas are necessary for certain wildlife to carry out life functions such as feeding and nesting. Smaller isolated areas may accommodate only a few individuals with modest home range requirements. Small mammals and other forest dwelling wildlife have shown an aversion to using areas with less vegetative cover. This would be the case with a four-lane roadway that has a shoulder and median. Although some animals have an aversion to roadways, many attempt to cross and result in collisions that impact both wildlife and humans. During 1990, 431 vehicle collisions with animals (wild and domestic) were serious enough to be reported to the Florida Department of Highway Safety and Motor Vehicles. These accidents resulted in 4 human fatalities and 380 injuries. The average estimated property damage for each accident was $3,395. Corridor 4 could result in extensions, as shown in the Conceptual Analysis Matrix, to access the Acreage. These extensions further fragment the ecosystem and isolate Section 1. Placing the roadway down the Rangeline would put it adjacent to the WCA. The WCA is a Class I potable water supply for the City of West Palm Beach. The roadway run-off would pose serious threats to the Citys drinking water supply. The alternative of using a bridge along the Rangeline would not be a feasible alternative due to it being adjacent to the WCA.

Up to 60th Street, Corridor 3 has been approved by the Corps. From 60th Street the roadway is shown going east along the M-Canal. This portion and the following north south portion of the roadway that ends at Northlake Boulevard would isolate the mitigation area for the Ibis Golf and Country Club. Requirements for the portion of the roadway adjacent to the mitigation area would include fencing on both sides of the roadway, culverts to maintain adequate hydrology, slower speed limits, wildlife crossing signs and culverts for wildlife crossings or bridges. The wildlife crossings should be placed above the seasonal high water elevation of wetlands but adjacent to wetlands. Wildlife crossings should be placed just above the ecotone of the wetland. The median should also be devoid of vegetation that would give the illusion of a narrow roadway to wildlife. Wildlife is more adverse to crossing wider roadways. Median landscaping plants should not provide a food source for wildlife. This would entice wildlife to cross the roadway and go into the median for food resulting in road kill. This area is within the Loxahatchee River Watershed and to a limited extent the Lake Worth Lagoon.

Additional Comments (optional):
Mitigation efforts should be concentrated in the same watershed. Mitigation options could include widening of the M-Canal and planting a flow through marsh to improve water quality. Mitigation in the WCA may be appropriate for this project.

Coordinator Feedback: None

0 ETAT Review by Madelyn T Martinez, National Marine Fisheries Service (08/14/2006)

Wetlands Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
NONE

Comments on Effects to Resources:
NONE

Additional Comments (optional):
Based on the project location and information provided on the ETDM website, NOAAs National Marine Fisheries Service (NOAA Fisheries) concludes the proposed work would not directly impact areas that support NOAA trust resources. We have no comments or recommendations to provide pursuant to the essential fish habitat (EFH) requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) P.L. 104-297. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Coordinator Feedback: None

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Wetlands Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The National Wetlands Inventory GIS report indicates that there are 304.51 acres of palustrine and 8.27 acres riverine wetlands within the 500-ft. project buffer zone. The Wetlands 2000 report indicates that there are 174.21, 6.64, 17.65, 1855.25, 485.76, 26.59, 1308.18, 8.07 and 107.44 acres of cypress, cypress domes, emergent aquatic vegetation, freshwater marsh, mixed schrubs, mixed wetland hardwoods, wet pinelands, wet prairies and mixed wetland forests, respectively, within the 5,280-ft. buffer of the project area.

Comments on Effects to Resources:
The project will require an environmental resource permit (ERP) from the South Florida Water Management District. The ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of the roadway extension project to the greatest extent practicable:
- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging 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. All stormwater treatment should be located in upland sites.
- 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 road improvement projects in the vicinity of the subject project should also be addressed.

Additional Comments (optional):
DEP ranks the Corridor 3 Alternative as # 2. Staff has expressed concerns regarding the fragmentation of wildlife habitat by the proposed roadway. The Department strongly recommends bridging ALL wetland crossings to minimize impacts to wetland connectivity/hydroperiod and wildlife corridor functions. Additionally, all stormwater should be conveyed to treatment sites located in upland areas.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the US Fish and Wildlife Service
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Wildlife and Habitat

Coordinator Summary

4 Summary Degree of Effect

Wildlife and Habitat Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Both the FFWCC and USFWS indicated that several state and federally listed species may occur within the project area. Although no listed species occurrences are reported within the 500-foot buffer for this alternative, there is a high likelihood of occurrence of listed wading birds and wood storks because of the large area of wetlands present along this alignment. This alternative is also adjacent to publicly owned conservation lands. In addition, the 500-foot buffer for this alternative contains pineland that requires prescribed burning for habitat management. For these reasons, the summary degree of effect assigned to Wildlife and Habitat is substantial.

ETAT Reviews for Wildlife and Habitat

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Wildlife and Habitat Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Habitat resources.

Comments on Effects to Resources:
The eastern alignments have substantial secondary impacts primarily related to the water/wetlands and habitat resources.

Coordinator Feedback: None

4 ETAT Review by Scott Sanders, FL Fish and Wildlife Conservation Commission (08/04/2006)

Wildlife and Habitat Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

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 #8127 in Palm Beach County, and provides the following comments related to potential impacts to fish and wildlife resources for this Programming Phase project.

The proposed project involves the evaluation of the need to extend SR 7 from SR 704 (Okeechobee Boulevard) to Northlake Boulevard in Palm Beach County. Four corridors and a No-Build option have been identified for the project.

Corridor 3 would begin at the intersection of Okeechobee Boulevard and SR 7, follow the Countys extension of Persimmon Boulevard, and continue north parallel to 110th Avenue. Near 60th Street, the alignment turns east, parallel to the M Canal, and then turns north to tie in with FDOTs existing Right-of-way (ROW). The alignment crosses the M canal, and continues north on the east side of the Ibis Golf and Country Club, and terminates at Northlake Boulevard.

This project was reviewed under the Advanced Notification process through the Florida State Clearinghouse at the Florida Department of Environmental Protection under SAI FL200506231187C (letter dated August 10, 2005, attached), and SAI# 9811160726C (letter dated December 2, 1998, attached). These FWC letters provide a detailed overview of project resources, including listed wildlife and plant species, potential impacts, and a course of action to reduce these impacts. We have reviewed these letters, and our previous comments remain applicable to the currently proposed project.

A GIS analysis of fish and wildlife and habitat resources was conducted using the Environmental Screening Tool (EST), and those results indicate that very similar upland and wetlands habitat types are present along all four corridors. Uplands within 500 feet of the proposed Corridor 3 include mixed pine-hardwood forest, pinelands, upland hardwood hammock, and dry prairie. Wetlands along this corridor include cypress swamp, cypress/pine/cabbage palm, freshwater marsh and wet prairie, hardwood swamp, mixed wetlands forests, open water, sawgrass marsh, and shrub swamp. Approximately 35.8 percent of the land within 500 feet of the corridor is in high and low impact urban land uses.

An all-inclusive accounting of the species listed by FWC which may occur in and adjacent to the project area include the eastern indigo snake (Threatened [T]), Florida pine snake (Species of Special Concern [SSC]), gopher tortoise (SSC), Shermans fox squirrel (SSC), Florida mouse (SSC), little blue heron (SSC), tricolored heron (SSC), white ibis (SSC), wood stork (E), snail kite (E), bald eagle (T), crested caracara (T), southeastern kestrel (T), limpkin (SSC), Florida sandhill crane (T), Florida burrowing owl (SSC), and

red-cockaded woodpecker (SSC). The presence or absence of some of these species within the project area is highly dependent on habitat type, plant successional stage, habitat quality, and site drainage conditions.

Habitat quality within 500 feet of the Right-of-way (ROW) for Corridor was evaluated using natural resource data layers within the EST. FWCs Biodiversity Hotspots data layer shows that 41.6 percent of the area is capable of supporting three to four, and five to six focal species. According to FWCs Integrated Wildlife Habitat Ranking System map, a total of 60.1 percent of this zone along the corridor has been assigned a score of from 6 to 8 (Scale 1 = Low, 10 = High), which ranks as good to excellent quality. According to the FWCs Priority Wetlands Map for wetlands dependent listed species, 43.7 percent of the habitat along the proposed roadway zone is ranked as capable of supporting 1 to 3 focal species in uplands, and 4 to 6 focal species in wetlands. Within this zone along the corridor, public and managed lands include the Loxahatchee Slough Natural Area, Grassy Waters Preserve, and the Pond Cypress Natural Area. Strategic Habitat Conservation Areas for the limpkin and wading birds have also been designated within 44.7 percent of this zone. Corridor 3 has the highest acreage of native upland habitat of the four corridors, and ranks number 1 in terms of the percentage of land area along the proposed ROW within the above five resource evaluation categories.

Comments on Effects to Resources:
Direct impacts to fish and wildlife from this project corridor wcould be substantial due to the significant amount of quality wetlands and uplands found along the corridor. Impacts could include habitat loss from roadway and Drainage Retention Area (DRA) construction, which would adversely affect a number of listed wildlife species. Due to the close proximity of three public land tracts, this corridor will potentially have substantial direct impacts on public lands.

Additional Comments (optional):
In order to reduce the impacts to fish and wildlife resources and important habitat, we continue to recommend that the existing road network be improved in order to resolve the current transportation need. If through further study, this proves not to be feasible, we recommend the selection of Corridor 1, which will have less impact on natural resources.

We recommend the following measures be considered during the Project Development and Environment (PD&E) Study to avoid, minimize, and mitigate project impacts to listed species and habitat:

1. A vegetative cover map and accounting by acreage for each plant community type should be made for the affected project area. Compensatory mitigation for all upland and wetlands habitat loss should be required. If wetlands are mitigated under the provisions of Chapter 373.4137 F.S., the proposed mitigation sites should be located within the immediate or same regional area, functionally equivalent, equal to or of higher functional value, and as or more productive as the wetlands impacted by the project.

2. Surveys for listed species should be performed within and adjacent to the ROW and proposed sites for DRAs during the PD&E Study. The methodology for these surveys should be coordinated with FWC, and follow appropriate survey techniques or guidelines to determine presence, absence or probability of occurrence of various species, and to assess habitat quality. These study methods should be designed considering the potential listed species discussed above.

3. Based on the survey results, a plan should also be developed to address direct, secondary, and cumulative impacts of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures, including compensatory replacement for both upland and wetlands habitat loss, should also be addressed. Land acquisition and restoration of appropriate tracts adjacent to existing public lands, or tracts placed under conservation easement located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas, would be biologically appropriate and supported by our agency.

4. The PD&E Study should also include an investigation of the design, cost, location, and construction

techniques for longer bridges over canals, sloughs and their floodplains, and wetlands, which would improve hydrological and floodplain functioning, and minimize wetlands fill. These improved structures would also reduce roadkills and provide improved habitat connectivity for wildlife species such as whitetail deer, bobcat, river otter, and other upland, transitional, and aquatic species that use wetlands riparian systems within the project area.

5. Habitat impacts in both uplands and wetlands may be avoided where possible by interchangeably designing the road expansion along those areas where less habitat resources occur. In addition, using the median and roadside swales for treating roadside runoff would reduce the need for some off-site DRAs, and assist in reducing habitat loss.

6. Construction equipment staging areas; storage of oils, greases, and fuel; fill and roadbed material; and vehicle maintenance activities should be sited in previously disturbed areas far removed from streams, wetlands, or surface water bodies. Staging areas, along with borrow areas, should also be surveyed for listed species.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Steve Lau in our Vero Beach Office at (772) 778-5094 for further coordination on this project.

Coordinator Feedback: None

4 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/05/2006)

Wildlife and Habitat Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Federally Listed Species and Fish and Wildlife Habitat

Comments on Effects to Resources:
Service Comments, 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.

The Service believes that the following federally listed species have the potential to occur in or near the project site: wood stork, Everglade snail kite (Rostrhamus sociabilis plumbeus) and eastern indigo snake (Drymarchon corais couperi), as well as the federally protected plants listed at the link for Palm Beach County at our web site (http://www.fws.gov /verobeach/ Species_lists/ PDF-lists/Palm Beach County.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 FDOTs Project Development and Environment process.

Service Comments, Fish and Wildlife Resources, Wetlands, and Special Designations:

Corridor 3 would follow Palm Beach Countys Persimmon Boulevard Extension and proceed east at the M-Canal for about 0.75 miles. The Corridor would then head northward for about 3 miles along the FDOT alignment to Northlake Avenue. The Service notes that Corridor 3 would directly impact uplands and wetlands currently protected for conservation purposes at Pond Cypress Natural Area. These lands include the parcel known as Section 1. Section 1 has been purchased by Palm Beach County as mitigation for impacts to wetlands resulting from the Persimmon Boulevard Extension and will be added to the Pond Cypress Natural Area. The Pond Cypress Natural Area and Section 1 are contiguous with a large block (>10,000 acres) of protected native habitat located directly to the east in the City of West Palm Beachs Water Catchment Area (also known as Grassy Waters Preserve). Pond Cypress Natural Area, Section 1, and the Water Catchment Area currently provide important habitat to variety of species including wading birds, small mammals, reptiles, amphibians, and small fishes. Portions of the wetlands and uplands within the Pond Cypress Natural Area and Section 1 have been impacted by the exotic invasive tree melaleuca (Melaleuca quinquenervia). Moreover, some of the wetlands in Section 1 have been degraded by off-road vehicles. Although these areas have been impacted, the Service notes that they still largely consist of good quality habitat for fish and wildlife. Furthermore, we understand that Palm Beach County intends to develop a management plan for the entire Pond Cypress Natural Area that will result in the removal of melaleuca and prohibit off-road vehicle use. We expect that the management activities proposed will restore areas of degraded habitat and benefit fish and wildlife in the area.

The northern segment of Corridor 3 borders the City of Palm Beachs Water Catchment Area. The Service believes that Corridor 3 will result in the direct loss of moderate quality habitat within the this section of the FDOT right-of-way. The Service also believes that Corridor 3 will result in significant adverse indirect effects to Fish and Wildlife in the City of West Palm Beachs Water Catchment Area. These effects would consist of disturbance from vehicle noise and vehicle and roadway lights.

Based on the impacts of to fish and wildlife habitat, wetlands, and public conservation lands, we cannot support Corridor 3 as the preferred alternative for the project. We recommend that the FDOT adopt Corridor 1 as the preferred alternative for the project.

Coordinator Feedback: None

- No review submitted from the FL Department of Agriculture and Consumer Services

- No review submitted from the US Forest Service

ETAT Reviews: Cultural

Historic and Archaeological Sites

Coordinator Summary

0 Summary Degree of Effect

Historic and Archaeological Sites Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The 2000 Cultural Resource Assessment Survey (DHR Survey #6173), the GIS analysis, and comments from FDOS and the Miccosukee Tribe of Indians of Florida indicate that this alignment will have no effect on any archaeological or historic resources.

ETAT Reviews for Historic and Archaeological Sites

0 ETAT Review by Steve Terry, Miccosukee Tribe (07/25/2006)

Historic and Archaeological Sites Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
None found.

Comments on Effects to Resources:
None found.

Coordinator Feedback: None

- No review submitted from the FL Department of State
- No review submitted from the Federal Highway Administration
- No review submitted from the Seminole Tribe

Recreation Areas

Coordinator Summary

4 Summary Degree of Effect

Recreation Areas Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The GIS Analysis and comments from FDEP indicate that three designated public conservation lands are located within the vicinity of this alignment. As indicated by the Florida Natural Areas Inventory, these lands contain significant natural communities and numerous element occurrences of listed species. These lands are also important in terms of natural function such as flood control, filtering storm water runoff, aquifer recharge, etc. The potential impact of this alignment to these lands is determined to be substantial as it will cause wildlife habitat fragmentation. The final design for this alignment will avoid or minimize impacts to these lands, including any proposed acquisition sites in the project area, to the greatest extent practicable, and appropriate mitigation will be provided for unavoidable impacts. In addition, a biological assessment/evaluation (BA/BE) will be completed as part of the project development phase to capture any primary and indirect effects to the public lands and any proposed acquisition sites in the project area.

ETAT Reviews for Recreation Areas

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Recreation Areas Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The following public conservation lands are located in the vicinity of this project: the Grassy Waters Preserve, Loxahatchee Slough Natural Area and Pond Cypress Natural Area.

Comments on Effects to Resources:
These lands contain significant natural communities and numerous element occurrences of listed species, as indicated by the Florida Natural Areas Inventory. The Department is interested in preserving the area's natural communities, wildlife corridor functions, natural flood control, stormwater runoff filtering capabilities, aquifer recharge potential, contributions to regional spring complexes, and recreational trail opportunities. Therefore, future environmental documentation should include an evaluation of the primary, secondary, and cumulative impacts of the proposed roadway widening construction on the above public lands and any proposed acquisition sites.

Additional Comments (optional):
Staff has expressed concerns regarding the fragmentation of wildlife habitat by the proposed roadway. The Department strongly recommends bridging ALL wetland crossings to minimize impacts to wetland connectivity/hydroperiod and wildlife corridor functions.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

- No review submitted from the National Park Service

Section 4(f) Potential

Coordinator Summary

4 Summary Degree of Effect

Section 4(f) Potential Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The GIS Analysis and comments from FHWA indicate that this alignment will cross conservation land and that a Section 4(f) Determination of Applicability will be required. For these reasons, the summary degree of effect for this alignment is determined to be substantial. The final design for this alignment will avoid or minimize impacts to this area to the greatest extent practicable, and appropriate mitigation will be provided for unavoidable impacts.

ETAT Reviews for Section 4(f) Potential

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Section 4(f) Potential Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Pond Cypress Natural Area and Grassy Waters Preserve

Comments on Effects to Resources:
The EST indicates that this alignment will cross the Pond Cypress Natural Area as the proposed Persimmon Boulevard Extension. The alignment is also adjacent to the Grassy Waters Preserve. A Section 4 (f) determination of applicability will be required.

Coordinator Feedback: None

ETAT Reviews: Community

Aesthetics

Coordinator Summary

2 Summary Degree of Effect

Aesthetics Summary Degree of Effect: Minimal
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that this alignment is not anticipated to have a major impact on community aesthetics as fewer residences/ noise sensitive receivers are present. Based on these reasons, the summary degree of effect assigned to Aesthetics for this alignment is minimal. The final design for this alignment will avoid or minimize impacts to the the community's character, as well as to identified noise sensitive receivers in the project area.

ETAT Reviews for Aesthetics

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Aesthetics Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Impact from noise and/or vibration would be minimal as fewer noise receivers would be affected.

Comments on Effects to Resources:
Alignment would have less impact on fewer number of residential properties.

Additional Comments (optional):
None.

CLC Commitments and Recommendations:
Landscaping and beautification of roadway will decrease the noise factor along residential sections
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Economic

Coordinator Summary

2 Summary Degree of Effect

Economic Summary Degree of Effect: Minimal
Reviewed By:

FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that there are no businesses located along this alignment that would be negatively impacted. Therefore, the summary degree of effect assigned to Economics for this alignment is minimal.

ETAT Reviews for Economic

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Economic Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
There are no businesses located along the corridor.

Comments on Effects to Resources:
Impact on established businesses in the alignment would be minimal.

Additional Comments (optional):
The corridor may increase the opportunity for residents to obtain employment a distance from living communities.

CLC Commitments and Recommendations:
No residential properties would need to be relocated therefore no change to the tax base for the area.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Land Use

Coordinator Summary

3 Summary Degree of Effect

Land Use Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
While comments from FDCA and the Palm Beach County MPO indicate that this alignment will have less impacts on wetlands, the floodplain, and recreation/open space of the community; FHWA indicates that this alignment will cause significant secondary and cumulative impacts to the natural environment. In addition, this alignment is not addressed within the county's comprehensive plan. Based on these reasons, the summary degree of effect assigned to Land Use for this alignment is moderate. The final design for this alignment will

avoid or minimize land use impacts to the greatest extent practicable, and appropriate mitigation will be provided for unavoidable impacts. FDOT will also coordinate with the local government to ensure the project is consistent with the county's comprehensive plan.

ETAT Reviews for Land Use

3 ETAT Review by Gary Donaldson, FL Department of Community Affairs (08/08/2006)

Land Use Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The Department of Community Affairs (DCA) has reviewed the referenced project and, based on current information, this project (Alternatives 1 and 2) are not addressed within the local governments comprehensive plan. However, Alternative 4 is consistent with the Palm Beach County Future Transportation Map.

The Department is supportive of Alternative 3 as the preferred alignment because adverse environmental impacts to Grassy Waters Preserve and Pond Cypress Natural Area are minimized. Additionally, the proposed alignment is consistent with the recently approved Notice of Proposed Change (NOPC) for the Fox Property Development of Regional Impact (DRI). However, this alternative has not been identified in the local government comprehensive plan. Therefore, if Alternative 3 is selected as the preferred alignment, as per DCA preference, the project should not be advanced into the Department of Transportations Five Year Work Program until the comprehensive plan is amended to reflect the proposed roadway modification.

Staff will make a determination of the consistency of the proposed roadway with the respective comprehensive plan when the comprehensive plan is amended to include the selected roadway alternative on an adopted future transportation map and improvement five year schedule.

Comments on Effects to Resources:
see above

Coordinator Feedback: None

3 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Land Use Effect: Moderate
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Direct impact to wetlands and floodplains encroachment is less and a slight decrease in recreation/open

space will occur.

Comments on Effects to Resources:
None.

Additional Comments (optional):
None.

CLC Commitments and Recommendations:
Compatibile with Local Growth Management Plans and in compliance with adopted land use plan.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Mobility

Coordinator Summary

1 Summary Degree of Effect

Mobility Summary Degree of Effect: Enhanced
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that this alignment will enhance connectivity between communities, as well as travel and accessibility for pedestrians, cyclists, and Transportation Disadvantaged citizens. Therefore, the summary degree of effect assigned to Mobility for this alignment is enhanced.

ETAT Reviews for Mobility

1 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Mobility Effect: Enhanced
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Pedestrian/bicycle travel would be enhanced with building of the roadway.

Comments on Effects to Resources:
Connectivity between communities to the north and south from Royal Palm Beach and the Acreage would be enhanced.

Additional Comments (optional):

Transportation Disadvantaged citizens would have more accessibility to medical facilities located along Northlake and Okeechobee Boulevards.

CLC Commitments and Recommendations:
Quality of life may be enhanced with the building of the roadway for citizens who use bicycle, pedestrian and motorized travel.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration
- No review submitted from the Federal Transit Administration

Relocation

Coordinator Summary

0 Summary Degree of Effect

Relocation Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
No residential properties will be impacted by this alignment; therefore, the summary degree of effect assigned to Relocation for this alignment is none.

ETAT Reviews for Relocation

0 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Relocation Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
There is no need for relocation of residential properties with this alignment.

Comments on Effects to Resources:
None.

Additional Comments (optional):
None.

CLC Commitments and Recommendations:
None.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Social

Coordinator Summary

2 Summary Degree of Effect

Social Summary Degree of Effect: Minimal
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
No major social issues are associated with this alignment. Potential increase in traffic due to the alignment, however, may have a slight impact on the local neighborhood. As a result, the summary degree of effect assigned to Social for this alignment is determined to be minimal. FDOT will conduct a noise study during project development to assess (and then avoid or minimize) potential noise impacts to residences located within the vicinity of the project.

ETAT Reviews for Social

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Social Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Increased traffic along the Persimmon Boulevard will impact residents with building of roadway.

Comments on Effects to Resources:
Building of extension of Persimmon Boulevard to the alignment of roadway will impact local neighborhood.

Additional Comments (optional):
Emergency services will be enhanced with greater accessibility between residential neighborhoods and emergency facilities located close to Northlake and Okeechobee Boulevards. The building of corridor will decrease response time by fire, police and medical responders.

CLC Commitments and Recommendations:
Connectivity and emergency service response could be enhanced by building roadway.
Coordinator Feedback: None

- No review submitted from the FL Department of Community Affairs
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration

ETAT Reviews: Secondary and Cumulative

Secondary and Cumulative Effects

Coordinator Summary

4 Summary Degree of Effect

Secondary and Cumulative Effects Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from FFWCC and FHWA indicate that this alignment is anticipated to have significant secondary and cumulative effects on the environment and community. Therefore, the summary degree of effect assigned to Secondary and Cumulative Impacts for this alignment is substantial. The final design for this alignment will avoid or minimize impacts to natural resources and the community to the greatest extent practicable, and appropriate mitigation will be provided for unavoidable impacts.

ETAT Reviews for Secondary and Cumulative Effects

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Secondary and Cumulative Effects Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

At-Risk Resource: Wetlands

Comments on Effects:
The eastern alignments have substantial secondary impacts primarily related to the water/wetlands and habitat resources.

Recommended Avoidance, Minimization, and Mitigation Measures:
None found.

Recommended Actions to Improve At-Risk Resources:
None found.

At-Risk Resource: Wildlife and Habitat

Comments on Effects:
The eastern alignments have substantial secondary impacts primarily related to the water/wetlands and habitat resources.

Recommended Avoidance, Minimization, and Mitigation Measures:
None found.

Recommended Actions to Improve At-Risk Resources:
None found.

Coordinator Feedback: None

4 ETAT Review by Scott Sanders, FL Fish and Wildlife Conservation Commission (08/04/2006)

Secondary and Cumulative Effects Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

At-Risk Resource: Wildlife and Habitat

Comments on Effects:
Secondary and cumulative impacts would be substantial due to increased residential and commercial development along the highway due to improved access. The roadway extension will also result in increased roadkills for many species of mammals, amphibians and reptiles, and some wading bird species. The expanded roadway will create a more formidable barrier to wildlife movement, and also result in habitat fragmentation and isolation. Increased stormwater runoff from the expanded impervious roadway surface could degrade the water quality of existing wetlands and streams along the ROW in the project area. Since three public land tracts are located immediately adjacent to the corridor, this action will potentially have substantial secondary impacts on public lands.

Recommended Avoidance, Minimization, and Mitigation Measures:
In order to reduce the impacts to fish and wildlife resources and important habitat, we continue to recommend that the existing road network be improved in order to resolve the current transportation need. If through further study, this proves not to be feasible, we recommend the selection of Corridor 1, which will have less impact on natural resources.

Recommended Actions to Improve At-Risk Resources:
Avoidance, minimization, and mitigation measures, including compensatory replacement for both upland and wetlands habitat loss, should also be addressed. Land acquisition and restoration of appropriate tracts adjacent to existing public lands, or tracts placed under conservation easement located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas, would be biologically appropriate and supported by our agency.

The PD&E Study should also include an investigation of the design, cost, location, and construction techniques for longer bridges over canals, sloughs and their floodplains, and wetlands, which would improve hydrological and floodplain functioning, and minimize wetlands fill. These improved structures

would also reduce roadkills and provide improved habitat connectivity for wildlife species such as whitetail deer, bobcat, river otter, and other upland, transitional, and aquatic species that use wetlands riparian systems within the project area.

Coordinator Feedback: None

Alternative #4

Alternative Description

From	SR 704 Okeechobee Blvd.
To	Northlake Blvd.
Type	New Alignment
Status	ETAT Review Complete
Total Length	7.068 mi.
Cost	$100,000,000.00
Modes	Roadway Bicycle Pedestrian

Segment Description(s)

Location and Length

Segment No.	Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
Segment 4	SR 7	SR 704 Okeechobee Blvd.	Northlake Blvd.	7.068	Digitized		

Jurisdiction and Class

Segment No.	Jurisdiction	Urban Service Area	Functional Class
Segment 4	FDOT	In	URBAN: Minor Arterial

Base Conditions

Segment No.	Year	AADT	Lanes	Config
Segment 4				

Interim Plan

Segment No.	Year	AADT	Lanes	Config
Segment 4				

Needs Plan

Segment No.	Year	AADT	Lanes	Config
Segment 4	2030	37000	6	Lanes Divided

Cost Feasible Plan

Segment No.	Year	AADT	Lanes	Config
Segment 4	2030	37000	6	Lanes Divided

Funding Sources

Segment No.	FEDERAL	FDOT	Unknown
Segment 4	X	X	

Project Effects Overview

Issue	Degree of Effect		Organization	Date Reviewed
Natural				
Air Quality	0	None	US Environmental Protection Agency	8/12/2006
Contaminated Sites	2	Minimal	US Environmental Protection Agency	8/12/2006
Special Designations	5	Dispute Resolution	US Fish and Wildlife Service	7/18/2006
Water Quality and Quantity	4	Substantial	FL Department of Environmental Protection	8/11/2006
Wetlands	4	Substantial	US Army Corps of Engineers	8/22/2006
Wetlands	0	None	National Marine Fisheries Service	8/14/2006
Wetlands	4	Substantial	FL Department of Environmental Protection	8/11/2006
Wetlands	5	Dispute Resolution	US Fish and Wildlife Service	7/18/2006
Wildlife and Habitat	4	Substantial	Federal Highway Administration	8/10/2006
Wildlife and Habitat	4	Substantial	FL Fish and Wildlife Conservation Commission	8/04/2006
Wildlife and Habitat	5	Dispute Resolution	US Fish and Wildlife Service	7/18/2006
Cultural				
Historic and Archaeological Sites	0	None	Miccosukee Tribe	7/25/2006
Recreation Areas	4	Substantial	FL Department of Environmental Protection	8/11/2006
Section 4(f) Potential	4	Substantial	Federal Highway Administration	8/10/2006
Community				
Aesthetics	2	Minimal	Palm Beach MPO	8/04/2006
Economic	0	None	Palm Beach MPO	8/04/2006
Land Use	3	Moderate	FL Department of Community Affairs	8/08/2006
Land Use	4	Substantial	Palm Beach MPO	8/04/2006
Mobility	1	Enhanced	Palm Beach MPO	8/04/2006
Relocation	0	None	Palm Beach MPO	8/04/2006
Social	0	None	Palm Beach MPO	8/04/2006
Secondary and Cumulative				
Secondary and Cumulative Effects	4	Substantial	Federal Highway Administration	8/10/2006
Secondary and Cumulative Effects	4	Substantial	FL Fish and Wildlife Conservation Commission	8/04/2006

ETAT Reviews: Natural

Air Quality

Coordinator Summary

0 Summary Degree of Effect

Air Quality Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The proposed alternative is consistent with Air Quality Conformity as stated through the Project Description. USEPA did not identify any Air Quality issues for this alternative; therefore, the summary degree of effect assigned to Air Quality is none.

ETAT Reviews for Air Quality

0 ETAT Review by Maher Budeir, US Environmental Protection Agency (08/12/2006)

Air Quality Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
None found.

Comments on Effects to Resources:
Based on data avaialable, there is no significant impact on air quality.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the Federal Highway Administration

Coastal and Marine

Coordinator Summary

0 Summary Degree of Effect

Coastal and Marine Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative is not located in a coastal or marine area nor is it in the vicinity of any coastal or marine resources. For these reasons, the summary degree effect assigned to Coastal and Marine is none.

ETAT Reviews for Coastal and Marine

No reviews found for the Coastal and Marine Issue.
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the National Marine Fisheries Service
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Contaminated Sites

Coordinator Summary

2 Summary Degree of Effect

Contaminated Sites Summary Degree of Effect: Minimal
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
According to the EST GIS Analysis, one geocoded petroleum tank site is located within 100 feet of Alternative 4. In addition, one hazardous waste site (AT&T Cellular One Lake Park) is located within 500 feet of Alternative 4. However, no designated Brownfield sites, geocoded dry cleaners, solid waste facilities, Superfund sites, or Toxic Release Inventory sites are reported within one-half mile of this alternative. For these reasons, the summary degree of effect assigned to Contaminated Sites is minimal.

ETAT Reviews for Contaminated Sites

2 ETAT Review by Maher Budeir, US Environmental Protection Agency (08/12/2006)

Contaminated Sites Effect: Minimal
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Soil and groundwater

Comments on Effects to Resources:
Two petroleum tanks (Ibis Golf Mantainance and Northern Palm Beach Water Control)and one hazardous waste managemebt site were identified with the 500-ft buffer of Alternative 4. Site specific survey/assessment should be conducted to determine if any contamination exist on the project buffer zone.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the Federal Highway Administration

- No review submitted from the South Florida Water Management District

Farmlands

Coordinator Summary

0 Summary Degree of Effect

Farmlands Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative will not impact any prime farmlands. For this reason, the summary degree effect assigned to Farmlands is none.

ETAT Reviews for Farmlands

No reviews found for the Farmlands Issue.
- No review submitted from the Federal Highway Administration
- No review submitted from the Natural Resources Conservation Service

Floodplains

Coordinator Summary

3 Summary Degree of Effect

Floodplains Summary Degree of Effect: Moderate
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The EST GIS Analysis shows the following acreage of FEMA FIRM floodzones within the project's 500-foot buffer. (A 500-foot buffer was used due to the proposed new 6-lane divided alignment):
Zone A (378 acres): an area inundated by 100-year flooding for which no base elevations have been determined. Zone AO (66 acres): an area inundated by 100-year flooding for which average depths have been determined. Zone X500 (430 acres): an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than one square mile.
Based on these results, 100 percent of the 500-foot buffer for each of the four alternative corridors occurs within a designated floodzone. A Location Hydraulics Report will be prepared for the project and the project will be designed to minimize floodplain impacts and compensate for potential floodplain encroachments. For these reasons, the summary degree of effect assigned to Floodplains is moderate.

ETAT Reviews for Floodplains

No reviews found for the Floodplains Issue.

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Infrastructure

Coordinator Summary

0 Summary Degree of Effect

Infrastructure Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alternative will not have any major impacts to infrastructure; therefore, the summary degree effect assigned to Infrastructure is none.

ETAT Reviews for Infrastructure

No reviews found for the Infrastructure Issue.
- No review submitted from the Federal Highway Administration

Navigation

Coordinator Summary

0 Summary Degree of Effect

Navigation Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The EST GIS Analysis did not report the presence of any navigable waterways within one-half mile of this alternative. This alternative crosses the M Canal; however, this canal has not been identified as a navigable waterway by the Army Corps of Engineers or U.S. Coast Guard. For these reasons, the summary degree of effect assigned to Navigation is none.

ETAT Reviews for Navigation

No reviews found for the Navigation Issue.
- No review submitted from the US Army Corps of Engineers
- No review submitted from the Federal Highway Administration
- No review submitted from the US Coast Guard

Special Designations

Coordinator Summary

5 Summary Degree of Effect

Special Designations Summary Degree of Effect: Dispute Resolution
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
According to the EST GIS Analysis, Alternative 4 is immediately adjacent to both the Pond Cypress Natural Area and Grassy Waters Preserve for most of its length. In addition, the northern terminus of Alternative 4 is located within 200 feet of the Loxahatchee Slough Natural Area. For these reasons, and as a result of the Dispute Resolution process, Alternative 4 has been dropped as an alternative.

ETAT Reviews for Special Designations

5 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/18/2006)

Special Designations Effect: Dispute Resolution
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information:
"Dispute Support" options were not available at the time of the review.

Identified Resources and Level of Importance:
Public Conservation Lands

Comments on Effects to Resources:
Corridor 4 begins at the intersection of Okeechobee Boulevard and proceeds northward along the FDOT right-of-way for approximately 4 miles to Northlake Boulevard. The Service notes that Corridor 4 would indirectly impact uplands and wetlands currently protected for conservation purposes at Pond Cypress Natural Area. These lands include the parcel known as Section 1. Section 1 has been purchased by Palm Beach County as mitigation for impacts to wetlands resulting from the Persimmon Boulevard Extension and will be added to the Pond Cypress Natural Area. The Pond Cypress Natural Area and Section 1 are contiguous with a large block (>10,000 acres) of protected native habitat located directly to the east in the City of West Palm Beachs Water Catchment Area (also known as Grassy Waters Preserve). Pond Cypress Natural Area, Section 1, and the Water Catchment Area currently provide important habitat to variety of species including wading birds, small mammals, reptiles, amphibians, and small fishes. Portions of the wetlands and uplands within the Pond Cypress Natural Area and Section 1 have been impacted by the exotic invasive tree melaleuca (Melaleuca quinquenervia). Moreover, some of the wetlands in Section 1 have been degraded by off-road vehicles. Although these areas have been impacted, the Service notes that they still largely consist of good quality habitat for fish and wildlife. Furthermore, we understand that Palm Beach County intends to develop a management plan for the entire Pond Cypress Natural Area that will result in the removal of melaleuca and prohibit off-road vehicle use. We expect that the management activities proposed will restore areas of degraded habitat and benefit fish and wildlife in the area.

Corridor 4 will result in the direct loss of fish and wildlife habitat and significantly fragment existing habitat in the Pond Cypress Natural Area, Section 1, and the City of West Palm Beachs Water Catchment Area. Fragmentation of habitat adversely affects wildlife by reducing the extent and connectivity of remaining habitats, and eliminating habitat for those species requiring large unbroken blocks of habitat.

Fragmentation may also increase the likelihood of predation for some species, and over time can lead to the loss of genetic diversity, reduce population size and increase the likelihood of local species extinctions (Forman et al. 2003). We believe that Corridor 4 would also result in significant additional habitat loss and fragmentation in the Pond Cypress Natural Area and Section 1 due to the fact that Persimmon Boulevard and 60th Street North would likely be extended by Palm Beach County to tie into Corridor 4.

The northern segment of Corridor 4 borders the City of West Palm Beachs Water Catchment Area. The Service notes that Corridor 4 will result in the direct loss of moderate quality habitat within the this section of the FDOT right-of-way. However, the Service believes that adoption of Corridor 4 will result in significant adverse indirect effects to Fish and Wildlife in the City of West Palm Beachs Water Catchment Area. These effects would consist of disturbance from vehicle noise and vehicle and roadway lights.

The Service was involved in the review of the Palm Beach Countys Persimmon Boulevard Extension project (also known as the Acreage Reliever Road). We worked with the County, and the U.S. Army Corps of Engineers (Corps) to develop an alignment that would minimize fragmentation of fish and wildlife habitat by locating the corridor as far to the west as possible. Fragmentation of habitat adversely affects wildlife by reducing the extent and connectivity of remaining habitats, and eliminating habitat for those species requiring large unbroken blocks of habitat. Fragmentation may also increase the likelihood of predation for some species, and over time can lead to the loss of genetic diversity, reduce population size and increase the likelihood of local species extinctions (Forman et al. 2003). Our planning effort resulted in the adoption by Palm Beach County of the Persimmon Boulevard Extension corridor as illustrated in Figures 1-4 provided in the Project Description. It was our understanding that the extension of State Road 7 to Northlake Boulevard would consist of extending the Persimmon Boulevard corridor as illustrated in Alternatives 1 or 3. Accordingly, we were surprised to now see Coridors 2 and 4 proposed as alternatives for the project. Based on information from Palm Beach Countys consultant, it was the Services understanding that the portion of the FDOT right-of-way that is adjacent to the Section 1 mitigation parcel was included as mitigation for the Persimmon Boulevard Extension Project. The inclusion of this portion of the right-of-way was the basis for the Services concurrence letter to the Corps on the Persimmon Boulevard Extension project (see Attachments 1 and 2 in the Additional Comments Section). Without the inclusion of the FDOT right-of-way as part of the mitigation plan, the Service would have not provided a concurrence letter to the Corps at that time.

Based on the impacts of to fish and wildlife habitat, wetlands, and public conservation lands, we cannot support Corridor 4 as the preferred alternative for the project. We recommend that the FDOT adopt Corridor 1 as the preferred alternative for the project.

LITERATURE CITED

Forman, R.T.T., D. Sperling, J.A. Bissonette, A. Clevenger, C.D. Cutshall, V.H. Dale, L. Fahrig, R. France, C.R. Goldman, K. Heanue, J.A. Jones, F.J. Swanson, T. Turrentine, and T.C. Winter. Road Ecology, Science and Solutions. Island Press, Washington D.C. U.S.A. 481 pages.

Additional Comments (optional):

Attachment 1. Email dated December 1, 2005, from Jim Schnelle, environmental consultant for Palm Beach County to John Wrublik, Fish and Wildlife Service.

To john-wrublik@fws.gov
cc Brandon.Howard@saj02.usace.army.mil
bcc
Subject FDOT ROW
John:
Sorry for any confusion. The FDOT ROW has always been intended to be released to Palm Beach County

as we discussed in the field. My e-mail on July 25 was not meant to confuse you. Deeded Conservation easement contains 544 acres=/-. The FDOT ROW -- 80.6 acres (24-25 acres lie in Section 1 and the balance in Sections 12 & 13) will be incorporated into the Pond Cypress Preserve .The Corps draft SOF states this ROW is forthcoming. I spoke with Brandon yesterday and he told me we have enough mitigation. I tried to get a conference call to you not realizing your office was holding an all day staff meeting. Let me know if I can do anything to clear up any miscommunication I am responsible for, Thanks for calling me this morning at my office. I have been in the field and the best way to reach me is my cell at 561 -662-8849.
Regards,
Jim

Attachment 2. Letter from Service to Corps dated December 13, 2005, on the Acreage Reliever Road project proposed by Palm Beach County.
December 13, 2005
Lawrence C. Evans
US. Army Corps of Engineers
Palm Beach Gardens Regulatory Office
4400 PGA Boulevard, Suite 500
Palm Beach Gardens, Florida 3341 0

Attention: Brandon Howard

Service Log No.: 4-1-05-1 -9856
Corps Application No.: SAJ-2002-8273 (IP-KBH)
Date Received: August 14,2005
Project : Acreage Reliever Road
Applicant: Palm Beach County
County:Palm Beach County

Dear Mrs. Evans:

The Fish and Wildlife Service (Service) has reviewed your Public Notice and other information submitted by the U.S. Army Corps of Engineers (Corps) for the application referenced above.

This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 et seq.) and the provisions of the Fish and Wildlife Coordination Act of 1958, as amended (48 Stat. 401 ; 16 U.S.C. 661 et seq.).

PROJECT DESCRIPTION

The applicant proposes to construct a new four-lane roadway, known as the "Acreage Reliever Road," from Okeechobee Boulevard to 60th Street. The purpose of the project is to improve traffic flow in the area. The project will impact a total of 106 acres of wetlands. Wetlands at the project site consist of hydric pine (Pinus elliottii) flatwoods, wet prairie, and cypress (Taxodium distichurn) wetlands. Some of the wetlands in the project site have been impacted by melaleuca (Melaleuca quinquenewia). As compensation for impacts to wetlands, the applicant had proposed to preserve and enhance 624.6 acres of high-quality wetlands and uplands within Sections 1, 12, 13, and 24, Township 43 South, Range 41 East, and to preserve and enhance 33.3 acres of uplands and wetlands west of the project corridor from 40th Street to 60th Street. Enhancement activities will consist of removal of exotic vegetation. The entire mitigation area will be added to Palm Beach County's Pond Cypress Natural Area. The project is located in Sections 1, 12, 13, 14, an4 24, Township 43 South, Range 41 East, Palm Beach County, Florida.
Lawrence C. Evans

THREATENED AND ENDANGERED SPECIES
Page 2

Wood stork

The project site is located within the core foraging areas (CFA) (i,e., within 18.6 miles) of four active breeding colonies of the endangered wood stork (Mycteria americana). The Service believes that the loss of wetlands within a CFA may reduce foraging opportunities for wood storks. To minimize adverse effects to the wood stork, the Service's Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Horida Ecological Services Consultation Area (Service 2002) (Guidelines) recommends that the applicant replace wetlands lost due to the action. The compensation plan should include a temporal lag factor, if necessary, to ensure that wetlands provided as compensation adequately replace the wetland functions lost due to the project. Moreover, wetlands offered as compensation should be of the same hydroperiod, and located within the CFA of the affected wood stork colony. 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.

The Corps has determined the project "may affect, but is not likely to adversely affect" the wood stork. In our letter to the Corps, dated December 10,2005, the Service noted information provided to the Service by the applicant's consultant indicated the wetlands mitigation proposed for the project had been reduced from 624.6 to 544.0 acres. A total of 80.6 acres of land (currently owned by the Florida Department of Transportation) located along the east side of the mitigation parcel had been removed from the mitigation proposal. The Service stated: (1) the compensation was not adequate to offset the loss of foraging habitat to the wood stork, (2) we could not provide concurrence for the Corps' determination, and (3) we recommended the applicant provide an additional 80.6 acres of mitigation in order to fulfill the original mitigation proposal. Based on recent discussions with the applicant's consultant and the Corps, we now understand this information was incorrect and the parcel is still included in the mitigation proposal. The Corps will require the applicant to preserve the 80.6-acre parcel within 1 year of issuance of the permit, and this will be included as a condition of the permit. Based on this new information, the Service believes the wetlands mitigation proposal is now adequate to compensate for the loss of wood stork foraging habitat, and we concur with the Corps' determination for the wood stork.

FISH AND WILDLIFE RESOURCES

The project will result in impacts to 106 acres of wetlands. The applicant proposes to mitigate the loss of wetlands by preserving and enhancing 624.6 acres of high-quality wetlands and uplands near the project site. The Service believes the proposed mitigation is adequate to compensate for the loss of wetlands resulting from the project.

Lawrence C. Evans Page 3

Thank you for allowing us to provide these comments and for your cooperation and effort in protecting federally listed species. If you have any questions regarding this project, please contact John Wrublik at 772-562-3909, extension 282.

Sincerely yours,
James J. Slack
Field Supervisor
South Florida Ecological Services
cc:
DEP, West Palm Beach, Florida
EPA, West Palm Beach, Florida
FWC, Vero Beach, Florida

LITERATURE CITED
U.S. Fish and Wildlife Service (Service). 2002. Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Florida Ecological Services Consultation Area. Fish and Wildlife Service, South Florida Ecological Services Office; Vero Beach, Florida.

Coordinator Feedback: None

- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Water Quality and Quantity

Coordinator Summary

4 Summary Degree of Effect

Water Quality and Quantity Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:

Because of the concerns stated by FDEP, notably the presence of the City of West Palm Beach Water Catchment Area immediately adjacent to the project, the summary degree of effect assigned to Water Quality and Quantity is substantial.

ETAT Reviews for Water Quality and Quantity

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Water Quality and Quantity Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
Stormwater runoff from the road surface may alter adjacent wetlands and surface waters through increased pollutant loading. 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. 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 pre-development hydroperiod and water quality, as well as to protect the natural functions of adjacent wetlands.

Comments on Effects to Resources:
We recommend that the 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. Increased stormwater runoff carrying oils, greases, metals, sediment, and other pollutants from the increased impervious surface would be of significant concern.

Additional Comments (optional):
The Water Catchment Area for the City of West Palm Beach is immediately adjacent to the project. All activities must be designed to prevent stormwater pollutant contamination of the City's water supply. DEP recommends that the FDOT work to include the City on all decisions affecting this critical area.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District

Wetlands

Coordinator Summary

Summary Degree of Effect

5

Wetlands Summary Degree of Effect: Dispute Resolution
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The following acreage of wetlands and open water habitats are reported by the ETDM GIS Analysis within the 500-foot buffer for each alternative:
National Wetlands Inventory database - 540 acres; Wetlands 2000 database - 528.3 acres; 2003 FFWCC Habitat and Landcover Grid database - 484.8 acres.
The proposed project is a 6-lane divided highway and would occupy much of the 500-foot buffer. Because of the concerns expressed by the agencies, the large area of wetlands occurring within the 500-foot buffer, and as a result of the Dispute Resolution process, Alternative 4 has been dropped as an alternative.

ETAT Reviews for Wetlands

4 ETAT Review by Alisa Zarbo, US Army Corps of Engineers (08/22/2006)

Wetlands Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Wetlands: This area was evaluated and considered in the permitting of the Acreage Reliever Road and has an extremely high level of importance to the Corps. Wildlife corridors were incorporated into the alignment of the Acreage Reliever Road. The Corps would try to keep the same continuity of the corridors when permitting this extension.

Comments on Effects to Resources:
If the roadway was constructed through corridor 4, it would fragment an extremely sensitive greenway and wildlife corridor that exists between the PCNA, the WCA and Section 1. The alignment would isolate the PCNA and the WCA to the extent that reptiles, amphibians and small and large mammals could not easily access the adjacent natural areas. Large natural areas are necessary for certain wildlife to carry out life functions such as feeding and nesting. Smaller isolated areas may accommodate only a few individuals with modest home range requirements. Small mammals and other forest dwelling wildlife have shown an aversion to using areas with less vegetative cover. This would be the case with a four-lane roadway that has a shoulder and median. Although some animals have an aversion to roadways, many attempt to cross and result in collisions that impact both wildlife and humans. During 1990, 431 vehicle collisions with animals (wild and domestic) were serious enough to be reported to the Florida Department of Highway Safety and Motor Vehicles. These accidents resulted in 4 human fatalities and 380 injuries. The average estimated property damage for each accident was $3,395. Corridor 4 could result in extensions, as shown in the Conceptual Analysis Matrix, to access the Acreage. These extensions further fragment the ecosystem and isolate Section 1. Placing the roadway down the Rangeline would put it adjacent to the WCA. The WCA is a Class I potable water supply for the City of West Palm Beach. The roadway run-off would pose serious threats to the Citys drinking water supply. The alternative of using a bridge along the Rangeline would not be a feasible alternative due to it being adjacent to the WCA.

Up to 60th Street, Corridor 3 has been approved by the Corps. From 60th Street the roadway is shown going east along the M-Canal. This portion and the following north south portion of the roadway that ends at Northlake Boulevard would isolate the mitigation area for the Ibis Golf and Country Club. Requirements for the portion of the roadway adjacent to the mitigation area would include fencing on both sides of the roadway, culverts to maintain adequate hydrology, slower speed limits, wildlife crossing signs and culverts

for wildlife crossings or bridges. The wildlife crossings should be placed above the seasonal high water elevation of wetlands but adjacent to wetlands. Wildlife crossings should be placed just above the ecotone of the wetland. The median should also be devoid of vegetation that would give the illusion of a narrow roadway to wildlife. Wildlife is more adverse to crossing wider roadways. Median landscaping plants should not provide a food source for wildlife. This would entice wildlife to cross the roadway and go into the median for food resulting in road kill. This area is within the Loxahatchee River Watershed and to a limited extent the Lake Worth Lagoon.

Additional Comments (optional):
Mitigation efforts should be concentrated in the same watershed. Mitigation options could include widening of the M-Canal and planting a flow through marsh to improve water quality. Mitigation in the WCA may be appropriate for this project.

Coordinator Feedback: None

0 ETAT Review by Madelyn T Martinez, National Marine Fisheries Service (08/14/2006)

Wetlands Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
NONE

Comments on Effects to Resources:
NONE

Additional Comments (optional):
Based on the project location and information provided on the ETDM website, NOAAs National Marine Fisheries Service (NOAA Fisheries) concludes the proposed work would not directly impact areas that support NOAA trust resources. We have no comments or recommendations to provide pursuant to the essential fish habitat (EFH) requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) P.L. 104-297. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Coordinator Feedback: None

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Wetlands Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
The National Wetlands Inventory GIS report indicates that there are 538.51 acres of palustrine and 1.50 acres of riverine wetlands within the 500-ft. project buffer zone. The Wetlands 2000 report indicates that there are 555.80, 25.15, 7.00, 17.87, 2,725.85, 537.77, 269.31, 25.98, 1,450.61, 8.07 and 519.28 acres of cypress, cypress domes, mixed cypress hardwoods, emergent aquatic vegetation, freshwater marsh, mixed schrubs, mixed wetland hardwoods, wet melaleuca, wet pinelands, wet prairies and mixed wetland forests, respectively, within the 5,280-ft. buffer of the project area.

Comments on Effects to Resources:
The project will require an environmental resource permit (ERP) from the South Florida Water Management District. The ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of the roadway extension project to the greatest extent practicable:
- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging 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. All stormwater treatment should be located in upland sites.
- 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 road improvement projects in the vicinity of the subject project should also be addressed.

Additional Comments (optional):
DEP ranks the Corridor 4 Alternative as # 3. Staff has expressed concerns regarding the extreme fragmentation of wildlife habitat by the proposed roadway. The Department strongly recommends bridging ALL wetland crossings to minimize impacts to wetland connectivity/hydroperiod and wildlife corridor functions. Additionally, all stormwater should be conveyed to treatment sites located in upland areas.

Coordinator Feedback: None

5 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/18/2006)

Wetlands Effect: Dispute Resolution
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:
"Dispute Support" options were not available at the time of the review.

Identified Resources and Level of Importance:
wetlands

Comments on Effects to Resources:
Corridor 4 begins at the intersection of Okeechobee Boulevard and proceeds northward along the FDOT right-of-way for approximately 4 miles to Northlake Boulevard. The Service notes that Corridor 4 would indirectly impact uplands and wetlands currently protected for conservation purposes at Pond Cypress Natural Area. These lands include the parcel known as Section 1. Section 1 has been purchased by Palm Beach County as mitigation for impacts to wetlands resulting from the Persimmon Boulevard Extension

and will be added to the Pond Cypress Natural Area. The Pond Cypress Natural Area and Section 1 are contiguous with a large block (>10,000 acres) of protected native habitat located directly to the east in the City of West Palm Beachs Water Catchment Area (also known as Grassy Waters Preserve). Pond Cypress Natural Area, Section 1, and the Water Catchment Area currently provide important habitat to variety of species including wading birds, small mammals, reptiles, amphibians, and small fishes. Portions of the wetlands and uplands within the Pond Cypress Natural Area and Section 1 have been impacted by the exotic invasive tree melaleuca (Melaleuca quinquenervia). Moreover, some of the wetlands in Section 1 have been degraded by off-road vehicles. Although these areas have been impacted, the Service notes that they still largely consist of good quality habitat for fish and wildlife. Furthermore, we understand that Palm Beach County intends to develop a management plan for the entire Pond Cypress Natural Area that will result in the removal of melaleuca and prohibit off-road vehicle use. We expect that the management activities proposed will restore areas of degraded habitat and benefit fish and wildlife in the area.

Corridor 4 will result in the direct loss of fish and wildlife habitat and significantly fragment existing habitat in the Pond Cypress Natural Area, Section 1, and the City of West Palm Beachs Water Catchment Area. Fragmentation of habitat adversely affects wildlife by reducing the extent and connectivity of remaining habitats, and eliminating habitat for those species requiring large unbroken blocks of habitat. Fragmentation may also increase the likelihood of predation for some species, and over time can lead to the loss of genetic diversity, reduce population size and increase the likelihood of local species extinctions (Forman et al. 2003). We believe that Corridor 4 would also result in significant additional habitat loss and fragmentation in the Pond Cypress Natural Area and Section 1 due to the fact that Persimmon Boulevard and 60th Street North would likely be extended by Palm Beach County to tie into Corridor 4.

The northern segment of Corridor 4 borders the City of West Palm Beachs Water Catchment Area. The Service notes that Corridor 4 will result in the direct loss of moderate quality habitat within the this section of the FDOT right-of-way. However, the Service believes that adoption of Corridor 4 will result in significant adverse indirect effects to Fish and Wildlife in the City of West Palm Beachs Water Catchment Area. These effects would consist of disturbance from vehicle noise and vehicle and roadway lights.

The Service was involved in the review of the Palm Beach Countys Persimmon Boulevard Extension project (also known as the Acreage Reliever Road). We worked with the County, and the U.S. Army Corps of Engineers (Corps) to develop an alignment that would minimize fragmentation of fish and wildlife habitat by locating the corridor as far to the west as possible. Fragmentation of habitat adversely affects wildlife by reducing the extent and connectivity of remaining habitats, and eliminating habitat for those species requiring large unbroken blocks of habitat. Fragmentation may also increase the likelihood of predation for some species, and over time can lead to the loss of genetic diversity, reduce population size and increase the likelihood of local species extinctions (Forman et al. 2003). Our planning effort resulted in the adoption by Palm Beach County of the Persimmon Boulevard Extension corridor as illustrated in Figures 1-4 provided in the Project Description. It was our understanding that the extension of State Road 7 to Northlake Boulevard would consist of extending the Persimmon Boulevard corridor as illustrated in Alternatives 1 or 3. Accordingly, we were surprised to now see Coridors 2 and 4 proposed as alternatives for the project. Based on information from Palm Beach Countys consultant, it was the Services understanding that the portion of the FDOT right-of-way that is adjacent to the Section 1 mitigation parcel was included as mitigation for the Persimmon Boulevard Extension Project. The inclusion of this portion of the right-of-way was the basis for the Services concurrence letter to the Corps on the Persimmon Boulevard Extension project (see Attachments 1 and 2 in the Additional Comments section). Without the inclusion of the FDOT right-of-way as part of the mitigation plan, the Service would have not provided a concurrence letter to the Corps at that time.

Based on the impacts of to fish and wildlife habitat, wetlands, and public conservation lands, we cannot support Corridor 4 as the preferred alternative for the project. We recommend that the FDOT adopt Corridor 1 as the preferred alternative for the project.

LITERATURE CITED

Forman, R.T.T., D. Sperling, J.A. Bissonette, A. Clevenger, C.D. Cutshall, V.H. Dale, L. Fahrig, R. France,

C.R. Goldman, K. Heanue, J.A. Jones, F.J. Swanson, T. Turrentine, and T.C. Winter. Road Ecology, Science and Solutions. Island Press, Washington D.C. U.S.A. 481 pages.

Additional Comments (optional):
Attachment 1. Email dated December 1, 2005, from Jim Schnelle, environmental consultant for Palm Beach County to John Wrublik, Fish and Wildlife Service.

To john-wrublik@fws.gov
cc Brandon.Howard@saj02.usace.army.mil
bcc
Subject FDOT ROW
John:
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December 13, 2005
Lawrence C. Evans
US. Army Corps of Engineers

Palm Beach Gardens Regulatory Office
4400 PGA Boulevard, Suite 500
Palm Beach Gardens, Florida 3341 0

Attention: Brandon Howard

Service Log No.: 4-1-05-1 -9856
Corps Application No.: SAJ-2002-8273 (IP-KBH)
Date Received: August 14,2005
Project : Acreage Reliever Road
Applicant: Palm Beach County
County:Palm Beach County

Dear Mrs. Evans:

The Fish and Wildlife Service (Service) has reviewed your Public Notice and other information submitted by the U.S. Army Corps of Engineers (Corps) for the application referenced above. This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 et seq.) and the provisions of the Fish and Wildlife Coordination Act of 1958, as amended (48 Stat. 401 ; 16 U.S.C. 661 et seq.).

PROJECT DESCRIPTION

The applicant proposes to construct a new four-lane roadway, known as the "Acreage Reliever Road," from Okeechobee Boulevard to 60th Street. The purpose of the project is to improve traffic flow in the area. The project will impact a total of 106 acres of wetlands. Wetlands at the project site consist of hydric pine (Pinus elliottii) flatwoods, wet prairie, and cypress (Taxodium distichurn) wetlands. Some of the wetlands in the project site have been impacted by melaleuca (Melaleuca quinquenewia). As compensation for impacts to wetlands, the applicant had proposed to preserve and enhance 624.6 acres of high-quality wetlands and uplands within Sections 1, 12, 13, and 24, Township 43 South, Range 41 East, and to preserve and enhance 33.3 acres of uplands and wetlands west of the project corridor from 40th Street to 60th Street. Enhancement activities will consist of removal of exotic vegetation. The entire mitigation area will be added to Palm Beach County's Pond Cypress Natural Area. The project is located in Sections 1, 12, 13, 14, an4 24, Township 43 South, Range 41 East, Palm Beach County, Florida.
Lawrence C. Evans

THREATENED AND ENDANGERED SPECIES
Page 2

Wood stork

The project site is located within the core foraging areas (CFA) (i,e., within 18.6 miles) of four active breeding colonies of the endangered wood stork (Mycteria americana). The Service believes that the loss of wetlands within a CFA may reduce foraging opportunities for wood storks. To minimize adverse effects to the wood stork, the Service's Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Horida Ecological Services Consultation Area (Service 2002) (Guidelines) recommends that the applicant replace wetlands lost due to the action. The compensation plan should include a temporal lag factor, if necessary, to ensure that wetlands provided as compensation adequately replace the wetland functions lost due to the project. Moreover, wetlands offered as compensation should be of the same hydroperiod, and located within the CFA of the affected wood stork colony. 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.

The Corps has determined the project "may affect, but is not likely to adversely affect" the wood stork. In our letter to the Corps, dated December 10,2005, the Service noted information provided to the Service by the applicant's consultant indicated the wetlands mitigation proposed for the project had been reduced from 624.6 to 544.0 acres. A total of 80.6 acres of land (currently owned by the Florida Department of Transportation) located along the east side of the mitigation parcel had been removed from the mitigation proposal. The Service stated: (1) the compensation was not adequate to offset the loss of foraging habitat to the wood stork, (2) we could not provide concurrence for the Corps' determination, and (3) we recommended the applicant provide an additional 80.6 acres of mitigation in order to fulfill the original mitigation proposal. Based on recent discussions with the applicant's consultant and the Corps, we now understand this information was incorrect and the parcel is still included in the mitigation proposal. The Corps will require the applicant to preserve the 80.6-acre parcel within 1 year of issuance of the permit, and this will be included as a condition of the permit. Based on this new information, the Service believes the wetlands mitigation proposal is now adequate to compensate for the loss of wood stork foraging habitat, and we concur with the Corps' determination for the wood stork.

FISH AND WILDLIFE RESOURCES

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Lawrence C. Evans Page 3

Thank you for allowing us to provide these comments and for your cooperation and effort in protecting federally listed species. If you have any questions regarding this project, please contact John Wrublik at 772-562-3909, extension 282.

Sincerely yours,
James J. Slack
Field Supervisor
South Florida Ecological Services
cc:
DEP, West Palm Beach, Florida
EPA, West Palm Beach, Florida
FWC, Vero Beach, Florida

LITERATURE CITED
U.S. Fish and Wildlife Service (Service). 2002. Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Florida Ecological Services Consultation Area. Fish and Wildlife Service, South Florida Ecological Services Office; Vero Beach, Florida.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration

- No review submitted from the South Florida Water Management District

Wildlife and Habitat

Coordinator Summary

5 Summary Degree of Effect

Wildlife and Habitat Summary Degree of Effect: Dispute Resolution
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Both the FFWCC and USFWS indicated that several state and federally listed species may occur within the project area. Although no listed species occurrences are reported within the 500-foot buffer for this alternative, there is a high likelihood of occurrence of listed wading birds and wood storks because of the large area of wetlands present along this alignment. This alternative is also adjacent to publicly owned conservation lands. In addition, the 500-foot buffer for this alternative contains pineland that requires prescribed burning for habitat management. For these reasons, and as a result of the Dispute Resolution process, Alternative 4 has been dropped as an alternative.

ETAT Reviews for Wildlife and Habitat

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Wildlife and Habitat Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
Habitat resources.

Comments on Effects to Resources:
See secondary and cumulative impacts comments.

Coordinator Feedback: None

4 ETAT Review by Scott Sanders, FL Fish and Wildlife Conservation Commission (08/04/2006)

Wildlife and Habitat Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

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 #8127 in Palm Beach County, and provides the following comments related to potential impacts to fish and wildlife resources for this Programming Phase project.

The proposed project involves an evaluation of need to extend SR 7 from SR 704 (Okeechobee Boulevard) to Northlake Boulevard in Palm Beach County. Four corridors and a No-Build option have been identified for the project.

Corridor 4 would begin at the intersection of Okeechobee Boulevard and SR 7, follow FDOTs existing Right-of-way, crosse the M Canal, and terminate at Northlake Boulevard. This alignment is referred to as the Range Line alignment.

This project was reviewed under the Advanced Notification process through the Florida State Clearinghouse at the Florida Department of Environmental Protection under SAI FL200506231187C (letter dated August 10, 2005, attached), and SAI# 9811160726C (letter dated December 2, 1998, attached). These FWC letters provide a detailed overview of project resources, including listed wildlife and plant species, potential impacts, and a course of action to reduce these impacts. We have reviewed these letters, and our previous comments remain applicable to the currently proposed project.

A GIS analysis of fish and wildlife and habitat resources was conducted using the Environmental Screening Tool (EST), and those results indicate that very similar upland and wetland habitat types are present along all four corridors. Uplands within 500 feet of the proposed Corridor 4 include mixed pine-hardwood forest, pinelands, upland hardwood hammock, and dry prairie. Wetlands along this corridor include cypress swamp, cypress/pine/cabbage palm, freshwater marsh and wet prairie, hardwood swamp, mixed wetland forests, open water, sawgrass marsh, and shrub swamp. Approximately 16.3 percent of the land within 500 feet of the corridor is in high and low impact urban land uses.

An all-inclusive accounting of the species listed by FWC which may occur in and adjacent to the project area include the eastern indigo snake (Threatened [T]), Florida pine snake (Species of Special Concern [SSC]), gopher tortoise (SSC), Shermans fox squirrel (SSC), Florida mouse (SSC), little blue heron (SSC), tricolored heron (SSC), white ibis (SSC), wood stork (E), snail kite (E), bald eagle (T), crested caracara (T), southeastern kestrel (T), limpkin (SSC), Florida sandhill crane (T), Florida burrowing owl (SSC), and red-cockaded woodpecker (SSC). The presence or absence of some of these species within the project area is highly dependent on habitat type, plant successional stage, habitat quality, and site drainage conditions.

Habitat quality within 500 feet of the Right-of-way (ROW) for Corridor 4 was evaluated using natural resource data layers in the EST. FWCs Biodiversity Hotspots data layer shows that 46.3 percent of the area is capable of supporting three to four, and 5 to 6 focal species. According to FWCs Integrated Wildlife Habitat Ranking System map, a total of 63.5 percent of this zone along the corridor has been assigned a score of from 6 to 8 (Scale 1 = Low, 10 = High) which ranks as good to excellent quality. According to FWCs Priority Wetlands Map for wetlands dependent listed species, 38.7 percent of the habitat along the proposed roadway zone is ranked as capable of supporting 1 to 3 focal species in uplands, and 4 to 6 focal species in wetlands. Within this zone along the corridor, public and managed lands include the Loxahatchee Slough Natural Area, Grassy Waters Preserve, and the Pond Cypress Natural Area. A total of 31.6 percent of the zone along Corridor 4 has been designated by FWC as Strategic Habitat Conservation Areas for the limpkin, wading birds, and the short-tailed hawk. Corridor 4 has the highest acreage of native wetlands, and the second highest extent of native upland habitats of the four corridors.

Comments on Effects to Resources:
Direct impacts to fish and wildlife from this project corridor could be substantial due to the significant amount of quality wetlands and uplands found along the corridor. Impacts could include habitat loss from roadway and Drainage Retention Area (DRA) construction, which would adversely affect a number of

listed wildlife species. Due to the close proximity of three public land tracts, this corridor will potentially have substantial direct impacts on public lands.

Additional Comments (optional):
In order to reduce the impacts to fish and wildlife resources and important habitat, we continue to recommend that the existing road network be improved in order to resolve the current transportation need. If through further study, this proves not to be feasible, we recommend the selection of Corridor 1, which will have less impact on natural resources.

We recommend the following measures be considered during the Project Development and Environment (PD&E) Study to avoid, minimize, and mitigate project impacts to listed species and habitat:

1. A vegetative cover map and accounting by acreage for each plant community type should be made for the affected project area. Compensatory mitigation for all upland and wetlands habitat loss should be required. If wetlands are mitigated under the provisions of Chapter 373.4137 F.S., the proposed mitigation sites should be located within the immediate or same regional area, functionally equivalent, equal to or of higher functional value, and as or more productive as the wetlands impacted by the project.

2. Surveys for listed species should be performed within and adjacent to the ROW and proposed sites for DRAs during the PD&E Study. The methodology for these surveys should be coordinated with FWC, and follow appropriate survey techniques or guidelines to determine presence, absence or probability of occurrence of various species, and to assess habitat quality. These study methods should be designed considering the potential listed species discussed above.

3. Based on the survey results, a plan should also be developed to address direct, secondary, and cumulative impacts of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures, including compensatory replacement for both upland and wetlands habitat loss, should also be addressed. Land acquisition and restoration of appropriate tracts adjacent to existing public lands, or tracts placed under conservation easement located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas, would be biologically appropriate and supported by our agency.

4. The PD&E Study should also include an investigation of the design, cost, location, and construction techniques for longer bridges over canals, sloughs, and their floodplains, and wetlands, which would improve hydrological and floodplain functioning, and minimize wetlands fill. These improved structures would also reduce roadkills and provide improved habitat connectivity for wildlife species such as whitetail deer, bobcat, river otter, and other upland, transitional, and aquatic species that use wetlands riparian systems within the project area.

5. Habitat impacts in both uplands and wetlands may be avoided where possible by interchangeably designing the road expansion along those areas where less habitat resources occur. In addition, using the median and roadside swales for treating roadside runoff would reduce the need for some off-site DRAs, and assist in reducing habitat loss.

6. Construction equipment staging areas; storage of oils, greases, and fuel; fill and roadbed material; and vehicle maintenance activities should be sited in previously disturbed areas far removed from streams, wetlands, or surface water bodies. Staging areas, along with borrow areas, should also be surveyed for listed species.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Steve Lau in our Vero Beach Office at (772) 778-5094 for further coordination on this project.

Coordinator Feedback: None

5 ETAT Review by John Wrublik, US Fish and Wildlife Service (07/18/2006)

Wildlife and Habitat Effect: Dispute Resolution
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information:
"Dispute Support" options were not available at the time of the review.

Identified Resources and Level of Importance:
Federally Listed Species and Fish and Wildlife Resources

Comments on Effects to Resources:
Service Comments, 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.

The Service believes that the following federally listed species have the potential to occur in or near the project site: wood stork, Everglade snail kite (Rostrhamus sociabilis plumbeus) and eastern indigo snake (Drymarchon corais couperi), as well as the federally protected plants listed at the link for Palm Beach County at our web site (http://www.fws.gov /verobeach/ Species_lists/ PDF-lists/Palm Beach County.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 FDOTs Project Development and Environment process.

Service comments Fish and Wildlife Habitat, Wetlands, and Special Designations:

Corridor 4

Corridor 4 begins at the intersection of Okeechobee Boulevard and proceeds northward along the FDOT right-of-way for approximately 4 miles to Northlake Boulevard. The Service notes that Corridor 4 would indirectly impact uplands and wetlands currently protected for conservation purposes at Pond Cypress Natural Area. These lands include the parcel known as Section 1. Section 1 has been purchased by Palm Beach County as mitigation for impacts to wetlands resulting from the Persimmon Boulevard Extension

and will be added to the Pond Cypress Natural Area. The Pond Cypress Natural Area and Section 1 are contiguous with a large block (>10,000 acres) of protected native habitat located directly to the east in the City of West Palm Beachs Water Catchment Area (also known as Grassy Waters Preserve). Pond Cypress Natural Area, Section 1, and the Water Catchment Area currently provide important habitat to variety of species including wading birds, small mammals, reptiles, amphibians, and small fishes. Portions of the wetlands and uplands within the Pond Cypress Natural Area and Section 1 have been impacted by the exotic invasive tree melaleuca (Melaleuca quinquenervia). Moreover, some of the wetlands in Section 1 have been degraded by off-road vehicles. Although these areas have been impacted, the Service notes that they still largely consist of good quality habitat for fish and wildlife. Furthermore, we understand that Palm Beach County intends to develop a management plan for the entire Pond Cypress Natural Area that will result in the removal of melaleuca and prohibit off-road vehicle use. We expect that the management activities proposed will restore areas of degraded habitat and benefit fish and wildlife in the area.

Corridor 4 will result in the direct loss of fish and wildlife habitat and significantly fragment existing habitat in the Pond Cypress Natural Area, Section 1, and the City of West Palm Beachs Water Catchment Area. Fragmentation of habitat adversely affects wildlife by reducing the extent and connectivity of remaining habitats, and eliminating habitat for those species requiring large unbroken blocks of habitat. Fragmentation may also increase the likelihood of predation for some species, and over time can lead to the loss of genetic diversity, reduce population size and increase the likelihood of local species extinctions (Forman et al. 2003). We believe that Corridor 4 would also result in significant additional habitat loss and fragmentation in the Pond Cypress Natural Area and Section 1 due to the fact that Persimmon Boulevard and 60th Street North would likely be extended by Palm Beach County to tie into Corridor 4.

The northern segment of Corridor 4 borders the City of West Palm Beachs Water Catchment Area. The Service notes that Corridor 4 will result in the direct loss of moderate quality habitat within the this section of the FDOT right-of-way. However, the Service believes that adoption of Corridor 4 will result in significant adverse indirect effects to Fish and Wildlife in the City of West Palm Beachs Water Catchment Area. These effects would consist of disturbance from vehicle noise and vehicle and roadway lights.

The Service was involved in the review of the Palm Beach Countys Persimmon Boulevard Extension project (also known as the Acreage Reliever Road). We worked with the County, and the U.S. Army Corps of Engineers (Corps) to develop an alignment that would minimize fragmentation of fish and wildlife habitat by locating the corridor as far to the west as possible. Fragmentation of habitat adversely affects wildlife by reducing the extent and connectivity of remaining habitats, and eliminating habitat for those species requiring large unbroken blocks of habitat. Fragmentation may also increase the likelihood of predation for some species, and over time can lead to the loss of genetic diversity, reduce population size and increase the likelihood of local species extinctions (Forman et al. 2003). Our planning effort resulted in the adoption by Palm Beach County of the Persimmon Boulevard Extension corridor as illustrated in Figures 1-4 provided in the Project Description. It was our understanding that the extension of State Road 7 to Northlake Boulevard would consist of extending the Persimmon Boulevard corridor as illustrated in Alternatives 1 or 3. Accordingly, we were surprised to now see Coridors 2 and 4 proposed as alternatives for the project. Based on information from Palm Beach Countys consultant, it was the Services understanding that the portion of the FDOT right-of-way that is adjacent to the Section 1 mitigation parcel was included as mitigation for the Persimmon Boulevard Extension Project. The inclusion of this portion of the right-of-way was the basis for the Services concurrence letter to the Corps on the Persimmon Boulevard Extension project (see Attachments 1 and 2 in Additional Comments). Without the inclusion of the FDOT right-of-way as part of the mitigation plan, the Service would have not provided a concurrence letter to the Corps at that time.

Based on the impacts of to fish and wildlife habitat, wetlands, and public conservation lands, we cannot support Corridor 4 as the preferred alternative for the project. We recommend that the FDOT adopt Corridor 1 as the preferred alternative for the project.

LITERATURE CITED

Forman, R.T.T., D. Sperling, J.A. Bissonette, A. Clevenger, C.D. Cutshall, V.H. Dale, L. Fahrig, R. France,

C.R. Goldman, K. Heanue, J.A. Jones, F.J. Swanson, T. Turrentine, and T.C. Winter. Road Ecology, Science and Solutions. Island Press, Washington D.C. U.S.A. 481 pages.

Additional Comments (optional):
Attachment 1. Email dated December 1, 2005, from Jim Schnelle, environmental consultant for Palm Beach County to John Wrublik, Fish and Wildlife Service.

To john-wrublik@fws.gov
cc Brandon.Howard@saj02.usace.army.mil
bcc
Subject FDOT ROW
John:
Sorry for any confusion. The FDOT ROW has always been intended to be released to Palm Beach County as we discussed in the field. My e-mail on July 25 was not meant to confuse you. Deeded Conservation easement contains 544 acres=/-. The FDOT ROW -- 80.6 acres (24-25 acres lie in Section 1 and the balance in Sections 12 & 13) will be incorporated into the Pond Cypress Preserve .The Corps draft SOF states this ROW is forthcoming. I spoke with Brandon yesterday and he told me we have enough mitigation. I tried to get a conference call to you not realizing your office was holding an all day staff meeting. Let me know if I can do anything to clear up any miscommunication I am responsible for, Thanks for calling me this morning at my office. I have been in the field and the best way to reach me is my cell at 561 -662-8849.
Regards,
Jim

Attachment 2. Letter from Service to Corps dated December 13, 2005, on the Acreage Reliever Road project proposed by Palm Beach County.
December 13, 2005
Lawrence C. Evans
US. Army Corps of Engineers
Palm Beach Gardens Regulatory Office
4400 PGA Boulevard, Suite 500
Palm Beach Gardens, Florida 3341 0

Attention: Brandon Howard

Service Log No.: 4-1-05-1 -9856
Corps Application No.: SAJ-2002-8273 (IP-KBH)
Date Received: August 14,2005
Project : Acreage Reliever Road
Applicant: Palm Beach County
County:Palm Beach County

Dear Mrs. Evans:

The Fish and Wildlife Service (Service) has reviewed your Public Notice and other information submitted by the U.S. Army Corps of Engineers (Corps) for the application referenced above. This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 et seq.) and the provisions of the Fish and Wildlife Coordination Act of 1958, as amended (48 Stat. 401 ; 16 U.S.C. 661 et seq.).

PROJECT DESCRIPTION

The applicant proposes to construct a new four-lane roadway, known as the "Acreage Reliever Road," from Okeechobee Boulevard to 60th Street. The purpose of the project is to improve traffic flow in the area. The project will impact a total of 106 acres of wetlands. Wetlands at the project site consist of hydric pine (Pinus elliottii) flatwoods, wet prairie, and cypress (Taxodium distichurn) wetlands. Some of the wetlands in the project site have been impacted by melaleuca (Melaleuca quinquenewia). As compensation for impacts to wetlands, the applicant had proposed to preserve and enhance 624.6 acres of high-quality wetlands and uplands within Sections 1, 12, 13, and 24, Township 43 South, Range 41 East, and to preserve and enhance 33.3 acres of uplands and wetlands west of the project corridor from 40th Street to 60th Street. Enhancement activities will consist of removal of exotic vegetation. The entire mitigation area will be added to Palm Beach County's Pond Cypress Natural Area. The project is located in Sections 1, 12, 13, 14, an4 24, Township 43 South, Range 41 East, Palm Beach County, Florida.
Lawrence C. Evans

THREATENED AND ENDANGERED SPECIES
Page 2

Wood stork

The project site is located within the core foraging areas (CFA) (i,e., within 18.6 miles) of four active breeding colonies of the endangered wood stork (Mycteria americana). The Service believes that the loss of wetlands within a CFA may reduce foraging opportunities for wood storks. To minimize adverse effects to the wood stork, the Service's Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Horida Ecological Services Consultation Area (Service 2002) (Guidelines) recommends that the applicant replace wetlands lost due to the action. The compensation plan should include a temporal lag factor, if necessary, to ensure that wetlands provided as compensation adequately replace the wetland functions lost due to the project. Moreover, wetlands offered as compensation should be of the same hydroperiod, and located within the CFA of the affected wood stork colony. 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.

The Corps has determined the project "may affect, but is not likely to adversely affect" the wood stork. In our letter to the Corps, dated December 10,2005, the Service noted information

provided to the Service by the applicant's consultant indicated the wetlands mitigation proposed for the project had been reduced from 624.6 to 544.0 acres. A total of 80.6 acres of land (currently owned by the Florida Department of Transportation) located along the east side of the mitigation parcel had been removed from the mitigation proposal. The Service stated: (1) the compensation was not adequate to offset the loss of foraging habitat to the wood stork, (2) we could not provide concurrence for the Corps' determination, and (3) we recommended the applicant provide an additional 80.6 acres of mitigation in order to fulfill the original mitigation proposal. Based on recent discussions with the applicant's consultant and the Corps, we now understand this information was incorrect and the parcel is still included in the mitigation proposal. The Corps will require the applicant to preserve the 80.6-acre parcel within 1 year of issuance of the permit, and this will be included as a condition of the permit. Based on this new information, the Service believes the wetlands mitigation proposal is now adequate to compensate for the loss of wood stork foraging habitat, and we concur with the Corps' determination for the wood stork.

FISH AND WILDLIFE RESOURCES

The project will result in impacts to 106 acres of wetlands. The applicant proposes to mitigate the loss of wetlands by preserving and enhancing 624.6 acres of high-quality wetlands and uplands near the project site. The Service believes the proposed mitigation is adequate to compensate for the loss of wetlands resulting from the project.

Lawrence C. Evans Page 3

Thank you for allowing us to provide these comments and for your cooperation and effort in protecting federally listed species. If you have any questions regarding this project, please contact John Wrublik at 772-562-3909, extension 282.

Sincerely yours,
James J. Slack
Field Supervisor
South Florida Ecological Services
cc:
DEP, West Palm Beach, Florida
EPA, West Palm Beach, Florida
FWC, Vero Beach, Florida

LITERATURE CITED
U.S. Fish and Wildlife Service (Service). 2002. Draft Supplemental Habitat Management Guidelines for the Wood Stork in the South Florida Ecological Services Consultation Area. Fish and Wildlife Service, South Florida Ecological Services Office; Vero Beach, Florida.

Coordinator Feedback: None

- No review submitted from the FL Department of Agriculture and Consumer Services
- No review submitted from the US Forest Service

ETAT Reviews: Cultural

Historic and Archaeological Sites

Coordinator Summary

0 Summary Degree of Effect

Historic and Archaeological Sites Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
The 2000 Cultural Resource Assessment Survey (DHR Survey #6173), the GIS analysis, and comments from FDOS and the Miccosukee Tribe of Indians of Florida indicate that this alignment will have no effect on any archaeological or historic resources.

ETAT Reviews for Historic and Archaeological Sites

0 ETAT Review by Steve Terry, Miccosukee Tribe (07/25/2006)

Historic and Archaeological Sites Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
None found.

Comments on Effects to Resources:
None found.

Coordinator Feedback: None

- No review submitted from the FL Department of State
- No review submitted from the Federal Highway Administration
- No review submitted from the Seminole Tribe

Recreation Areas

Coordinator Summary

4 Summary Degree of Effect

Recreation Areas Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)

Comments:
The GIS Analysis and comments from FDEP indicate that three designated public conservation lands are located within the vicinity of this alignment. As indicated by the Florida Natural Areas Inventory, these lands contain significant natural communities and numerous element occurrences of listed species. These lands are also important in terms of natural function such as flood control, filtering storm water runoff, aquifer recharge, etc. The potential impact of this alignment to these lands is determined to be substantial as it will cause wildlife habitat fragmentation.

ETAT Reviews for Recreation Areas

4 ETAT Review by Lauren P. Milligan, FL Department of Environmental Protection (08/11/2006)

Recreation Areas Effect: Substantial
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
The following public conservation lands are located in the vicinity of this project: the Grassy Waters Preserve, Loxahatchee Slough Natural Area and Pond Cypress Natural Area.

Comments on Effects to Resources:
These lands contain significant natural communities and numerous element occurrences of listed species, as indicated by the Florida Natural Areas Inventory. The Department is interested in preserving the area's natural communities, wildlife corridor functions, natural flood control, stormwater runoff filtering capabilities, aquifer recharge potential, contributions to regional spring complexes, and recreational trail opportunities. Therefore, future environmental documentation should include an evaluation of the primary, secondary, and cumulative impacts of the proposed roadway widening construction on the above public lands and any proposed acquisition sites.

Additional Comments (optional):
Staff has expressed concerns regarding the extreme fragmentation of wildlife habitat by the proposed roadway. The Department strongly recommends bridging ALL wetland crossings to minimize impacts to wetland connectivity/hydroperiod and wildlife corridor functions.

Coordinator Feedback: None

- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration
- No review submitted from the South Florida Water Management District
- No review submitted from the National Park Service

Section 4(f) Potential

Coordinator Summary

4 Summary Degree of Effect

Section 4(f) Potential Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
The GIS Analysis and comments from FHWA indicate that although this alignment is adjacent to conservation land, a future extension could have substantial impacts to other conservation lands within the project area. A Determination of Applicability will be required. Section 4(f) involvement could be anticipated. For these reasons, the summary degree of effect for this alignment is determined to be substantial.

ETAT Reviews for Section 4(f) Potential

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Section 4(f) Potential Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Grassy Waters Preserve and Loxahatchee Slough Natural Area

Comments on Effects to Resources:
The EST indicates that the alignment is adjacent to the Grassy Waters Preserve. Section 4(f) involvement could be anticipated and a determination of applicability is required. A future extension could have substantial impacts to the Loxahatchee Slough Natural Area.

Coordinator Feedback: None

ETAT Reviews: Community

Aesthetics

Coordinator Summary

2 Summary Degree of Effect

Aesthetics Summary Degree of Effect: Minimal
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
Comments from the Palm Beach County MPO indicate that this alignment is not anticipated to impact community aesthetics as few residences/ noise sensitive receivers are present. This alignment is located

furthest from residential areas. Based on these reasons, the summary degree of effect assigned to Aesthetics for this alignment is minimal.

ETAT Reviews for Aesthetics

2 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Aesthetics Effect: Minimal
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
Minimal impact to residential communities will be realized from noise or vibration.

Comments on Effects to Resources:
This alignment is located furthest from residential communities.

Additional Comments (optional):
None

CLC Commitments and Recommendations:
None.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Economic

Coordinator Summary

0 Summary Degree of Effect

Economic Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that there are no businesses located along this alignment. Therefore, the summary degree of effect assigned to Economics for this alignment is none.

ETAT Reviews for Economic

0 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Economic Effect: None
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
No business interests are located along this alignment.

Comments on Effects to Resources:
This alignment is furthest away from residential communities and may not be as accessbile to employment centers to the north and south of established neighborhoods.

Additional Comments (optional):
None.

CLC Commitments and Recommendations:
None.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Land Use

Coordinator Summary

4 Summary Degree of Effect

Land Use Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
While this alignment is consistent with the Palm Beach County Future Transportation Map, comments from FHWA and the Palm Beach County MPO indicate that this alignment will substantially impact the natural environment. Therefore, the summary degree of effect assigned to Land Use for this alignment is substantial.

ETAT Reviews for Land Use

3 ETAT Review by Gary Donaldson, FL Department of Community Affairs (08/08/2006)

Land Use Effect: Moderate
Coordination Document: *The "Coordination Document" option was not available at the time of the review.*

Dispute Information: N/A

Identified Resources and Level of Importance:
The Department of Community Affairs (DCA) has reviewed the referenced project and, based on current information, this project (Alternatives 1 and 2) are not addressed within the local governments comprehensive plan. However, Alternative 4 is consistent with the Palm Beach County Future Transportation Map.

The Department is supportive of Alternative 3 as the preferred alignment because adverse environmental impacts to Grassy Waters Preserve and Pond Cypress Natural Area are minimized. Additionally, the proposed alignment is consistent with the recently approved Notice of Proposed Change (NOPC) for the Fox Property Development of Regional Impact (DRI). However, this alternative has not been identified in the local government comprehensive plan. Therefore, if Alternative 3 is selected as the preferred alignment, as per DCA preference, the project should not be advanced into the Department of Transportations Five Year Work Program until the comprehensive plan is amended to reflect the proposed roadway modification.

Staff will make a determination of the consistency of the proposed roadway with the respective comprehensive plan when the comprehensive plan is amended to include the selected roadway alternative on an adopted future transportation map and improvement five year schedule.

Comments on Effects to Resources:
see above

Coordinator Feedback: None

4 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Land Use Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
A substantial impact may be realized by the WPB Water Catchment Area and the wetland and floodplain encroachment as the alignment runs six miles into environmentally sensitive areas.

Comments on Effects to Resources:
This alignment may not be compatible with land use plans.

Additional Comments (optional):
Only 2 acres of right-of-way would need to be acquired.

CLC Commitments and Recommendations:
No further comment.
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Mobility

Coordinator Summary

1 Summary Degree of Effect

Mobility Summary Degree of Effect: Enhanced
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
Comments from the Palm Beach County MPO indicate that this alignment will enhance bicycle and pedestrian mobility, which, in turn, will improve connectivity between communities. Based on these reasons, the summary degree of effect assigned to Mobility for this alignment is enhanced.

ETAT Reviews for Mobility

1 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Mobility Effect: Enhanced
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
Bicycle/pedestrian mobility will be enhanced.

Comments on Effects to Resources:
Bicycle and pedestrian lanes along the corridor would create connectivity between northern and southern communities.

Additional Comments (optional):
None.

CLC Commitments and Recommendations:
None
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration
- No review submitted from the Federal Transit Administration

Relocation

Coordinator Summary

0 Summary Degree of Effect

Relocation Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
No residential properties will be impacted by this alignment; therefore, the summary degree of effect assigned to Relocation for this alignment is none.

ETAT Reviews for Relocation

0 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Relocation Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
There are no residential of homes with this alignment.

Comments on Effects to Resources:
None

Additional Comments (optional):
None

CLC Commitments and Recommendations:
None
Coordinator Feedback: None

- No review submitted from the Federal Highway Administration

Social

Coordinator Summary

0 Summary Degree of Effect

Social Summary Degree of Effect: None
Reviewed By:
FDOT District 4 (4/24/2007)
Comments:
This alignment will have little or no impact on minority or low income populations. In addition, no residential

properties will be impacted by this alignment. Based on these reasons, the summary degree of effect assigned to Social for this alignment is none.

ETAT Reviews for Social

0 ETAT Review by Patricia Masterman, Palm Beach MPO (08/04/2006)

Social Effect: None
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

Identified Resources and Level of Importance:
This alignment will have little or no impact on minority or low income populations.

Comments on Effects to Resources:
Since this alignment is located in the middle of the wetlands there is no impact on established residential neighborhoods.

Additional Comments (optional):
There may be limited enhancement on quality of life with this alignment as far as emergency services for communities between Okeechobee and Northlake Boulevards, however the residential communities to the west of the alignment will most likely feel little change in services.

CLC Commitments and Recommendations:
No further comment.
Coordinator Feedback: None

- No review submitted from the FL Department of Community Affairs
- No review submitted from the FL Department of Environmental Protection
- No review submitted from the US Environmental Protection Agency
- No review submitted from the Federal Highway Administration

ETAT Reviews: Secondary and Cumulative

Secondary and Cumulative Effects

Coordinator Summary

4 Summary Degree of Effect

Secondary and Cumulative Effects Summary Degree of Effect: Substantial
Reviewed By:
FDOT District 4 (4/25/2007)
Comments:
Comments from FFWCC and FHWA indicate that this alignment, in particular, is anticipated to have substantial

secondary and cumulative effects on the environment and community as it may serve as a springboard for future roadway extensions to the north, as well as east/west connections. Therefore, the summary degree of effect assigned to Secondary and Cumulative Impacts for this alignment is substantial.

ETAT Reviews for Secondary and Cumulative Effects

4 ETAT Review by Nahir Detizio, Federal Highway Administration (08/10/2006)

Secondary and Cumulative Effects Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

At-Risk Resource: Wetlands

Comments on Effects:
The eastern alignments have substantial secondary impacts primarily related to the water/wetlands and habitat resources. Alternative 4 may also have substantial secondary impacts to resources north of North Lake Boulevard if the proposed alternative were to serve as the springboard for later roadway extensions to the north, and to facilitate additional development in that area than would otherwise occur. Similarly, Alternative 4 may have additional substantial secondary and cumulative impacts to the wetland/water and habitat resources if east/west connections are made to the proposed route in order to better serve the residential developments to the west. The environmental document should assess these secondary impacts of the alternatives, as well as cumulative impacts to the areas wetland/water and habitat resources from all area development that is reasonably foreseeable to occur.

Recommended Avoidance, Minimization, and Mitigation Measures:
None found.

Recommended Actions to Improve At-Risk Resources:
None found.

At-Risk Resource: Wildlife and Habitat

Comments on Effects:
The eastern alignments have substantial secondary impacts primarily related to the water/wetlands and habitat resources. Alternative 4 may also have substantial secondary impacts to resources north of North Lake Boulevard if the proposed alternative were to serve as the springboard for later roadway extensions to the north, and to facilitate additional development in that area than would otherwise occur. Similarly, Alternative 4 may have additional substantial secondary and cumulative impacts to the wetland/water and habitat resources if east/west connections are made to the proposed route in order to better serve the residential developments to the west. The environmental document should assess these secondary impacts of the alternatives, as well as cumulative impacts to the areas wetland/water and habitat resources from all area development that is reasonably foreseeable to occur.

Recommended Avoidance, Minimization, and Mitigation Measures:

None found.

Recommended Actions to Improve At-Risk Resources:
None found.

At-Risk Resource: Water Quality and Quantity

Comments on Effects:
None found.

Recommended Avoidance, Minimization, and Mitigation Measures:
None found.

Recommended Actions to Improve At-Risk Resources:
None found.

Coordinator Feedback: None

4 ETAT Review by Scott Sanders, FL Fish and Wildlife Conservation Commission (08/04/2006)

Secondary and Cumulative Effects Effect: Substantial
Coordination Document:*The "Coordination Document" option was not available at the time of the review.*

Dispute Information:N/A

At-Risk Resource: Wildlife and Habitat

Comments on Effects:
Secondary and cumulative impacts would be substantial due to increased residential and commercial development along the highway due to improved access. The roadway extension will also result in increased roadkills for many species of mammals, amphibians and reptiles, and some wading bird species. The expanded roadway will create a more formidable barrier to wildlife movement, and also result in habitat fragmentation and isolation. Increased stormwater runoff from the expanded impervious roadway surface could degrade the water quality of existing wetlands and streams along the ROW in the project area. Since three public land tracts are located immediately adjacent to the corridor, this action will potentially have substantial secondary impacts on public lands.

Recommended Avoidance, Minimization, and Mitigation Measures:
In order to reduce the impacts to fish and wildlife resources and important habitat, we continue to recommend that the existing road network be improved in order to resolve the current transportation need. If through further study, this proves not to be feasible, we recommend the selection of Corridor 1, which will have less impact on natural resources.

Recommended Actions to Improve At-Risk Resources:
Avoidance, minimization, and mitigation measures, including compensatory replacement for both upland and wetlands habitat loss, should also be addressed. Land acquisition and restoration of appropriate tracts adjacent to existing public lands, or tracts placed under conservation easement located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas, would be biologically appropriate and supported by our agency.

The PD&E Study should also include an investigation of the design, cost, location, and construction techniques for longer bridges over canals, sloughs, and their floodplains, and wetlands, which would improve hydrological and floodplain functioning, and minimize wetlands fill. These improved structures would also reduce roadkills and provide improved habitat connectivity for wildlife species such as whitetail deer, bobcat, river otter, and other upland, transitional, and aquatic species that use wetlands riparian systems within the project area.

Coordinator Feedback: None

Project Scope

General Project Commitments

Date	Description
4/25/2007	Based on the results of the informal dispute resolution and public involvement the FDOT recommends to continue the PD&E study with only Alternative Corridor 3 and the "No Build" option.

Required Permits

No Permits Found.

Required Technical Studies

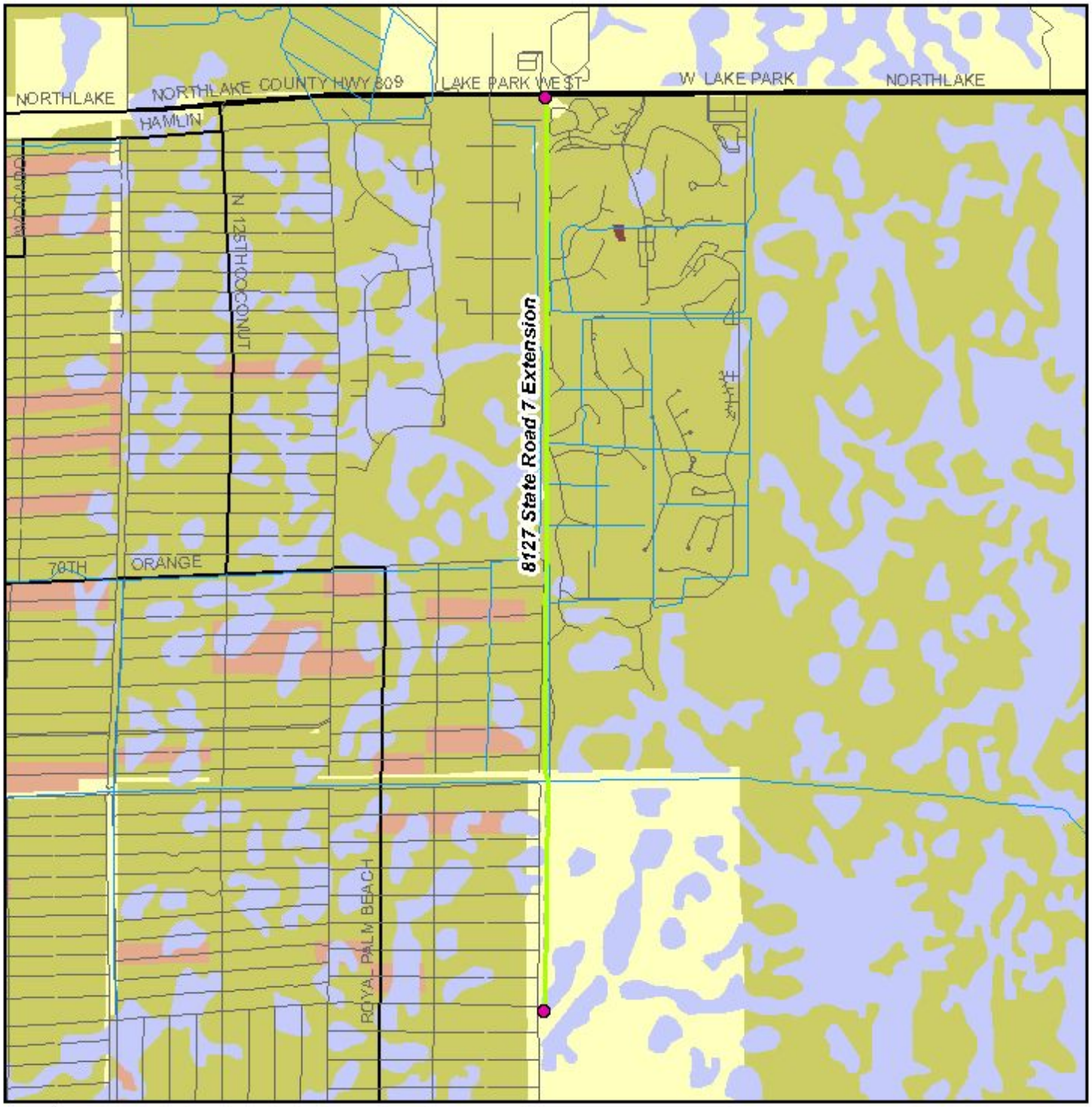
No Technical Studies Found.

Dispute Resolution Activity Log

Action Date	Issue	Attachment(s)	Action
03/09/07	Special Designations	http://www.fla-etat.org/est/servlet/blobViewer?blobID=1755	Potential Disputes on Special Designations, Wetlands and Wildlife and Habitat for Alternatives 2 and 4 from USFWS.Meeting was held with interested agencies on November 9, 2006. Meeting minutes are attached.

Hardcopy Maps: Alternative #1

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Population Age Distribution Map

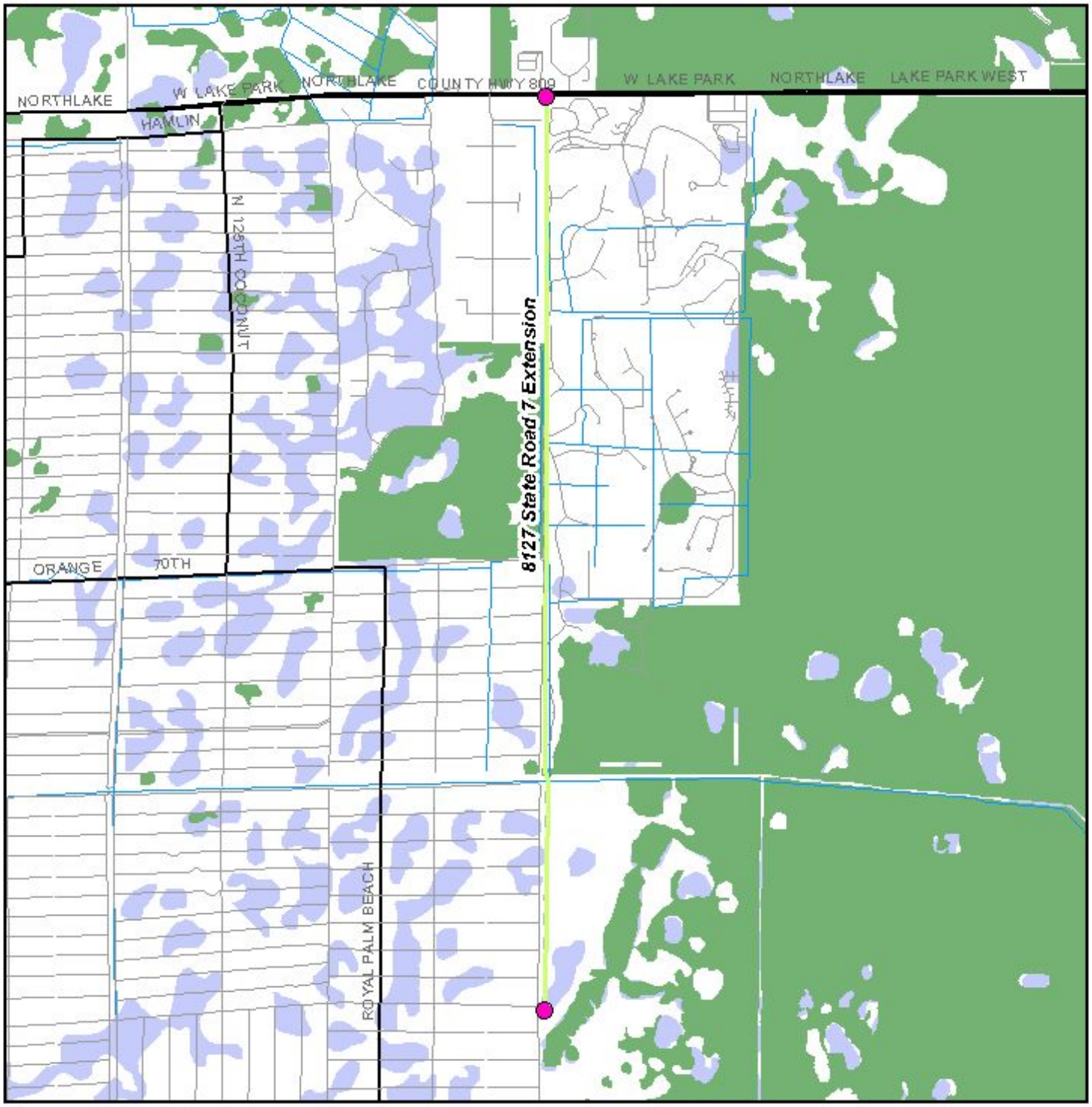
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

Median Age: 0 - 18, 18 - 30, 30 - 65, > 65

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

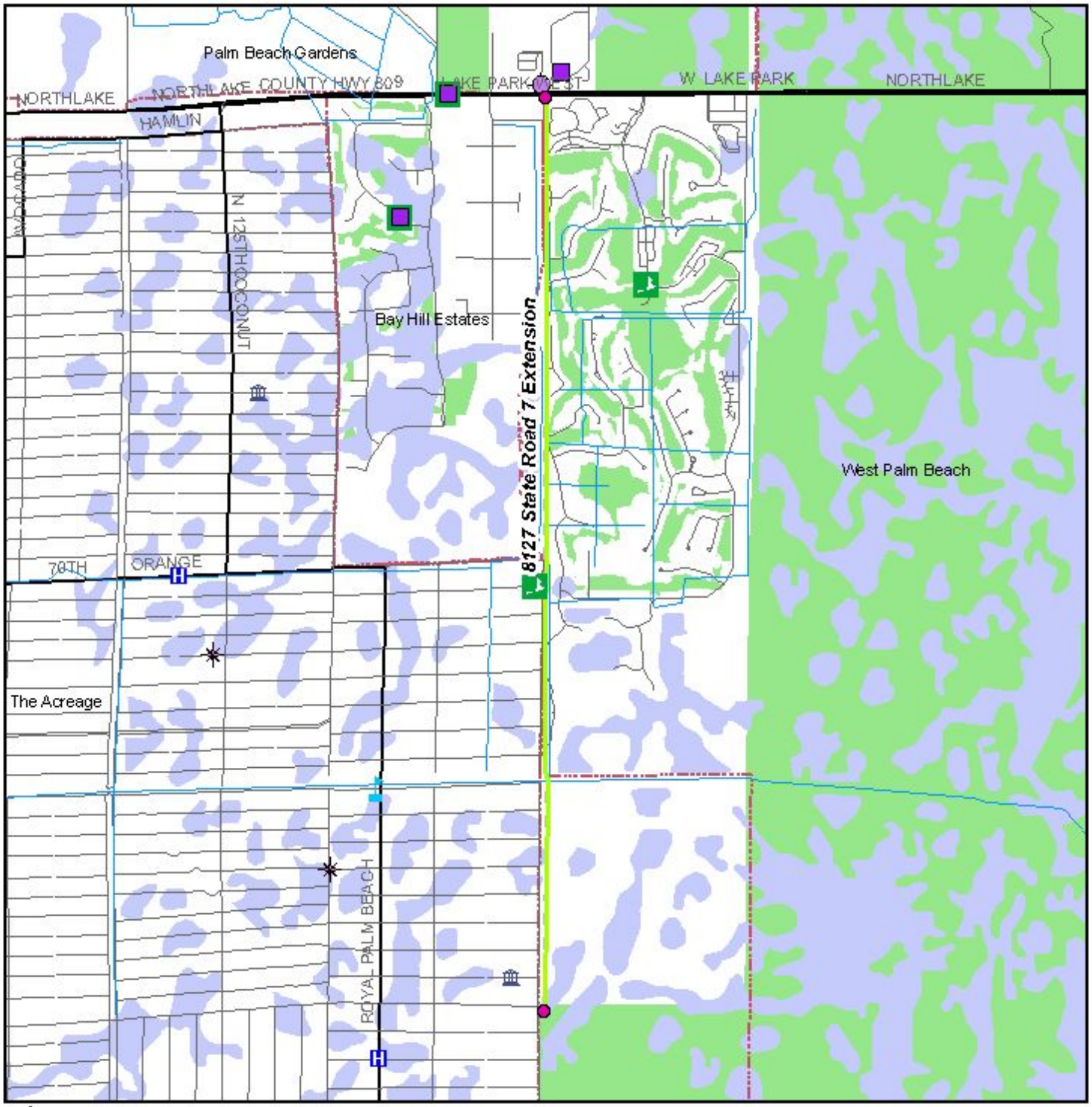
Coastal and Marine Resource Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0.0075 Miles

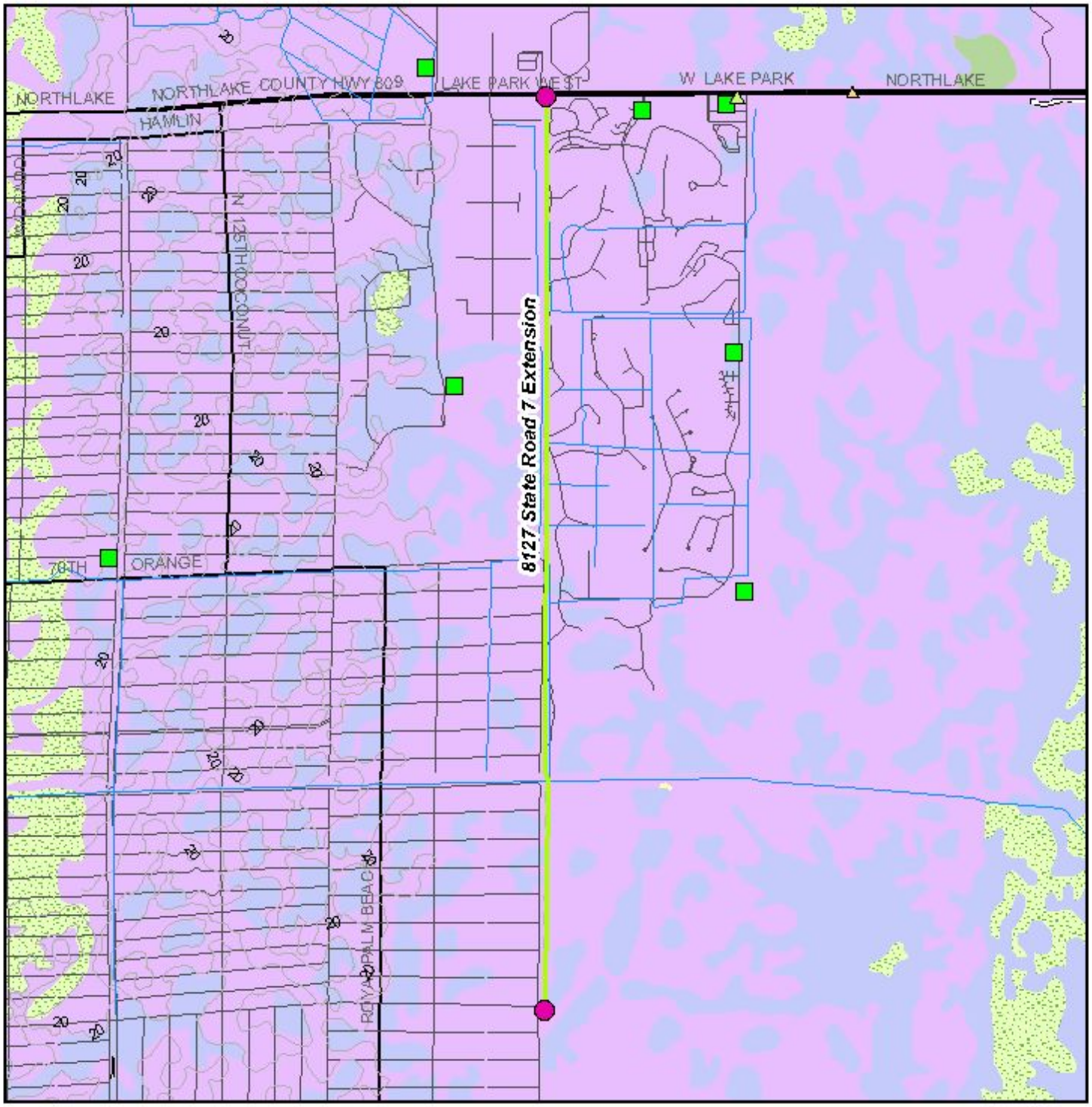
Community Facilities and Services Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Potential Contamination Assessment Map

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Toxic Release Inventory
- Dry Cleaning Facility
- Gasoline Service Station
- Solid Waste Facility
- NPL Remediation Site
- Hazardous Material Site
- Power Plant
- Superfund Site
- Nuclear Site
- Petroleum Tank
- Brownfield Area
- 5 FT Contour

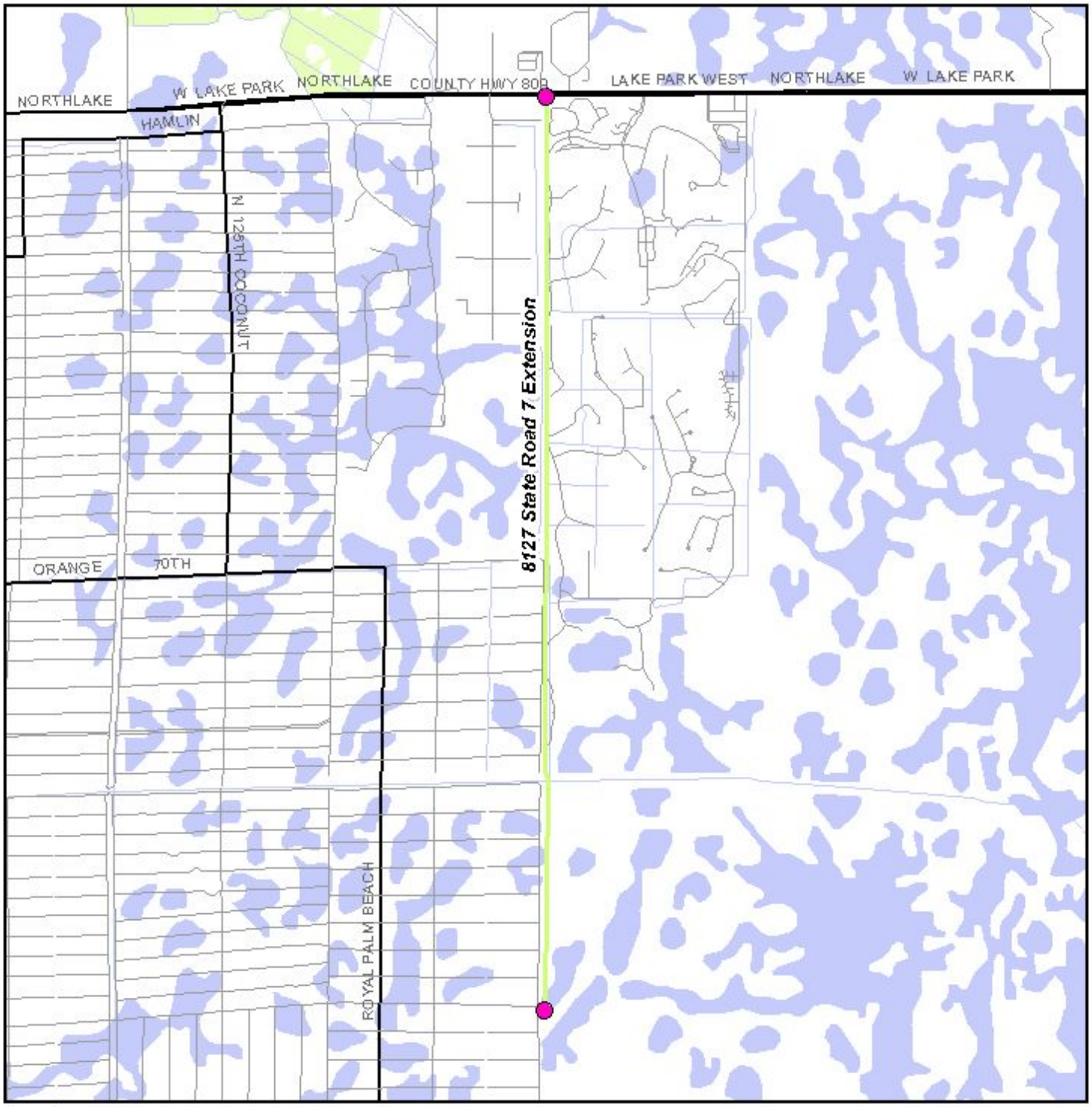
Soil Drainage

- Excellent to Well
- Well to Moderate Well
- Moderate Well to Poor
- Poor to Very Poor
- Unclassified
- Water Body
- Swamp/Marsh

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



Farmlands Resource Map

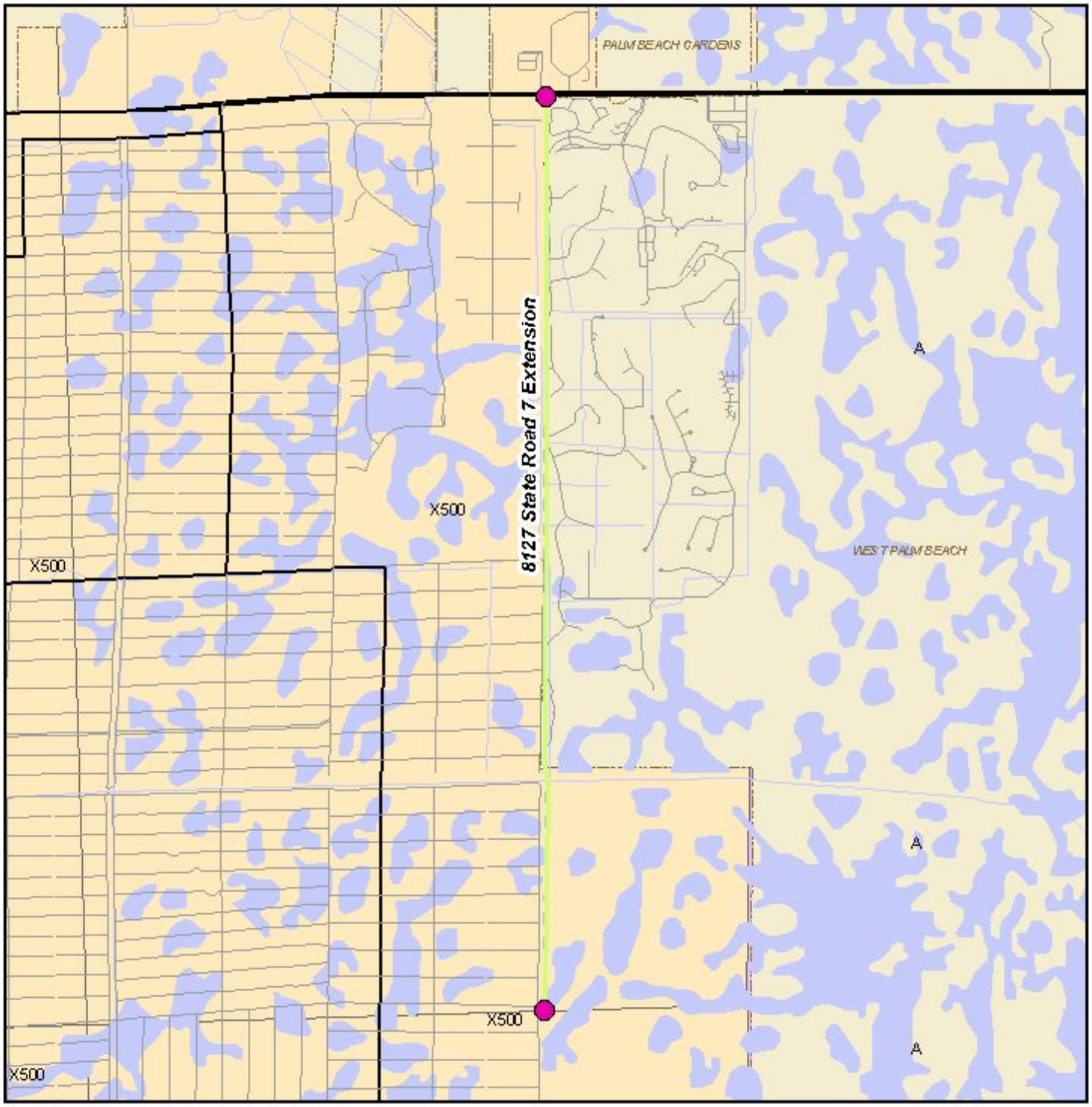
0 0.2 Miles

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Major Road
- Local Road or Trail
- Water Body
- Prime Farmland Soils
- Cropland/Pastureland
- Feeding Operations
- Nurseries/Vineyards
- Specialty Farms
- Tree Crops
- Rural Open Lands

Data Sources: Geographic Data Technology, Inc.
Florida Water Management Districts
US Geological Survey
Natural Resources Conseration Services

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



Floodplain Resource Map

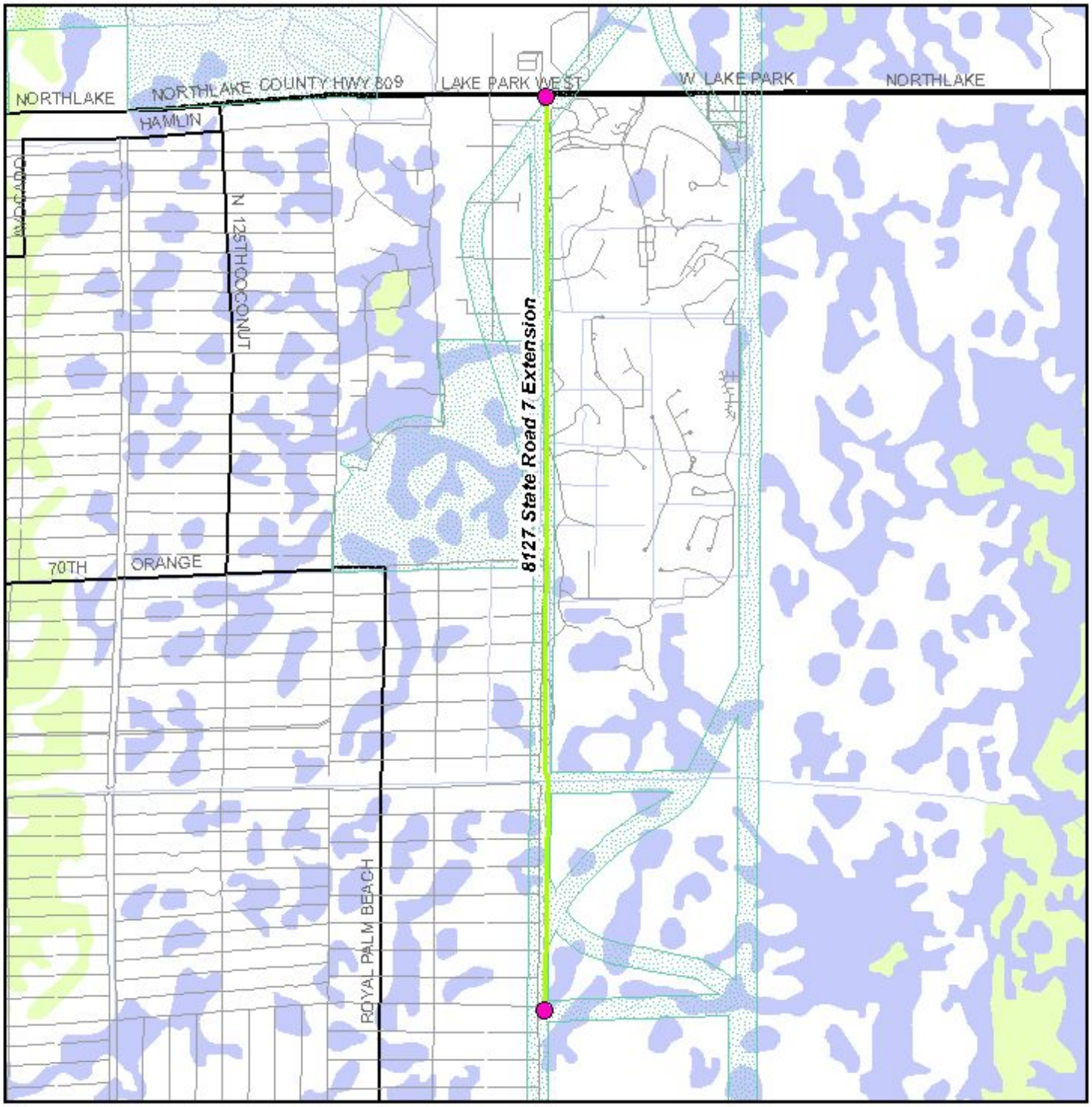
0 0.2 Miles

ETDM Alternative Terminus
ETDM Alternative
Major Road
Local Road or Trail
River, Stream or Canal
Water Body
Inside Special Flood Hazard Area
Outside Special Flood Hazard Area
FEMA Data Not Available

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.4 Miles

Historic Resources Map

Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
Florida Department of Transportation
Florida Department of State,
Bureau of Archaeological Research

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Major Road
- Local Road or Trail
- Railroad
- Historic Structure
- Historic Cemetery
- Historic Bridge
- Historic Resource Group
- Cultural Resource Field Survey Area
- State Historic Highway

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). Absense of features on the map does not necessarily indicate an absense of resources in the project vicinity.

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.

0 0.2 Miles

Hydrogeology Resource Map

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Other 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
- Eocene
- Holocene
- Miocene
- Miocene/Pliocene
- Oligocene
- Oligocene/Miocene
- Pleistocene
- Pleistocene & Holocene
- Pliocene
- Pliocene/Pleistocene

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.

0 0.08 Miles

Income Distribution Map

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

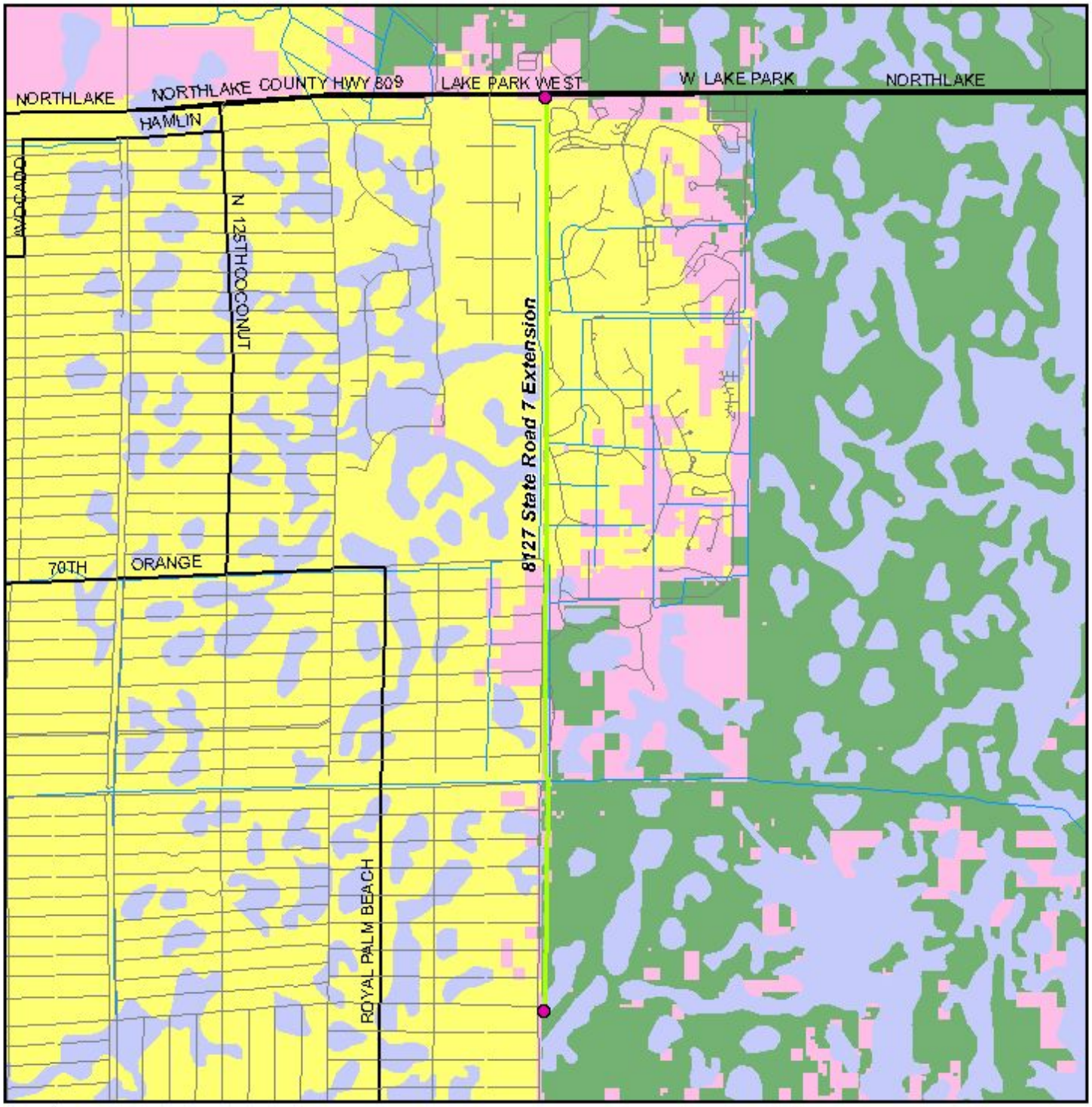
Median Household Income

0 - 10000
10001 - 29999
30000 - 49999
50000 - 79999
80000 - 125000
> 125000

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

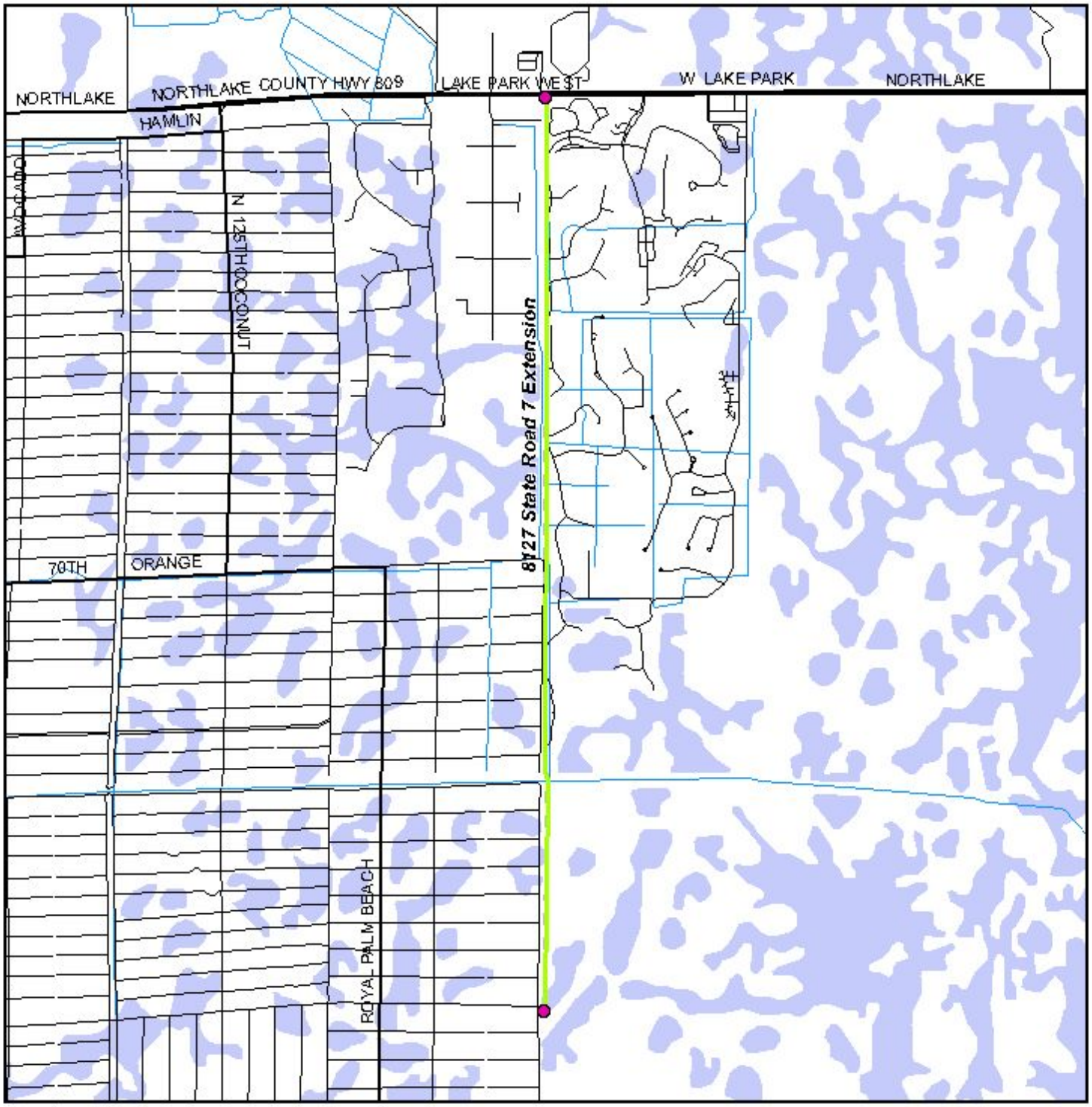
Integrated Wildlife Habitat Ranking System Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

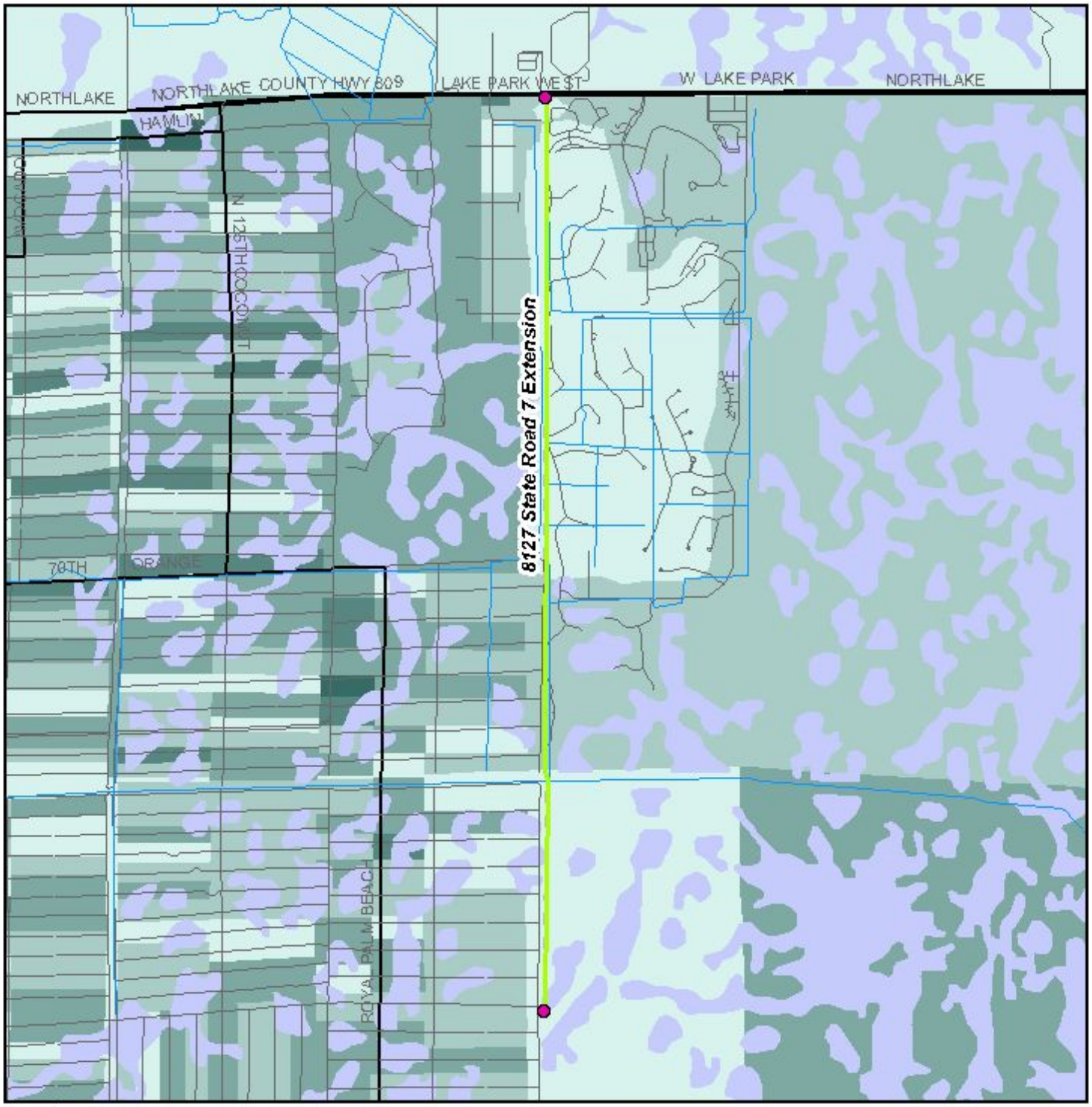
Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
Florida Department of Revenue
Florida Department of Transportation
Florida County Property Appraiser Offices

Land Use Map

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Minority Population Distribution Map

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

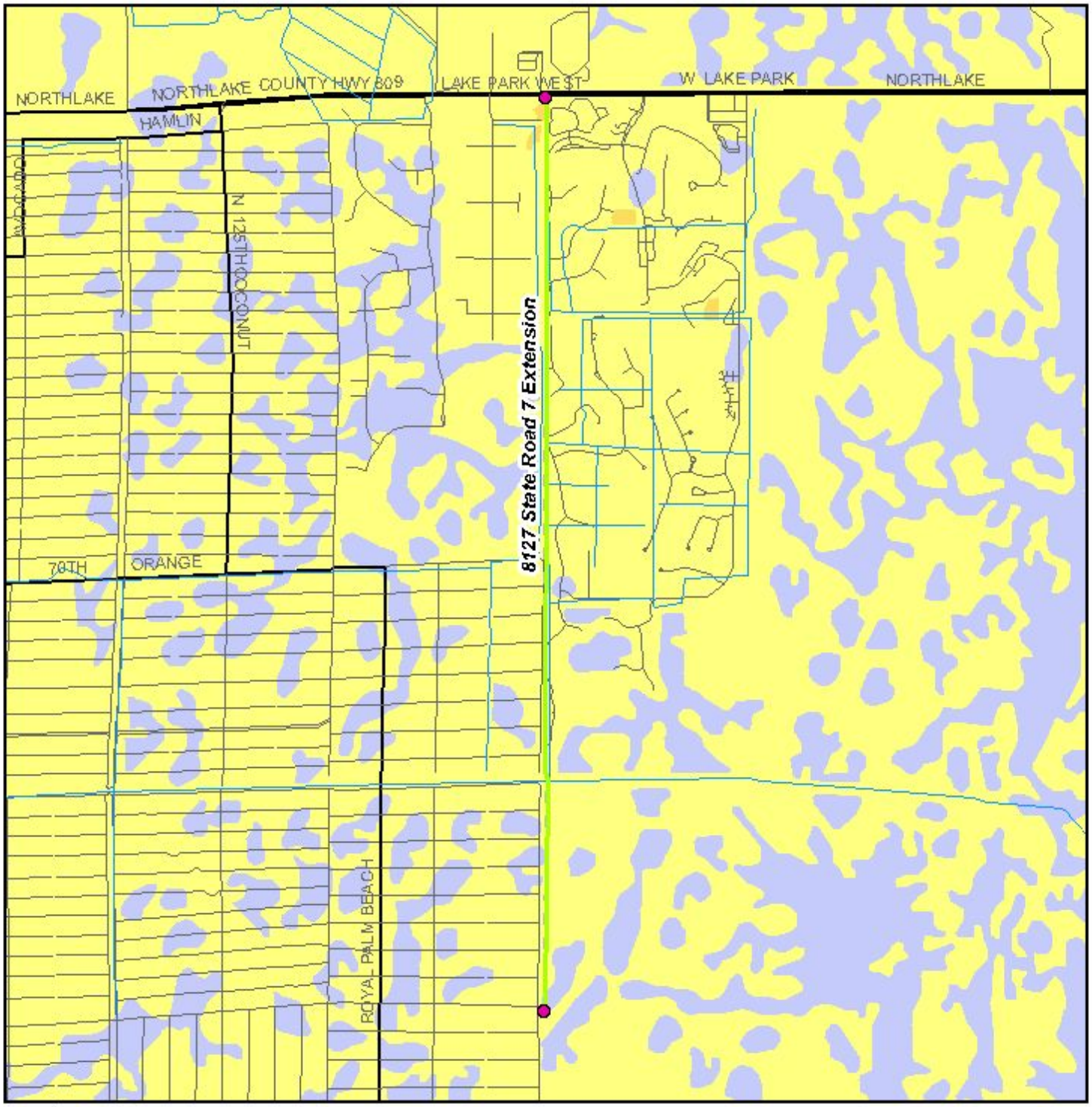
Percent Minority Population

0 - 6 | 7 - 20 | 21 - 38 | 39 - 60 | 61 - 85 | 86 - 100

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Population Density Map

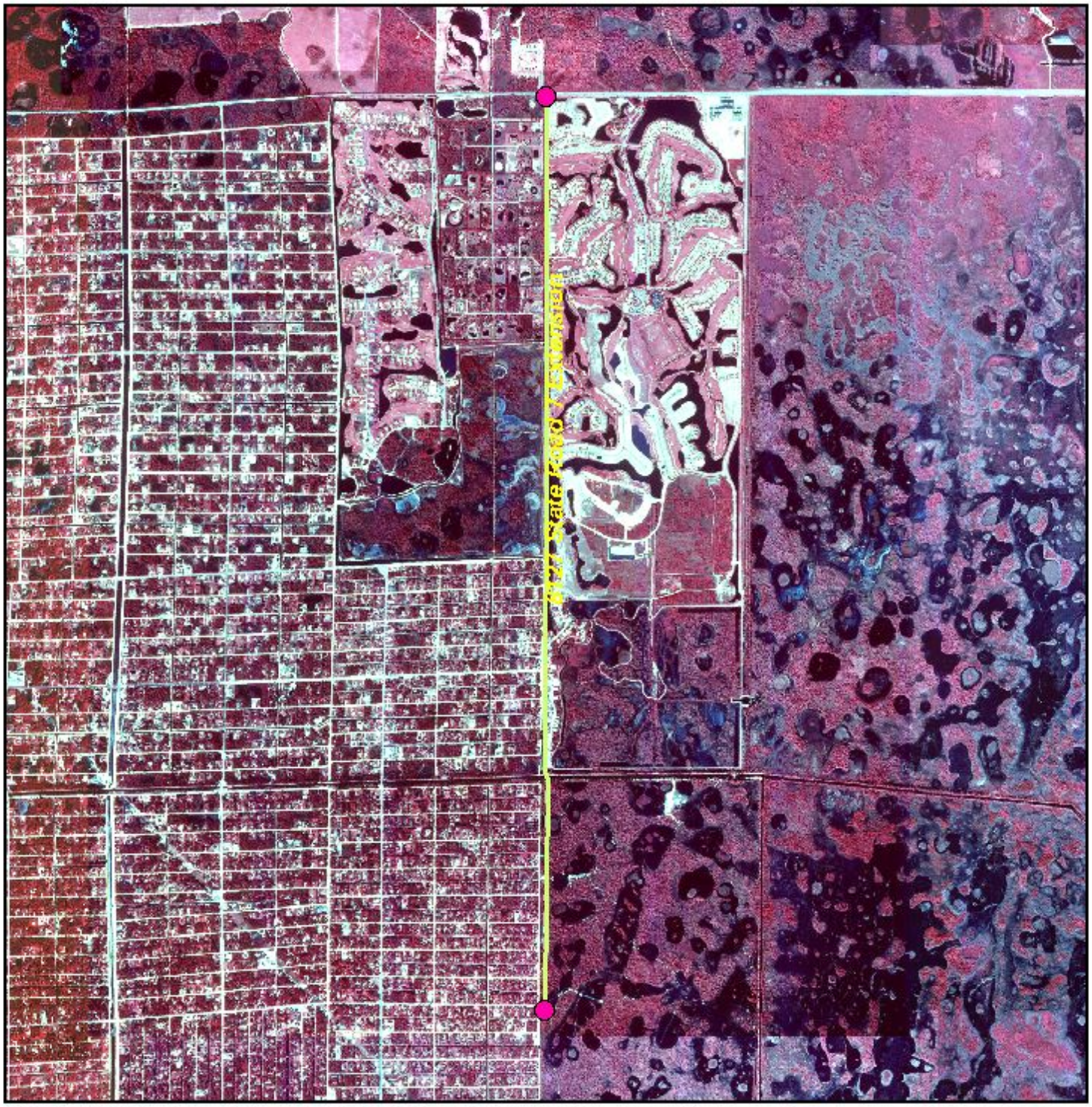
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

Population per Acre: 0 - 4.9, 5 - 29.9, 30 - 99.9, 100 - 349.9, 350 - 800, > 800

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0.05 Miles

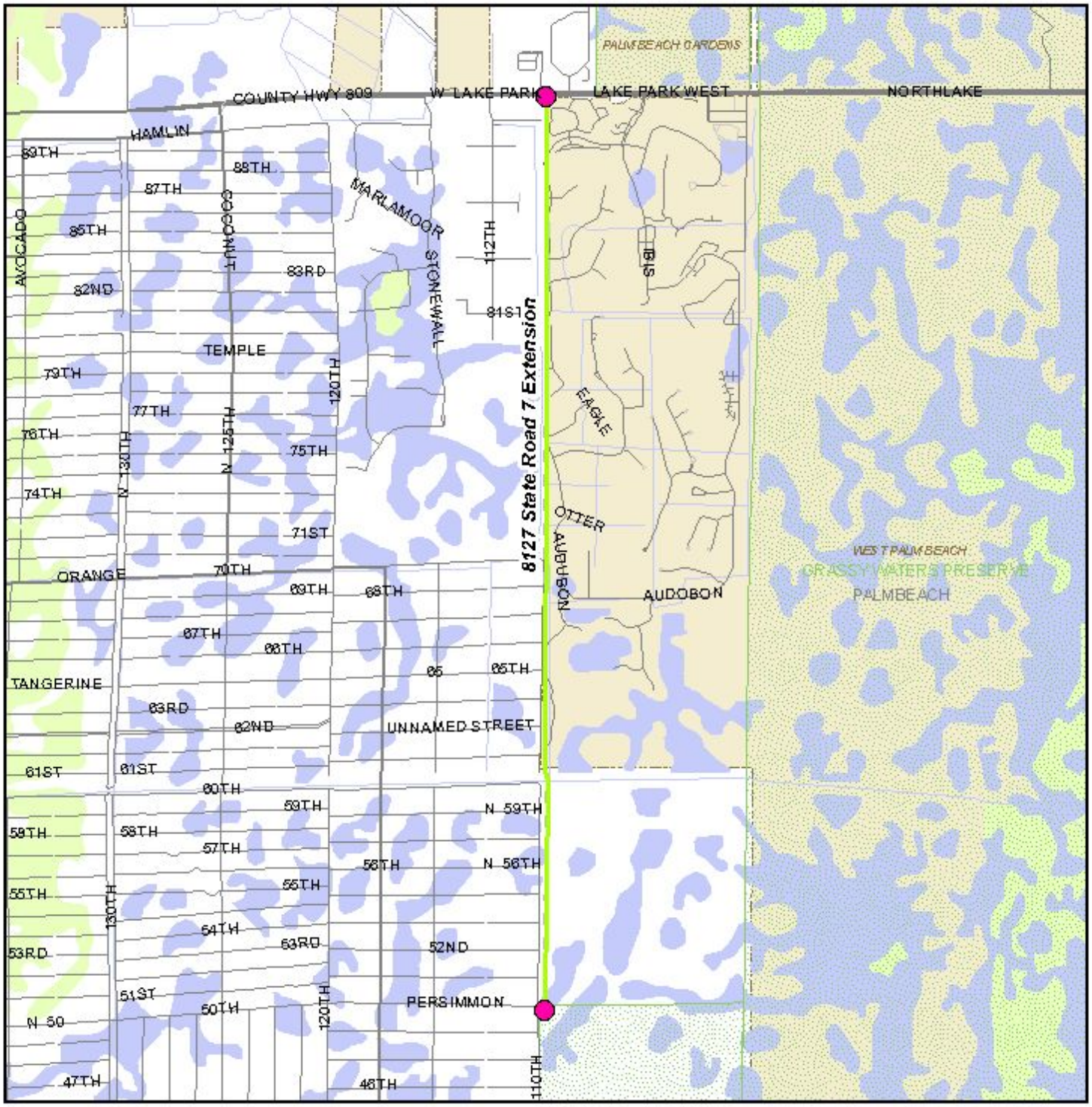
Project Aerial Map

ETDM Alternative Terminus
ETDM Alternative
Primary and Limited Access Highway
Secondary, Unlimited Access Highway
Other Highway Feature

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



Project Location Map

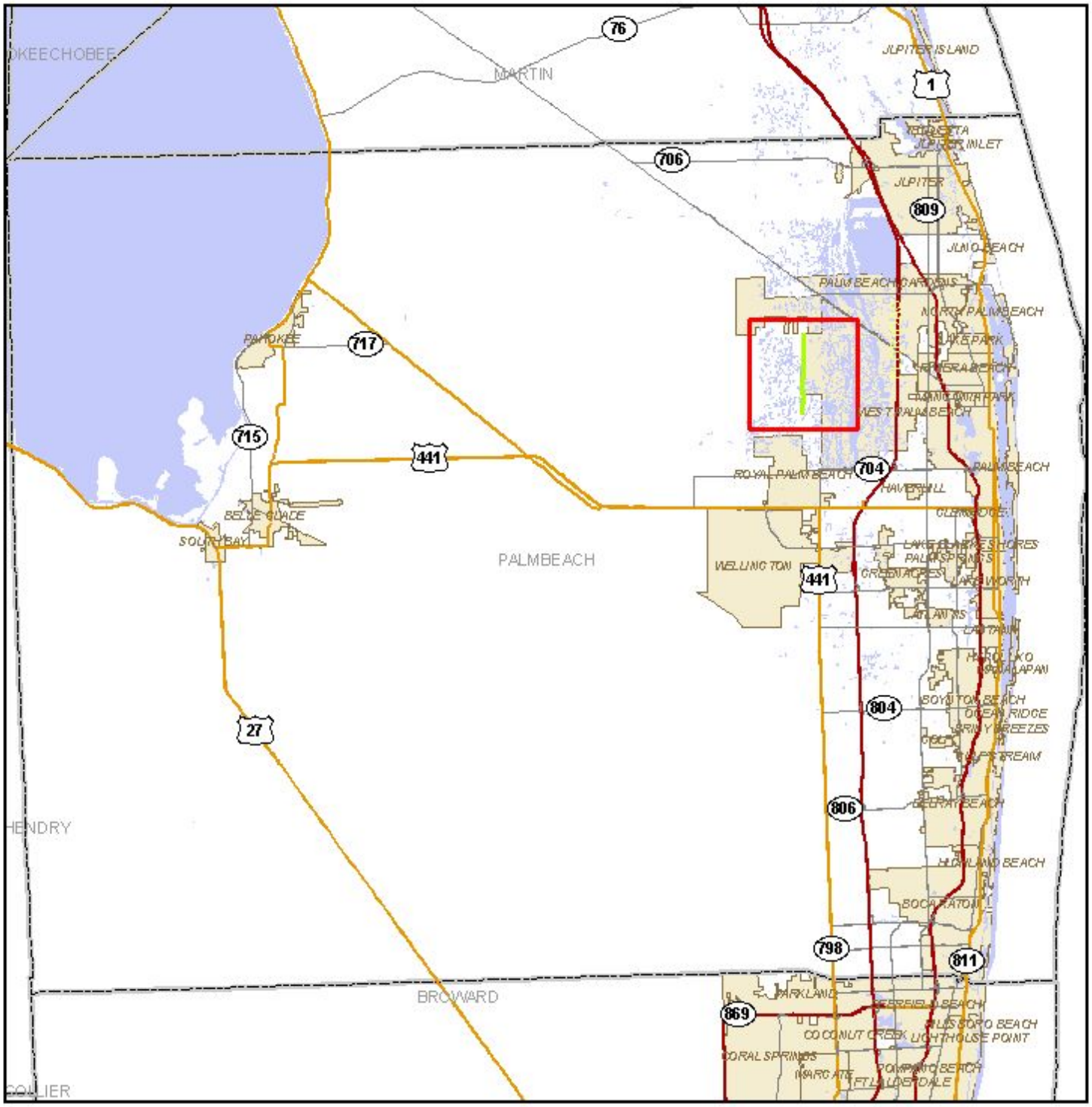
0 0.08 Miles

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 7 Miles

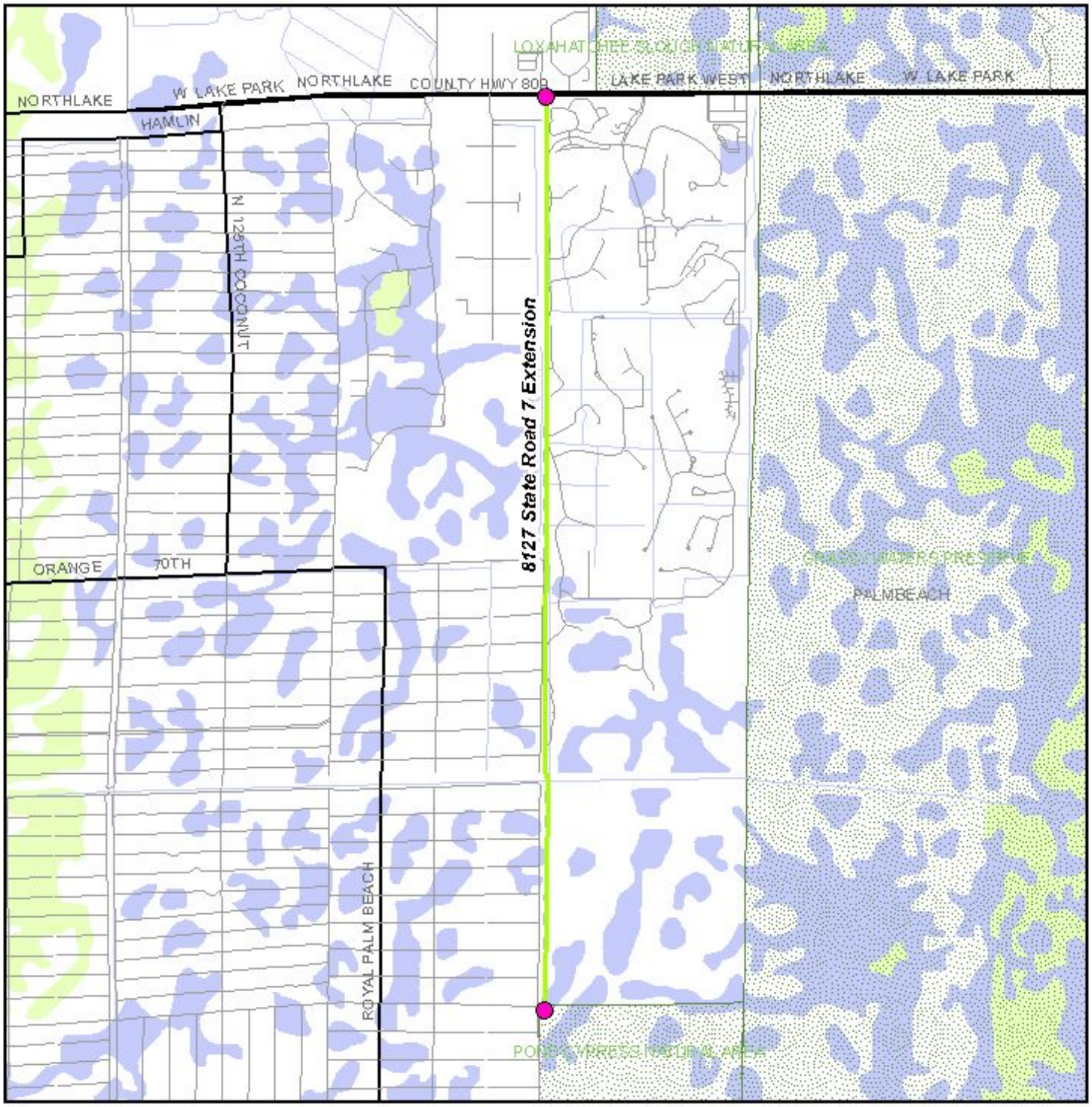
County Location Map

- ETDM Alternative
- Primary and Limited Access Highway
- Secondary, Unlimited Access Highway
- Other Highway Feature
- Water Body
- City Limit
- County Boundary
- Project Extent

Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
US Census Bureau
County Property Appraisers

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0.06 Miles

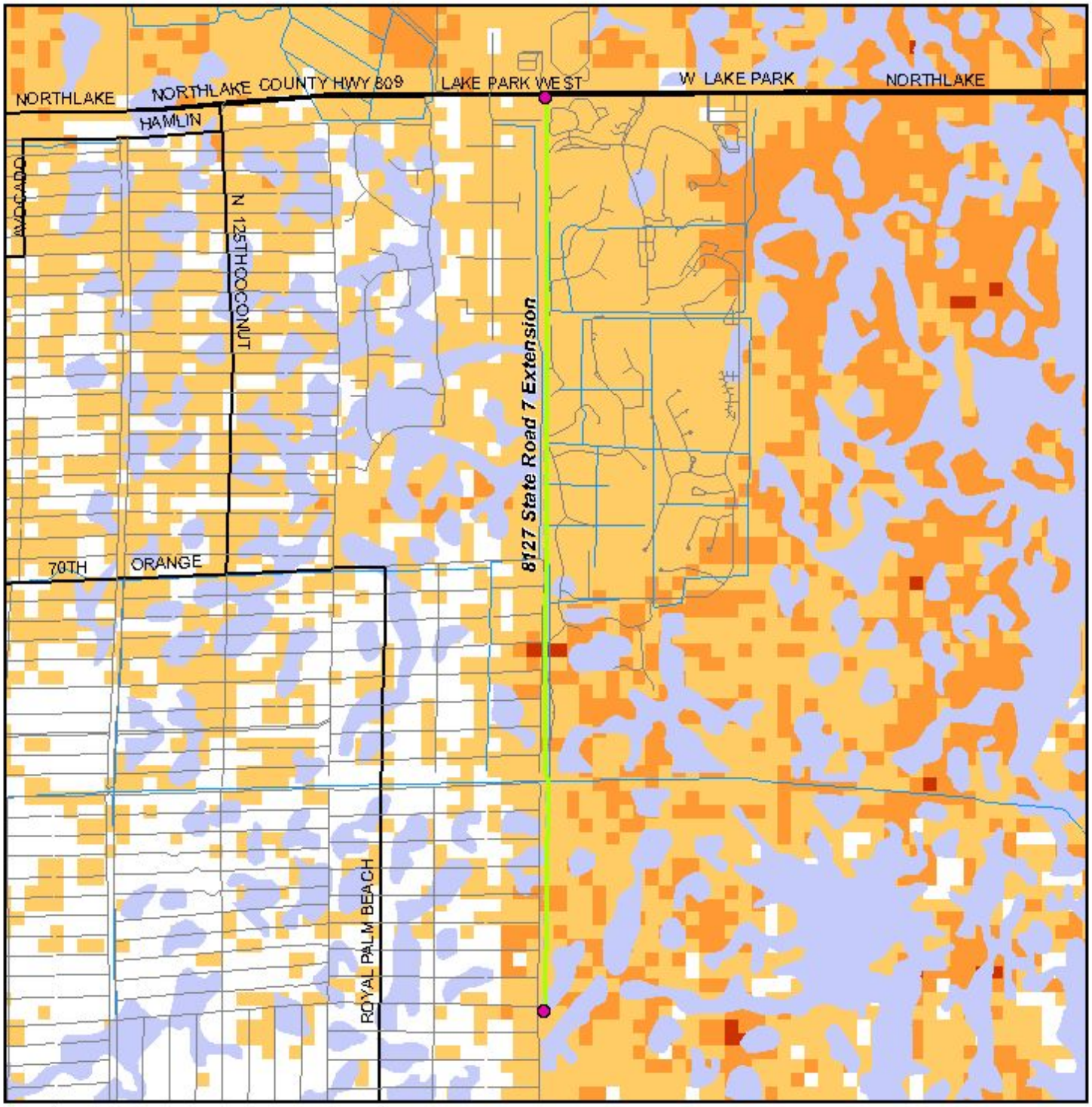
Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
Florida Natural Areas Inventory

Conservation and Recreation Area Map

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Conservation or Recreation Area
- Major Road
- Local Road or Trail
- Railroad
- County Boundary

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

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

Species Potential Habitat Model Map

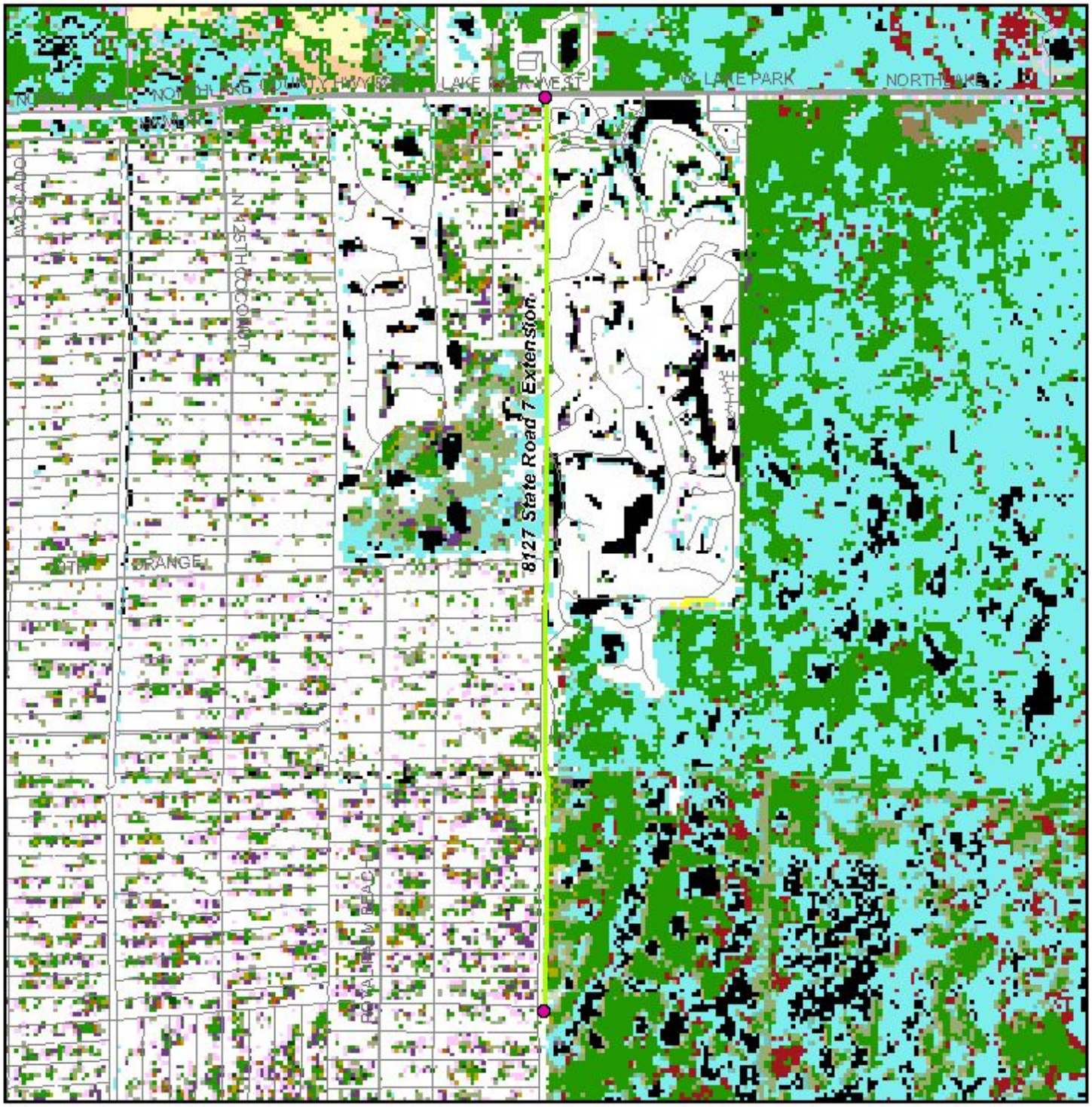
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

Potential Habitat for Focal Species

- 1 - 6 Species
- 7 - 12 Species
- 13 - 18 Species
- > 18 Species

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0.06 Miles

Vegetation and Land Cover Map

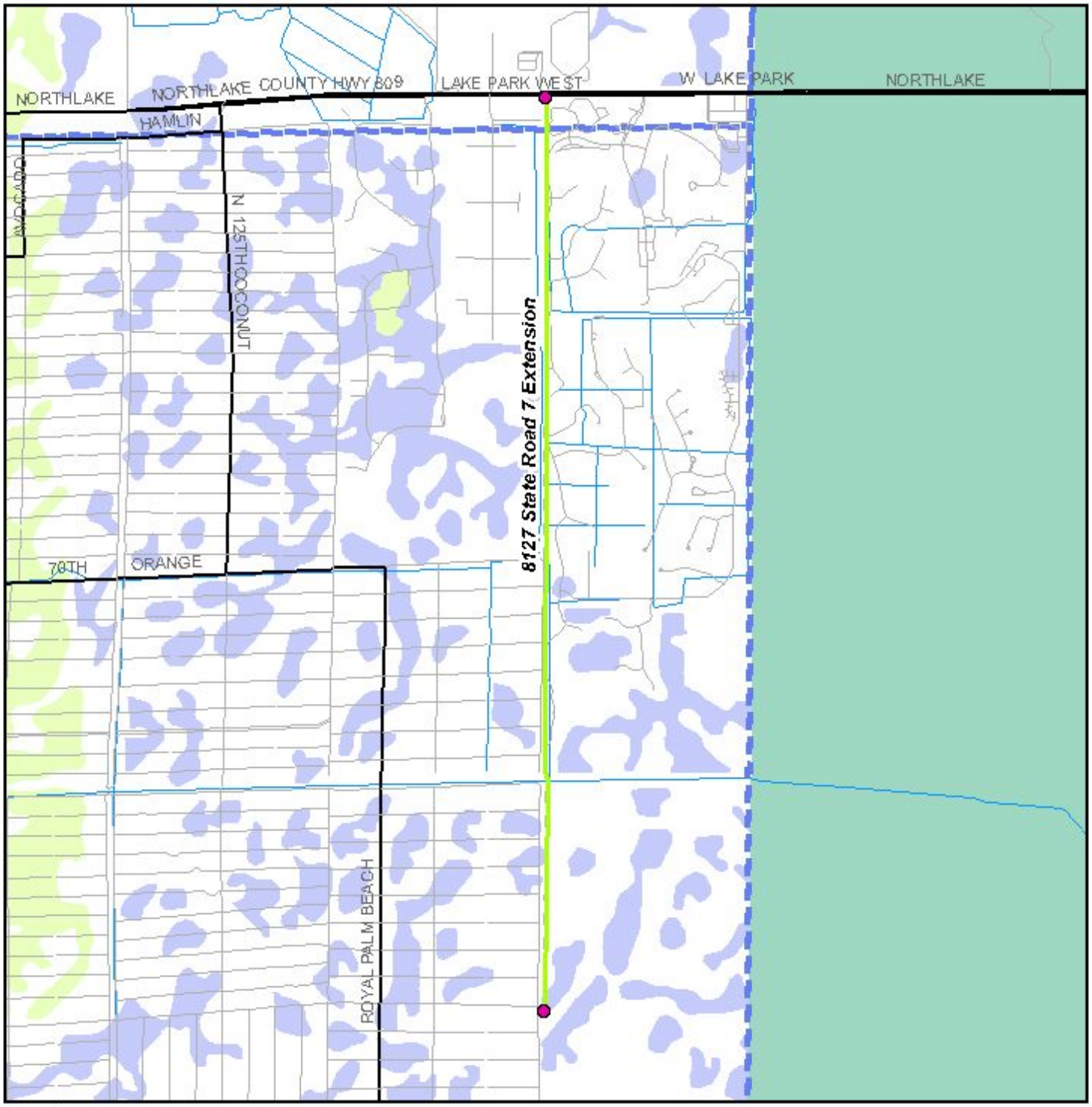
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail

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

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

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Water Resources Map

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

Data Sources:

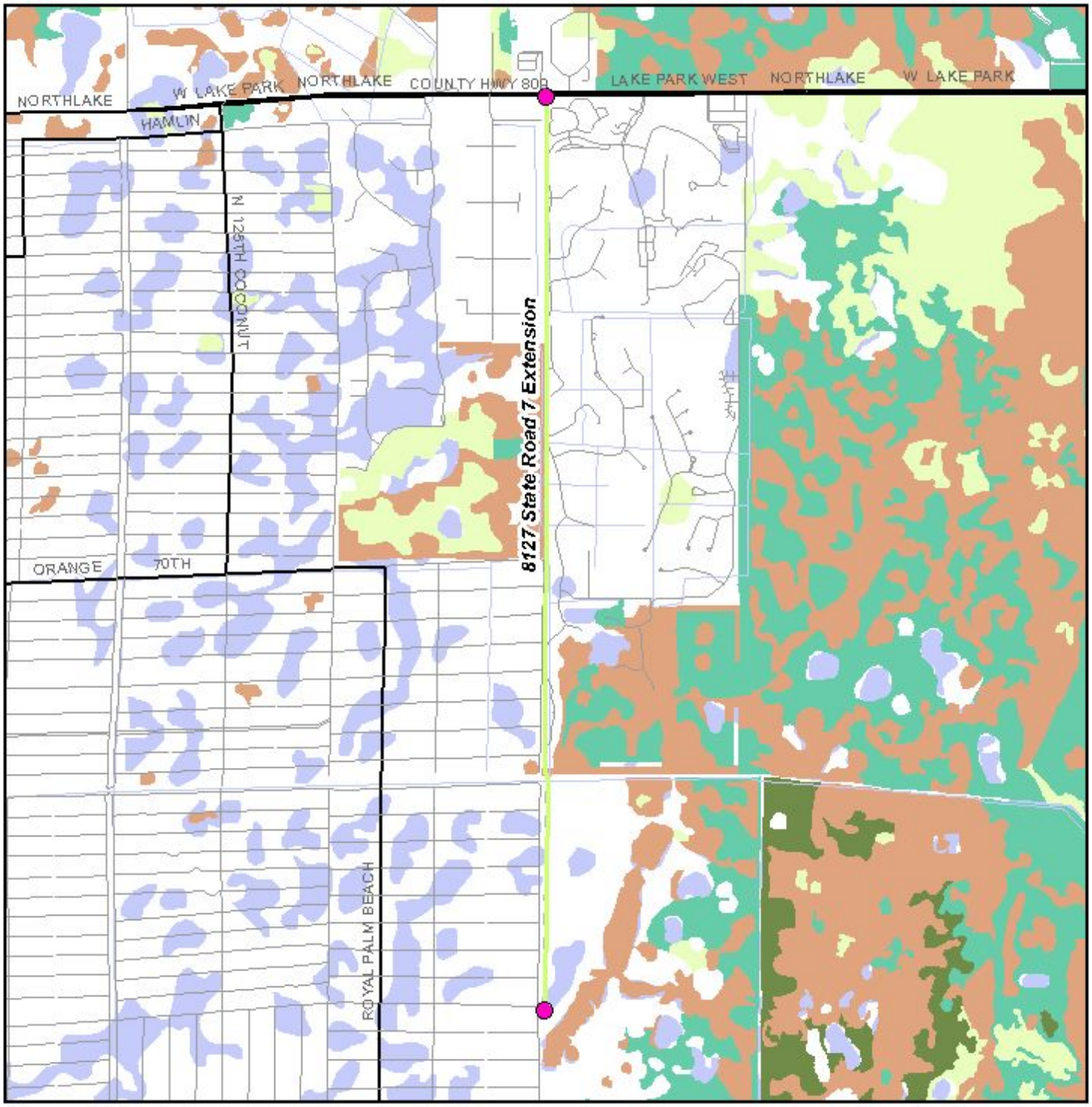
Geographic Data Technology, Inc.
US Geological Survey

Florida Department of Transportation
Florida Department of Environmental Protection

Florida Geological Survey
US Bureau of Transportation Statistics

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #1
Persimmon Blvd. to Northlake Blvd.



Wetland Resource Map

0.06 Miles

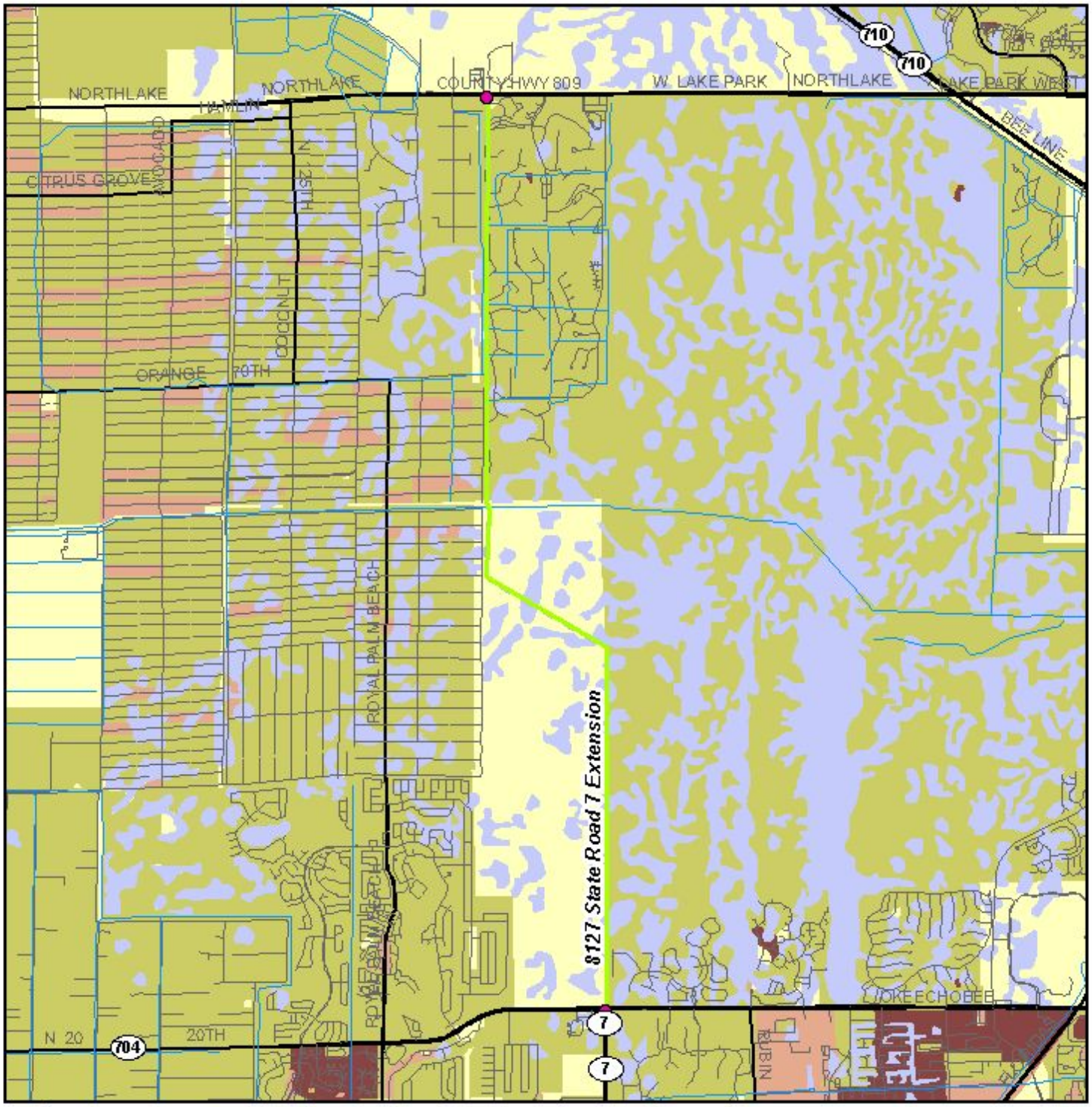
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Wetland Hardwood Forest
- Wetland Coniferous Forest
- Wetland Forested Mixed
- Vegetated Non-forested Wetland
- Non-vegetated Wetland
- Cut Over Wetland
- Wetland Scrub Shrub

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

Map Generated on: 12/4/2006

Hardcopy Maps: Alternative #2

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Population Age Distribution Map

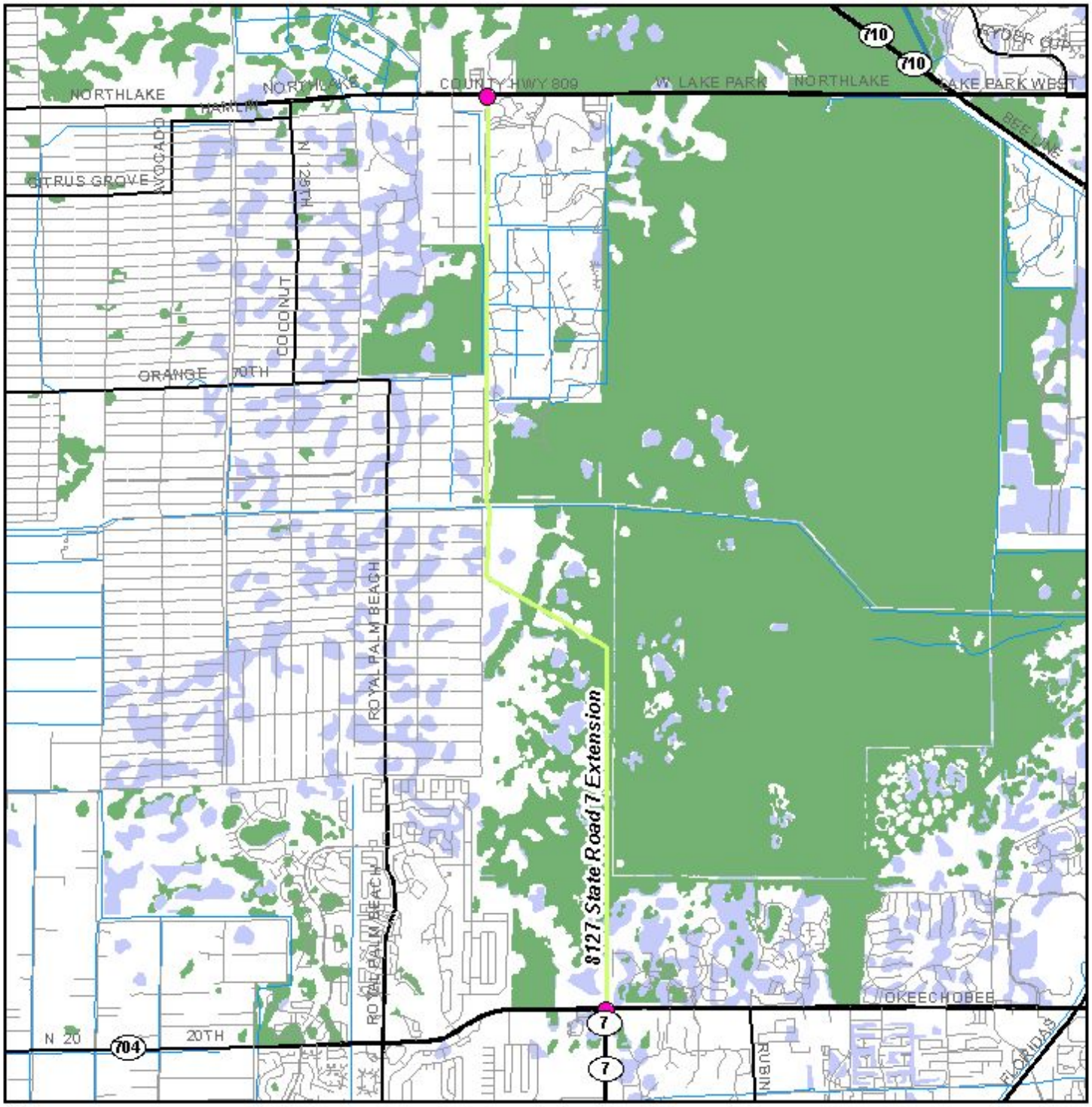
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

Median Age: 0 - 18, 18 - 30, 30 - 65, > 65

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0.07 Miles

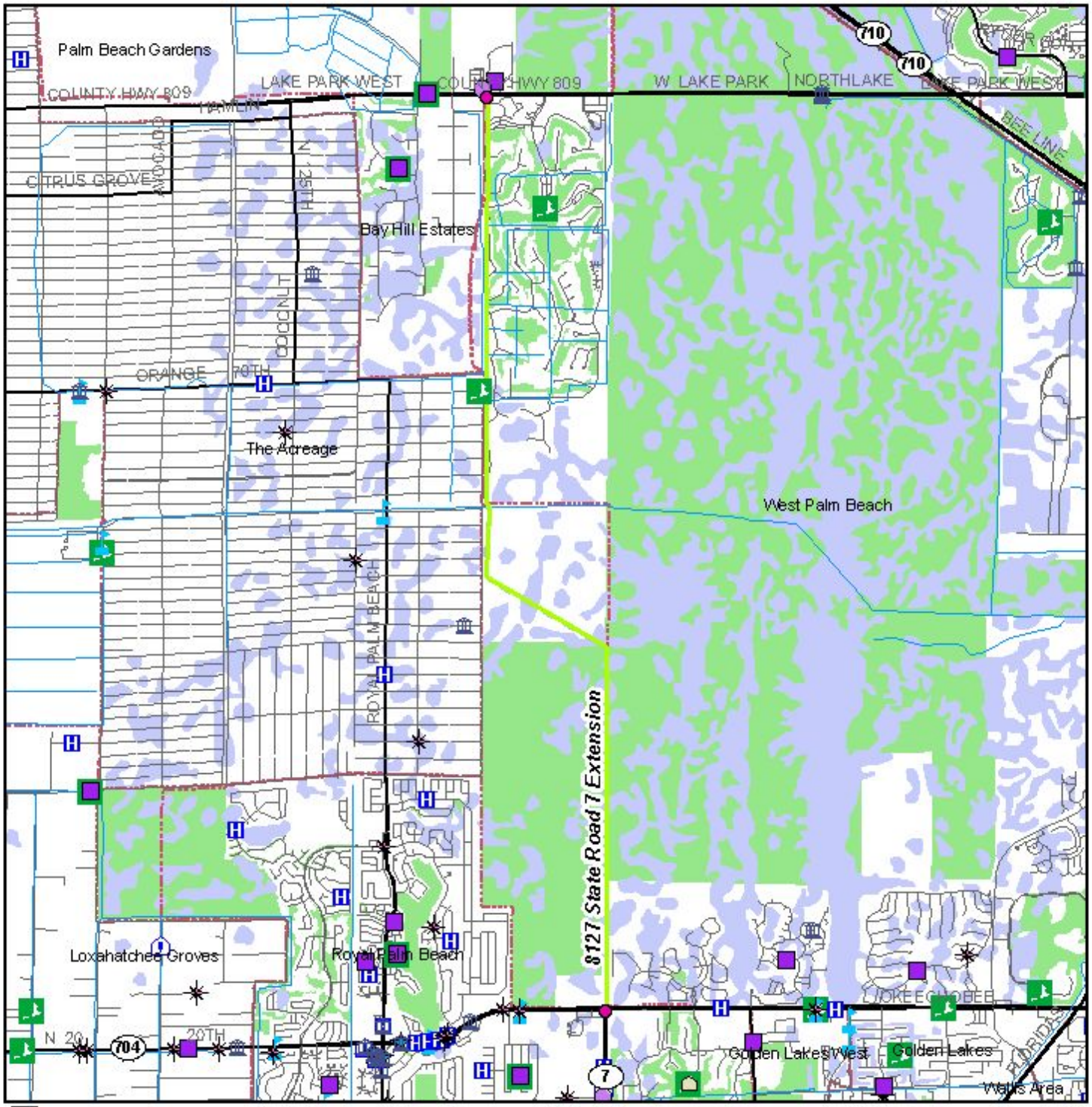
Coastal and Marine Resource Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.2 Miles

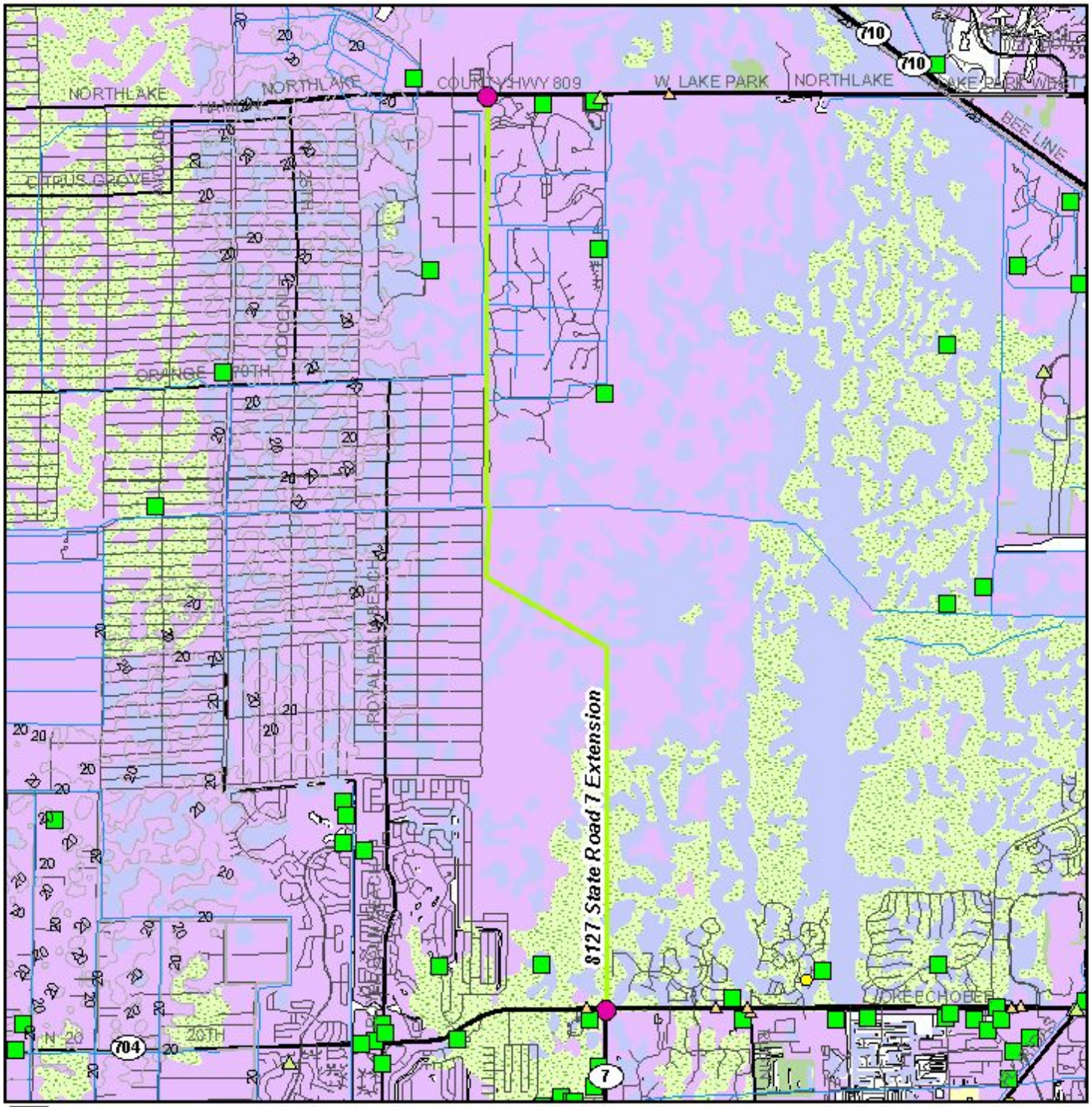
Community Facilities and Services Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Potential Contamination Assessment Map

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Toxic Release Inventory
- Dry Cleaning Facility
- Gasoline Service Station
- Solid Waste Facility
- NPL Remediation Site
- Hazardous Material Site
- Power Plant
- Superfund Site
- Nuclear Site
- Petroleum Tank
- Brownfield Area
- 5 FT Contour

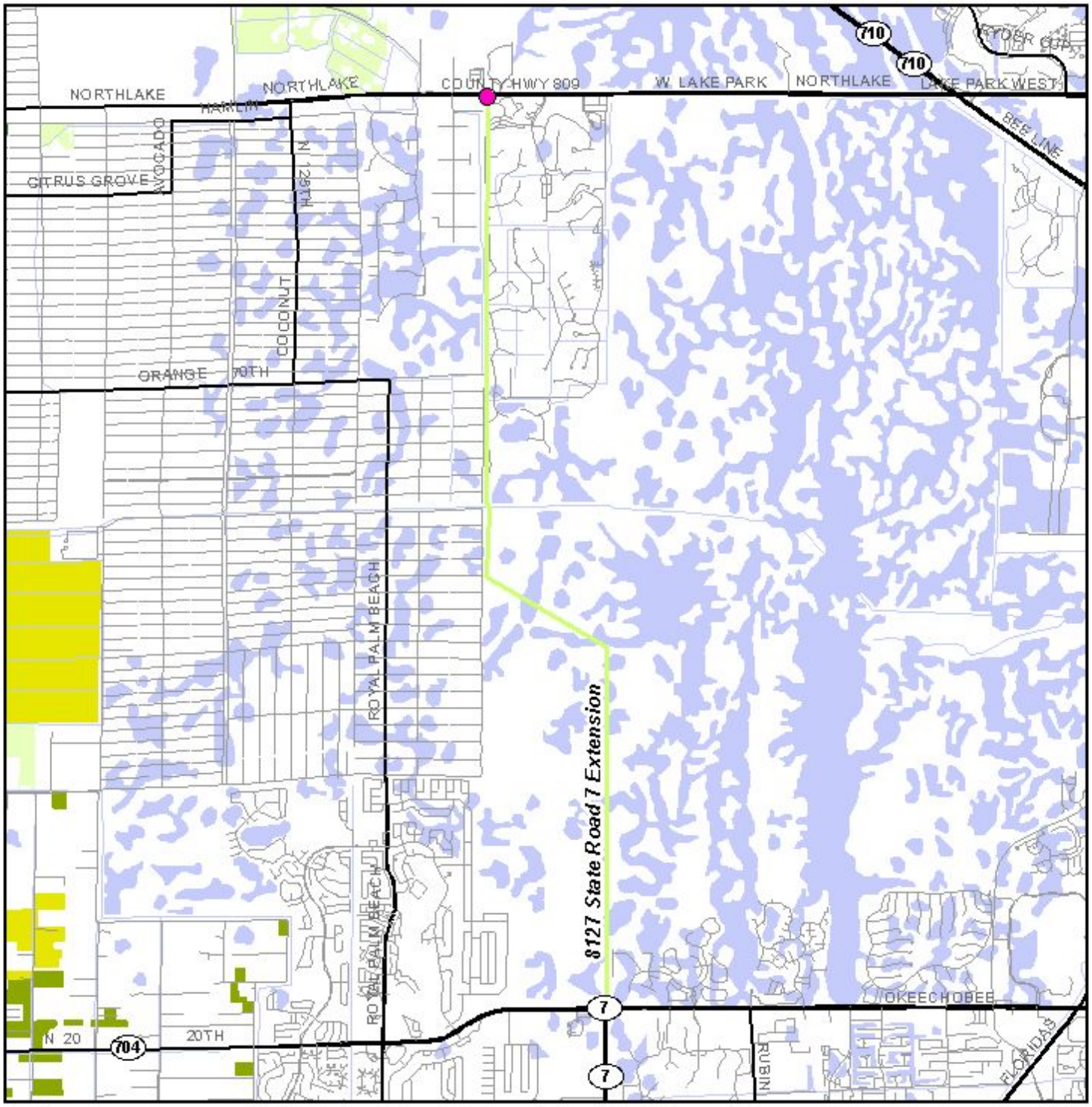
Soil Drainage

- Excellent to Well
- Well to Moderate Well
- Moderate Well to Poor
- Poor to Very Poor
- Unclassified
- Water Body
- Swamp/Marsh

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



Farmlands Resource Map

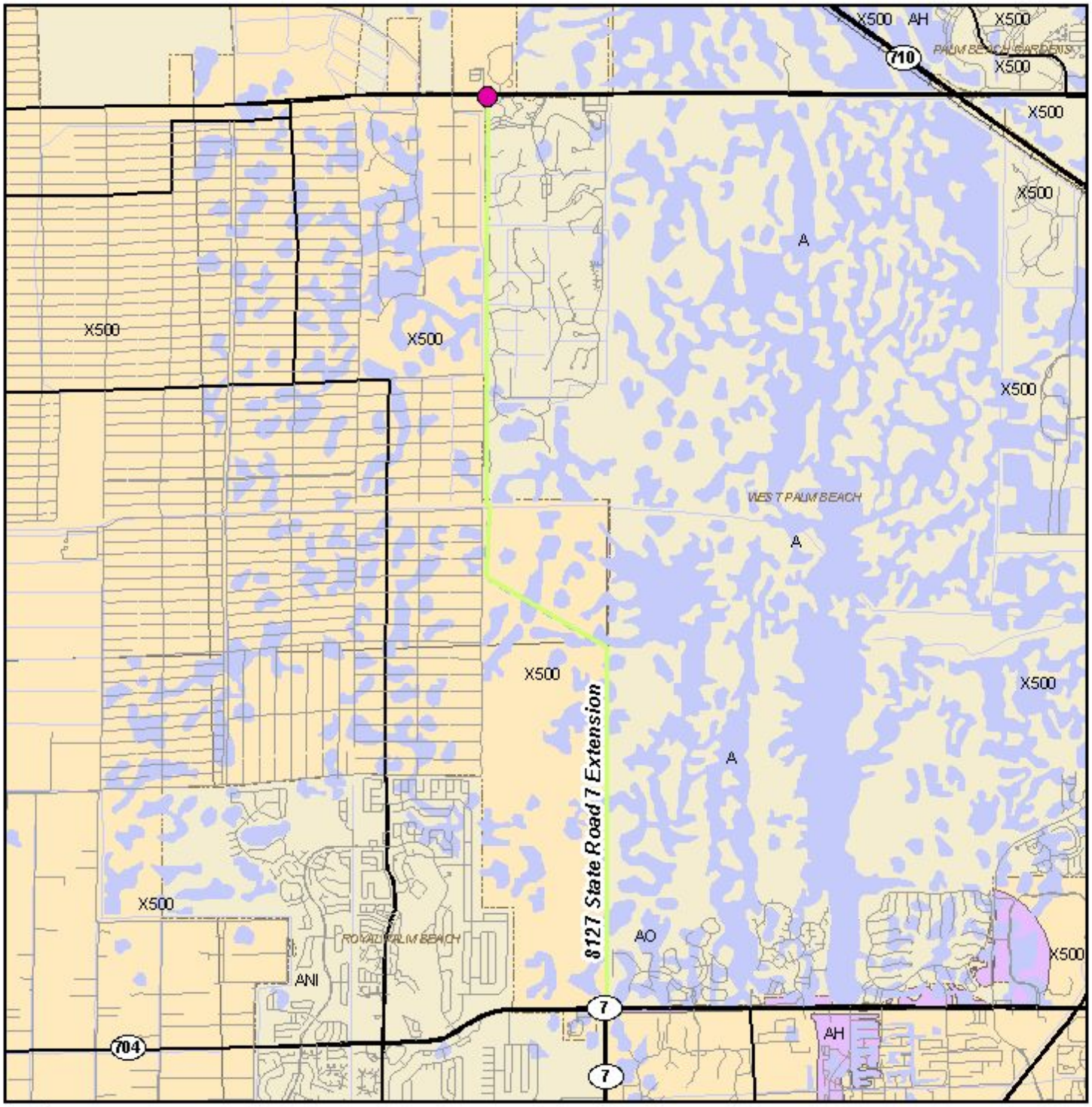
0 0.3 Miles

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Major Road
- Local Road or Trail
- Water Body
- Prime Farmland Soils
- Cropland/Pastureland
- Feeding Operations
- Nurseries/Vineyards
- Specialty Farms
- Tree Crops
- Rural Open Lands

Data Sources: Geographic Data Technology, Inc.
Florida Water Management Districts
US Geological Survey
Natural Resources Conseration Services

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



Floodplain Resource Map

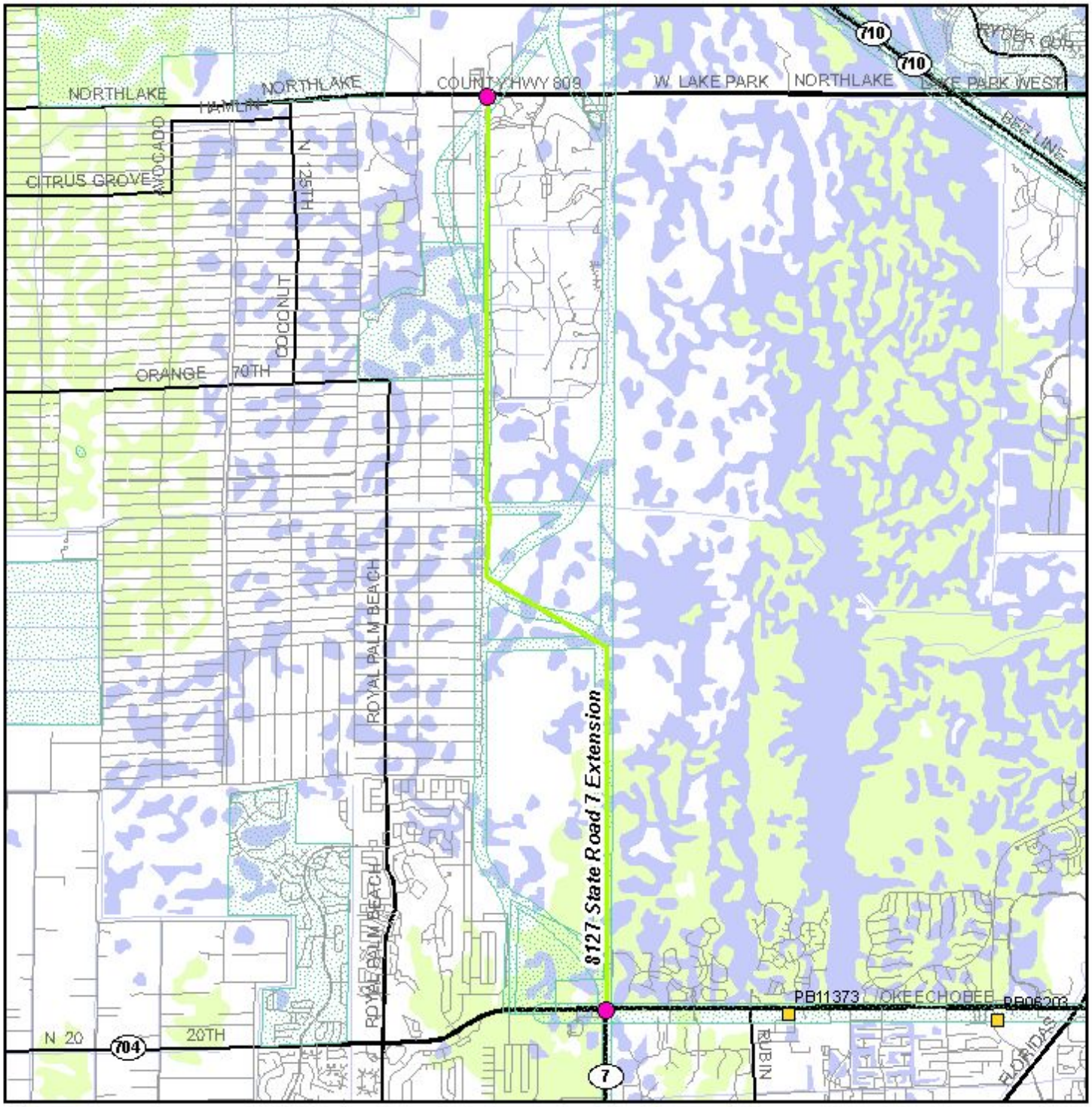
0 0.3 Miles

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Inside Special Flood Hazard Area
- Outside Special Flood Hazard Area
- FEMA Data Not Available

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



Historic Resources Map

0 .06 Miles

Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
Florida Department of Transportation
Florida Department of State,
Bureau of Archaeological Research

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Major Road
- Local Road or Trail
- Railroad
- Historic Structure
- Historic Cemetery
- Historic Bridge
- Historic Resource Group
- Cultural Resource Field Survey Area
- State Historic Highway

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). Absense of features on the map does not necessarily indicate an absense of resources in the project vicinity.

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
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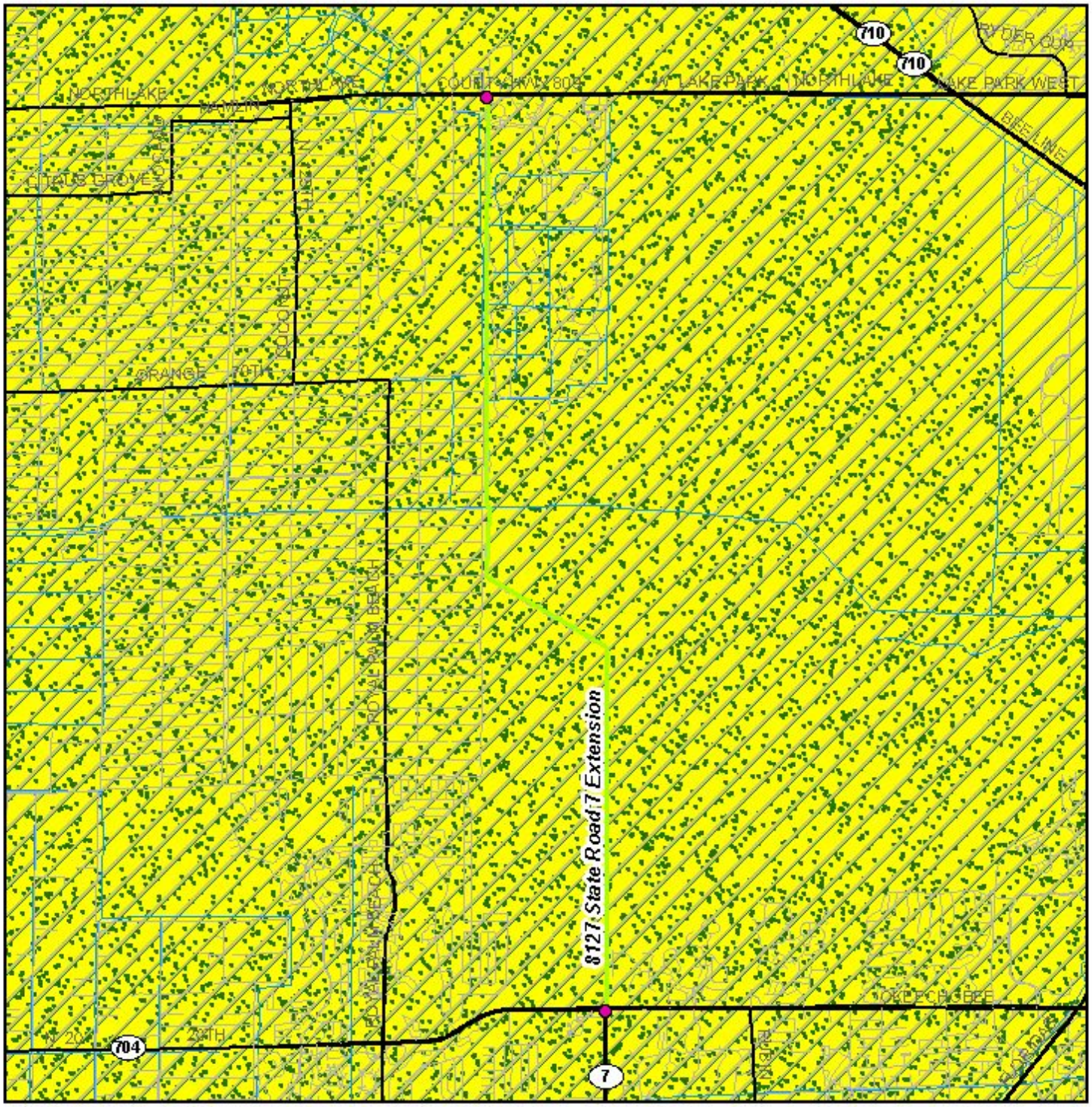


0 0.3 Miles

Hydrogeology Resource Map

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Other 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

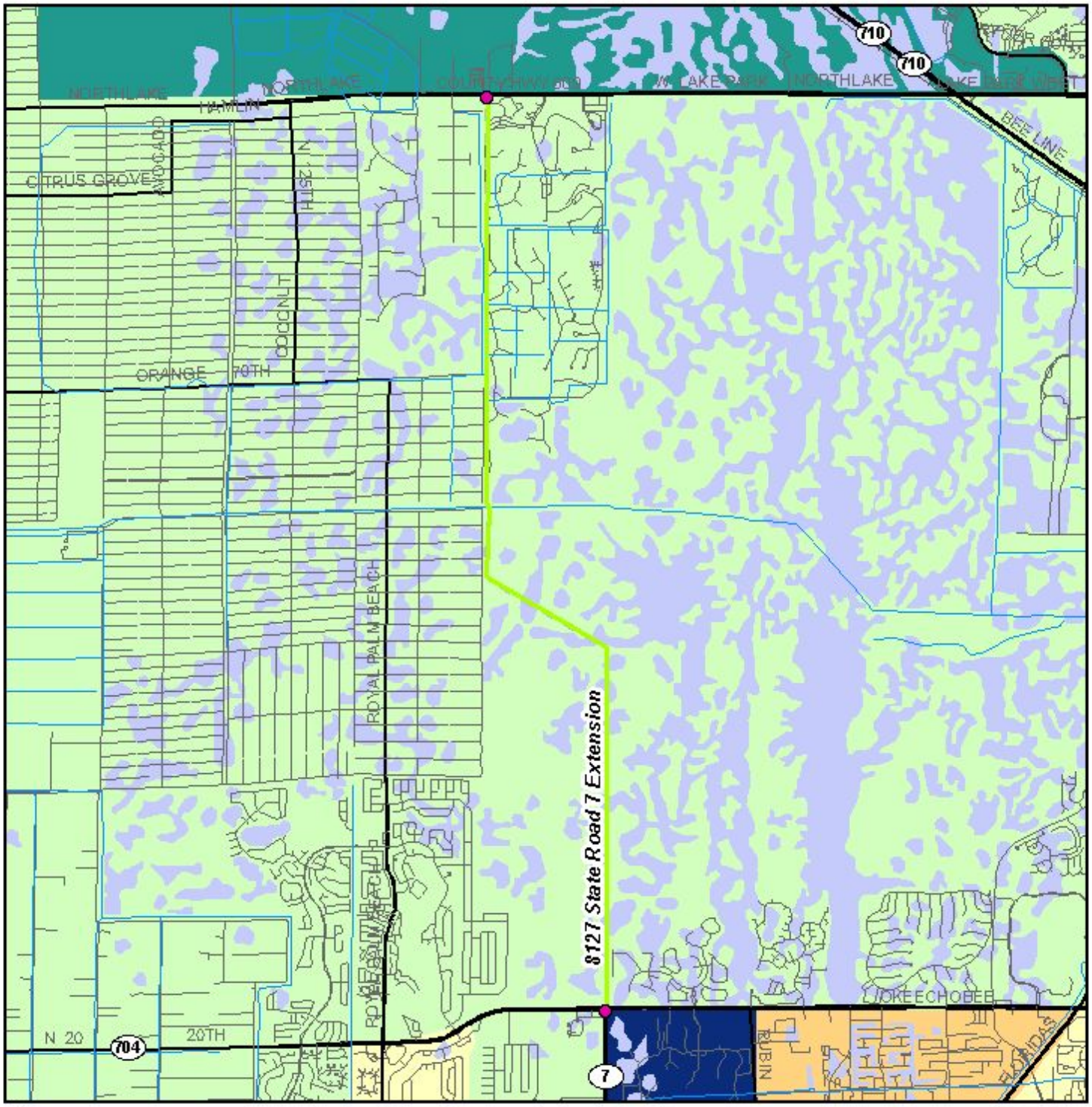
Geological Epoch

- Eocene
- Holocene
- Miocene
- Miocene/Pliocene
- Oligocene
- Oligocene/Miocene
- Pleistocene
- Pleistocene & Holocene
- Pliocene
- Pliocene/Pleistocene

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.1 Miles

Income Distribution Map

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

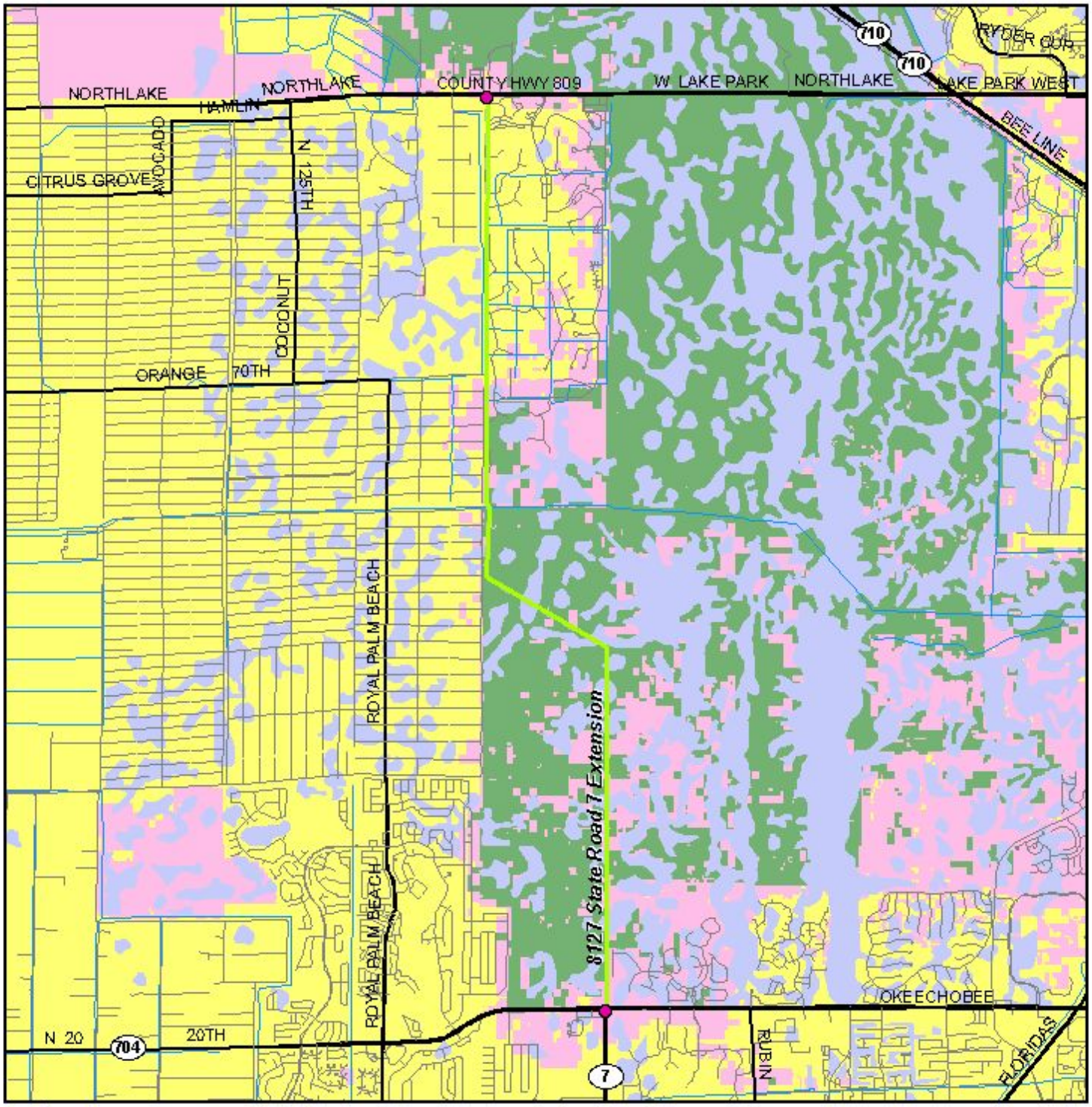
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- > 20% Below Poverty
- Water Body

Median Household Income

0 - 10000
10001 - 29999
30000 - 49999
50000 - 79999
80000 - 125000
> 125000

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Integrated Wildlife Habitat Ranking System Map

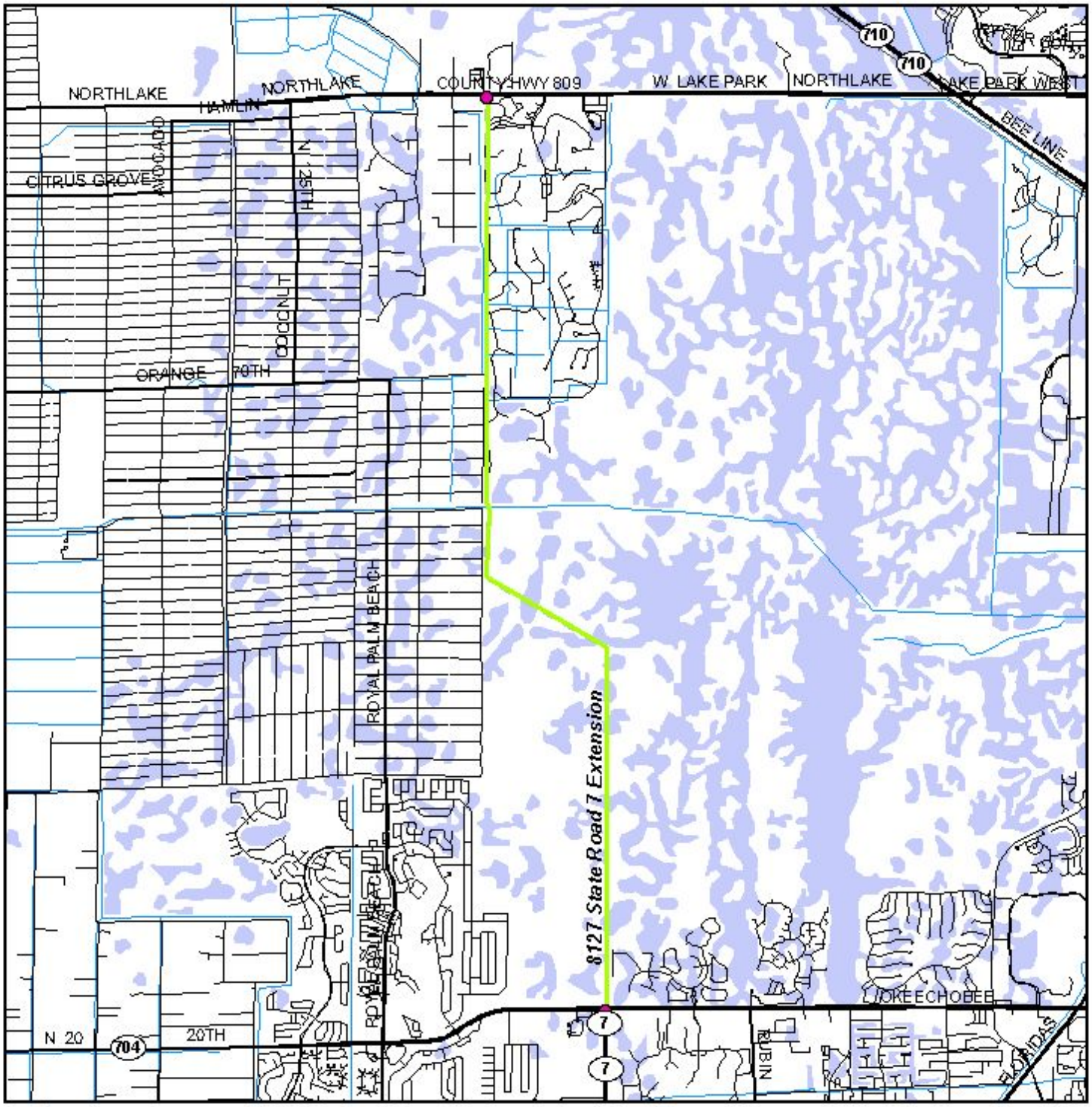
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body
- Low Habitat Quality
- Medium Habitat Quality
- High Habitat Quality

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2

SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

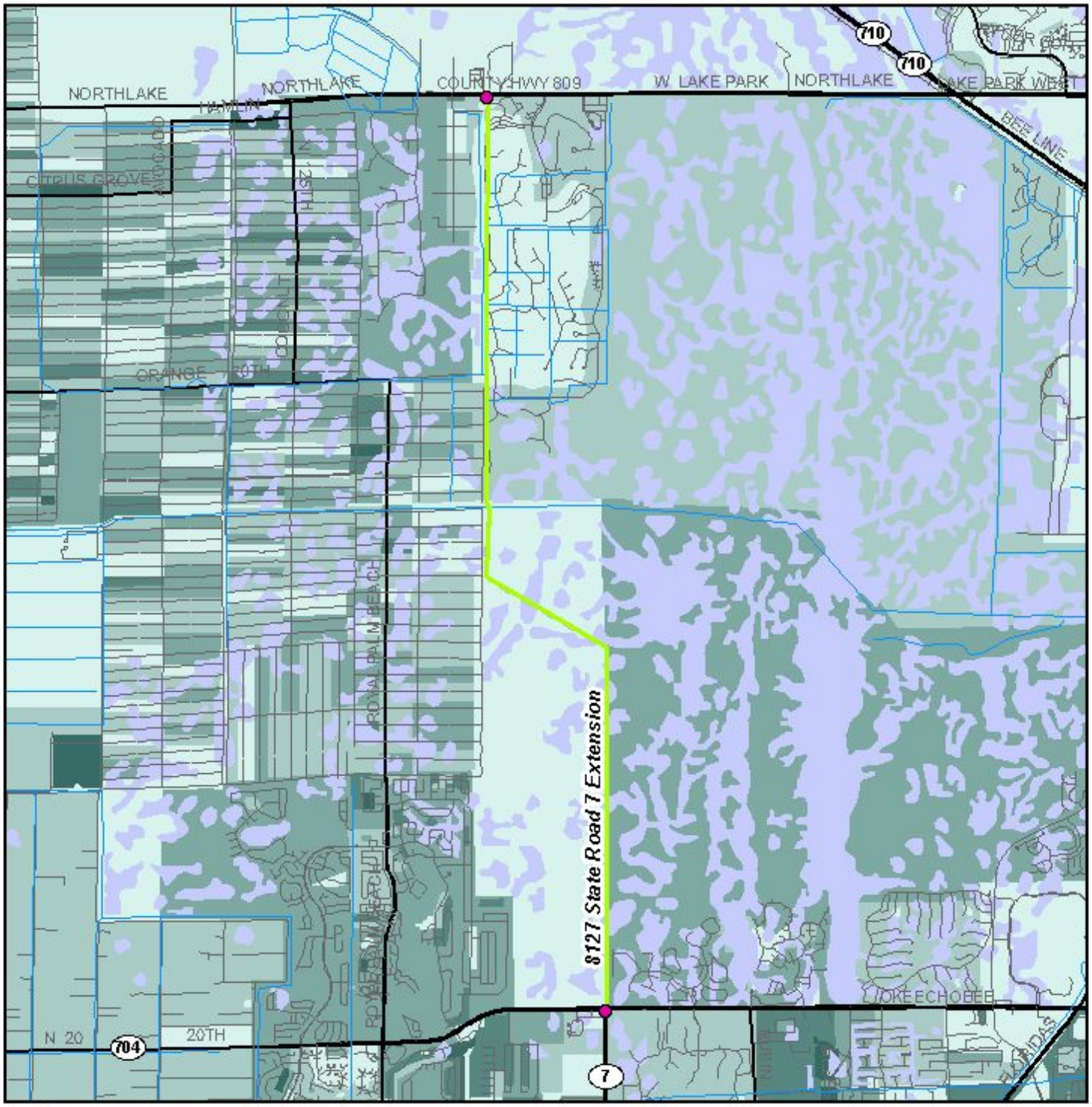
Land Use Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Minority Population Distribution Map

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

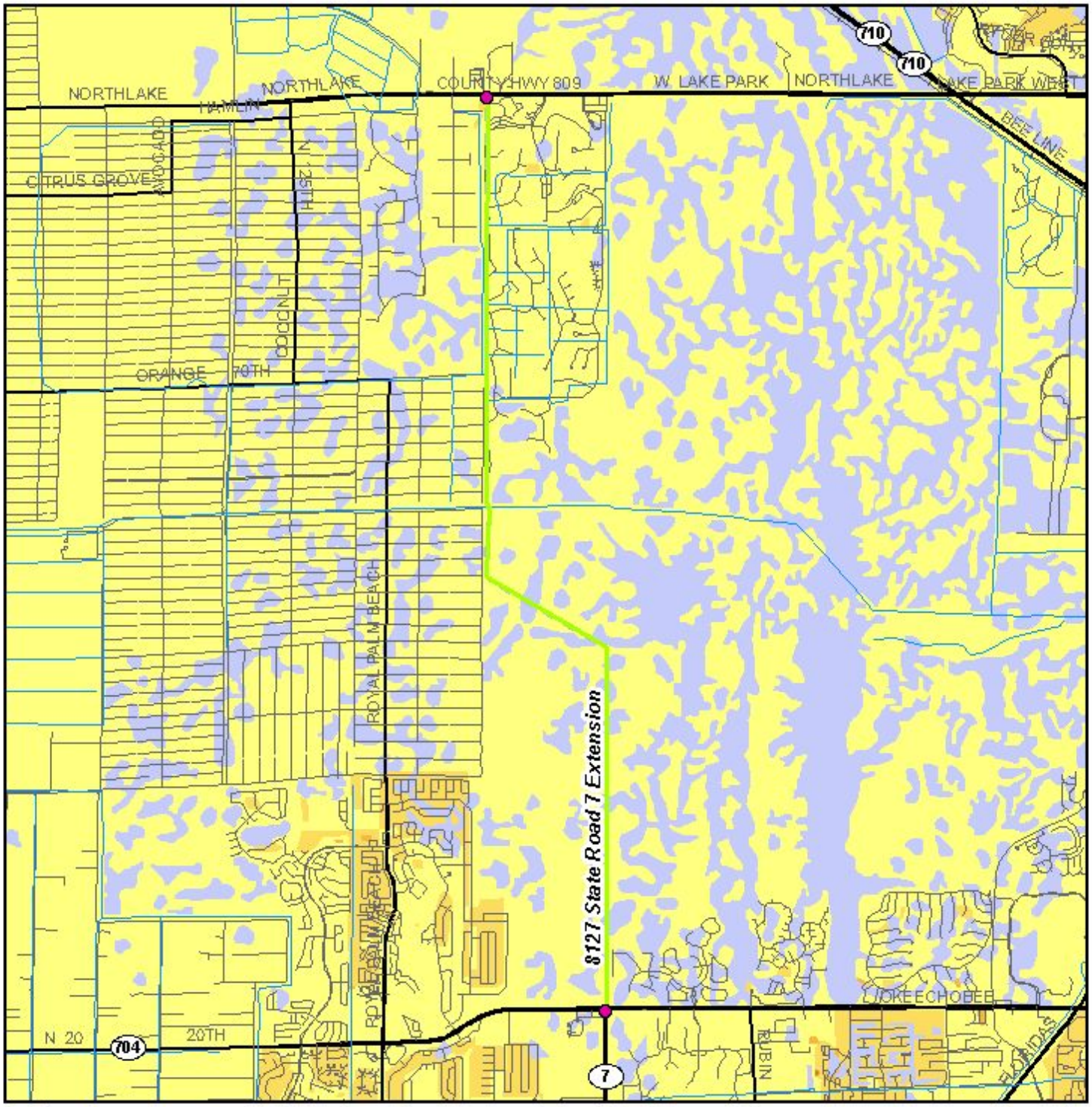
Percent Minority Population

0 - 6 | 7 - 20 | 21 - 38 | 39 - 60 | 61 - 85 | 86 - 100

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Population Density Map

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

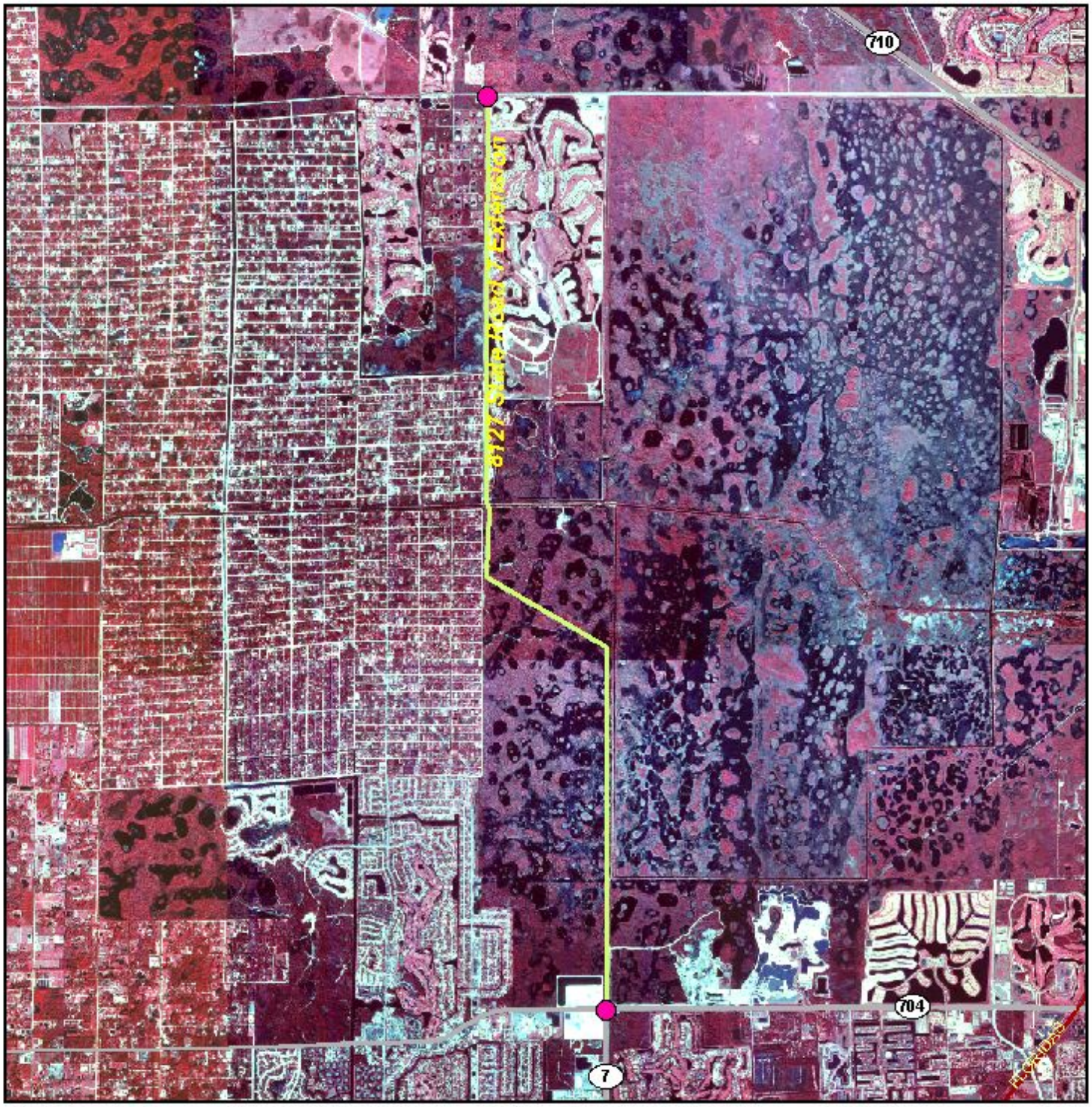
Population per Acre

0 - 4.9
5 - 29.9
30 - 99.9
100 - 349.9
350 - 800
> 800

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



00075 Miles

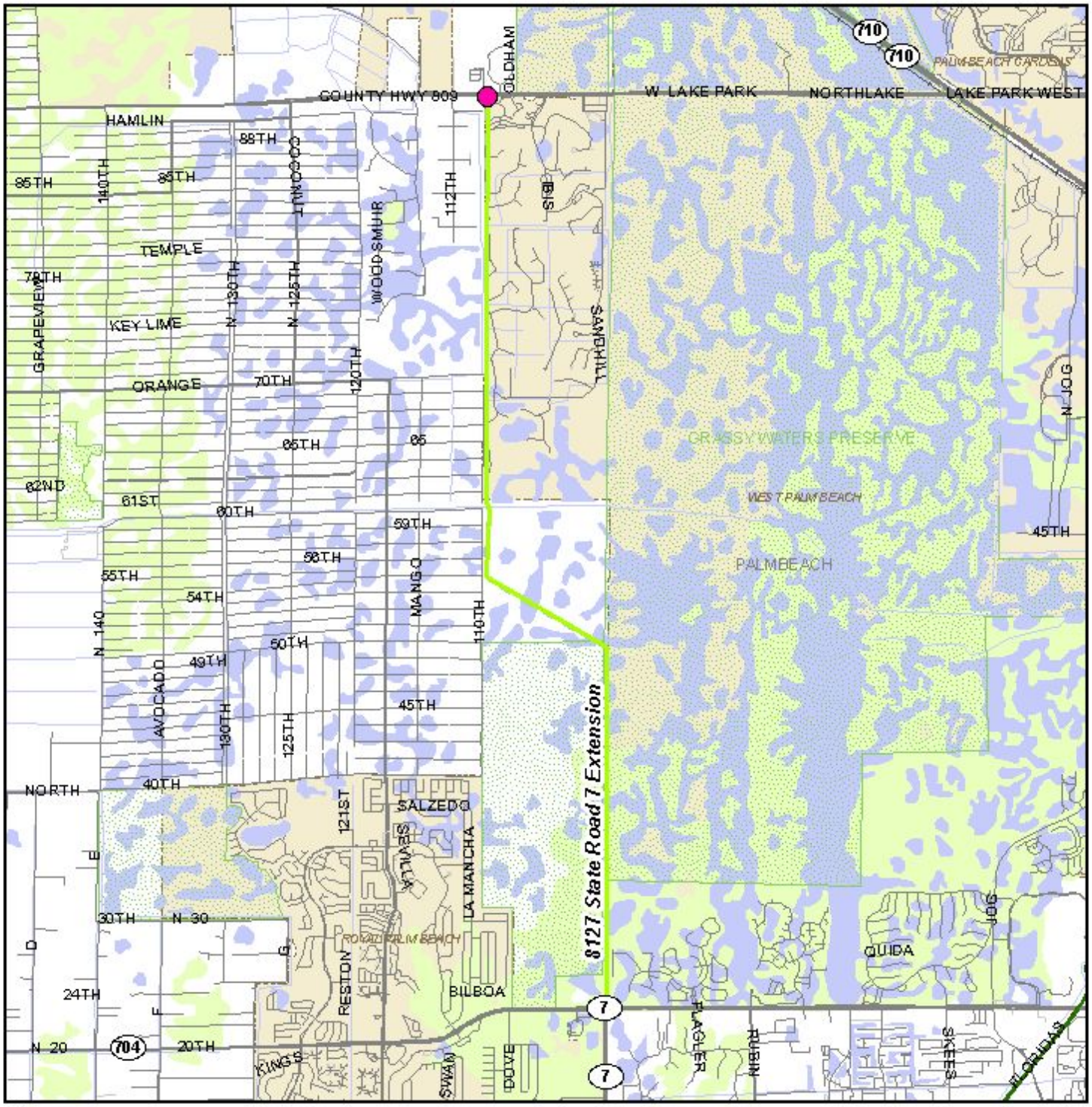
Project Aerial Map

ETDM Alternative Terminus
ETDM Alternative
Primary and Limited Access Highway
Secondary, Unlimited Access Highway
Other Highway Feature

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



Project Location Map

0 0.1 Miles

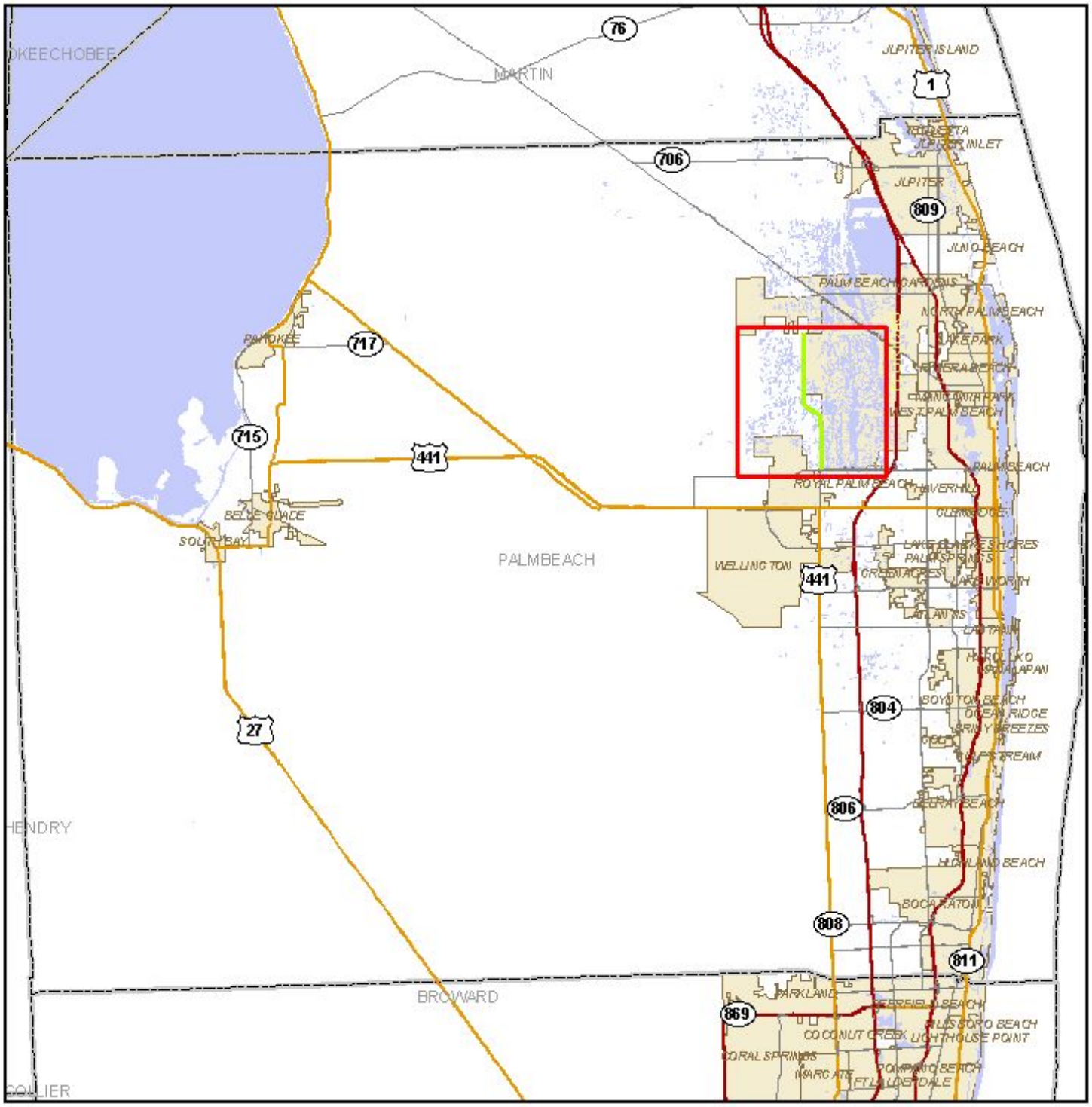
Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
US Census Bureau
County Property Appraisers
Florida Natural Areas Inventory

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #2

SR 704 Okeechobee Blvd. to Northlake Blvd.



0 7 Miles

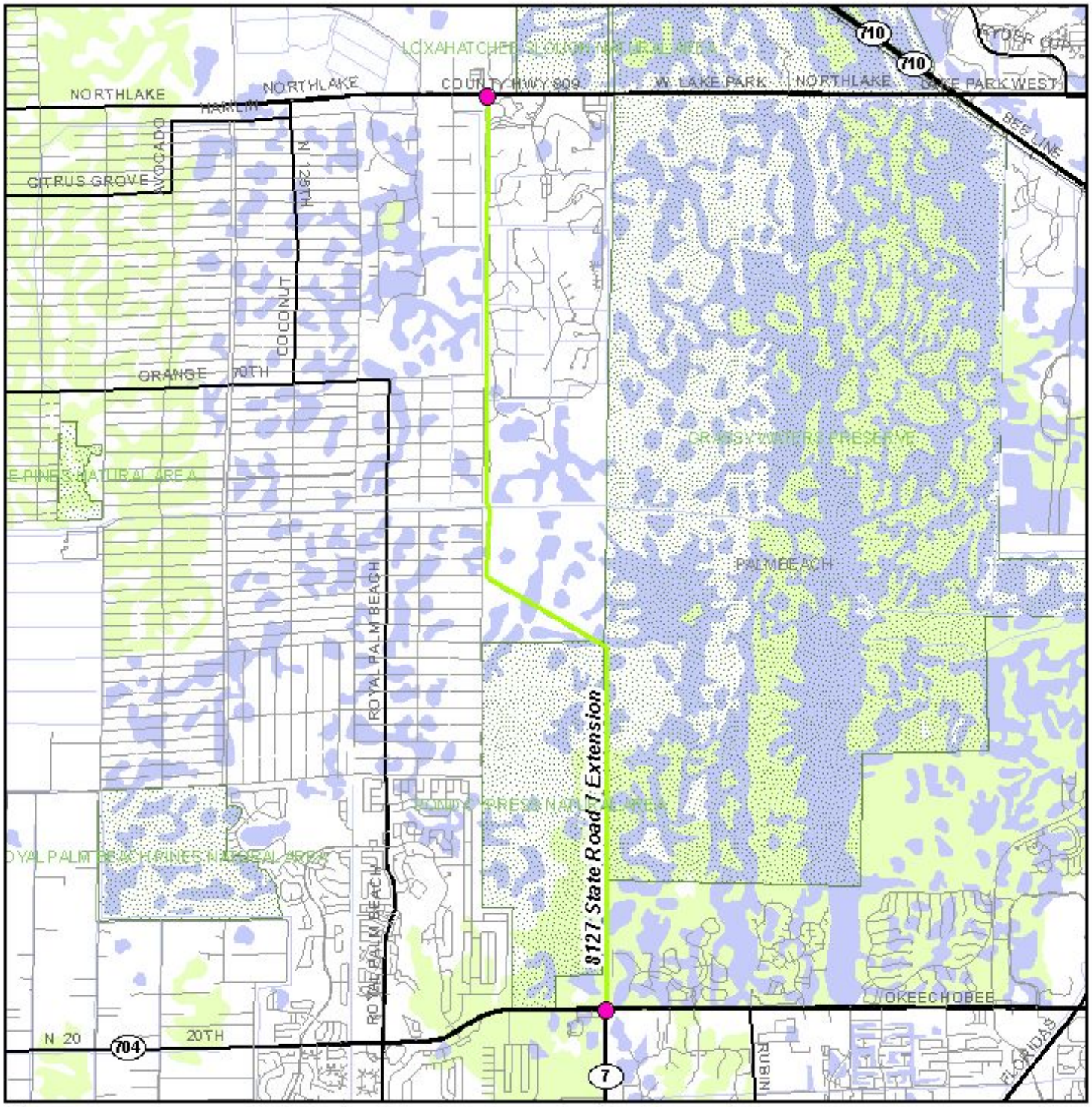
County Location Map

- ETDM Alternative
- Primary and Limited Access Highway
- Secondary, Unlimited Access Highway
- Other Highway Feature
- Water Body
- City Limit
- County Boundary
- Project Extent

Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
US Census Bureau
County Property Appraisers

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



00.1 Miles

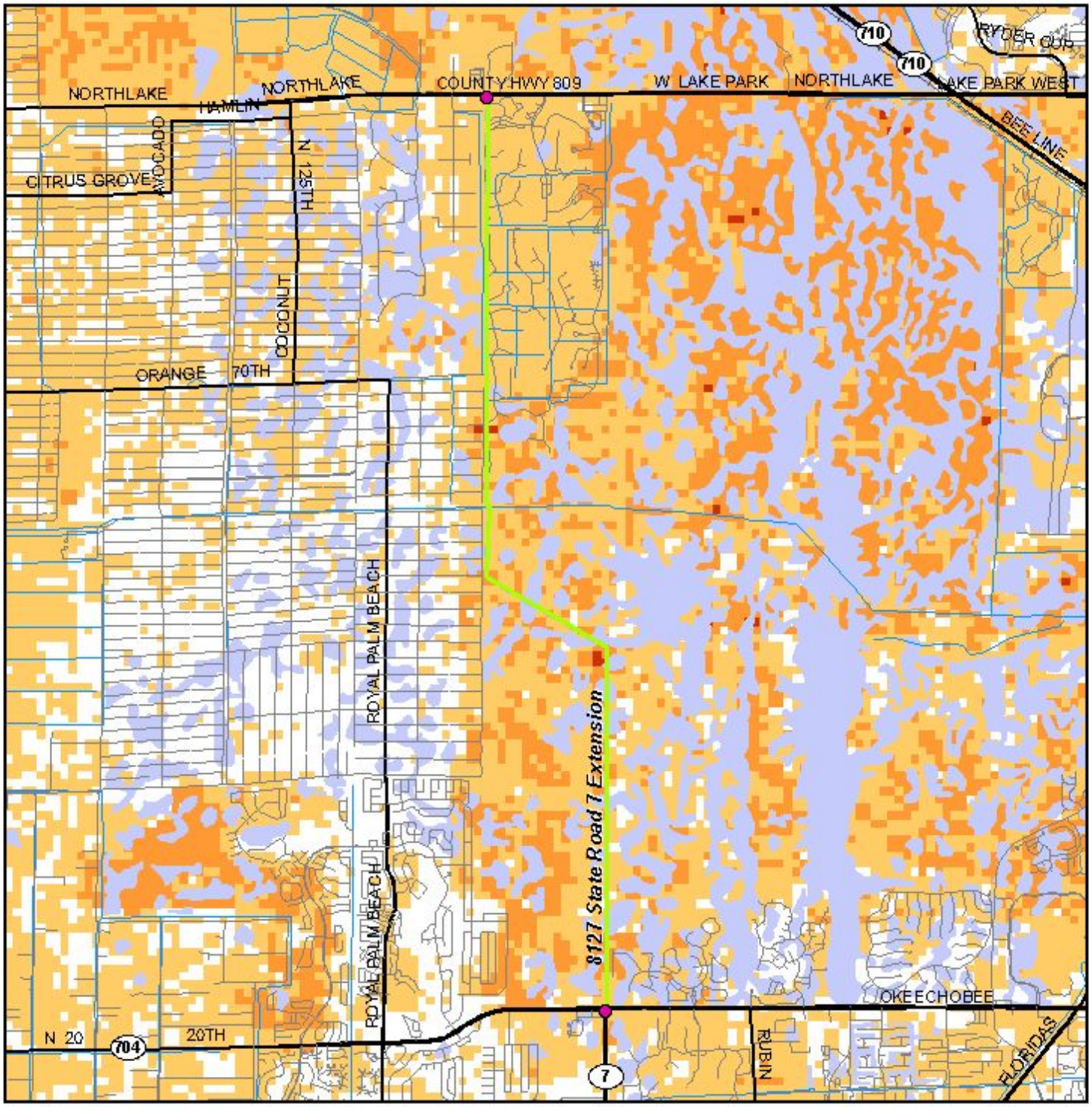
Conservation and Recreation Area Map

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Conservation or Recreation Area
- Major Road
- Local Road or Trail
- Railroad
- County Boundary

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

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

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

Species Potential Habitat Model Map

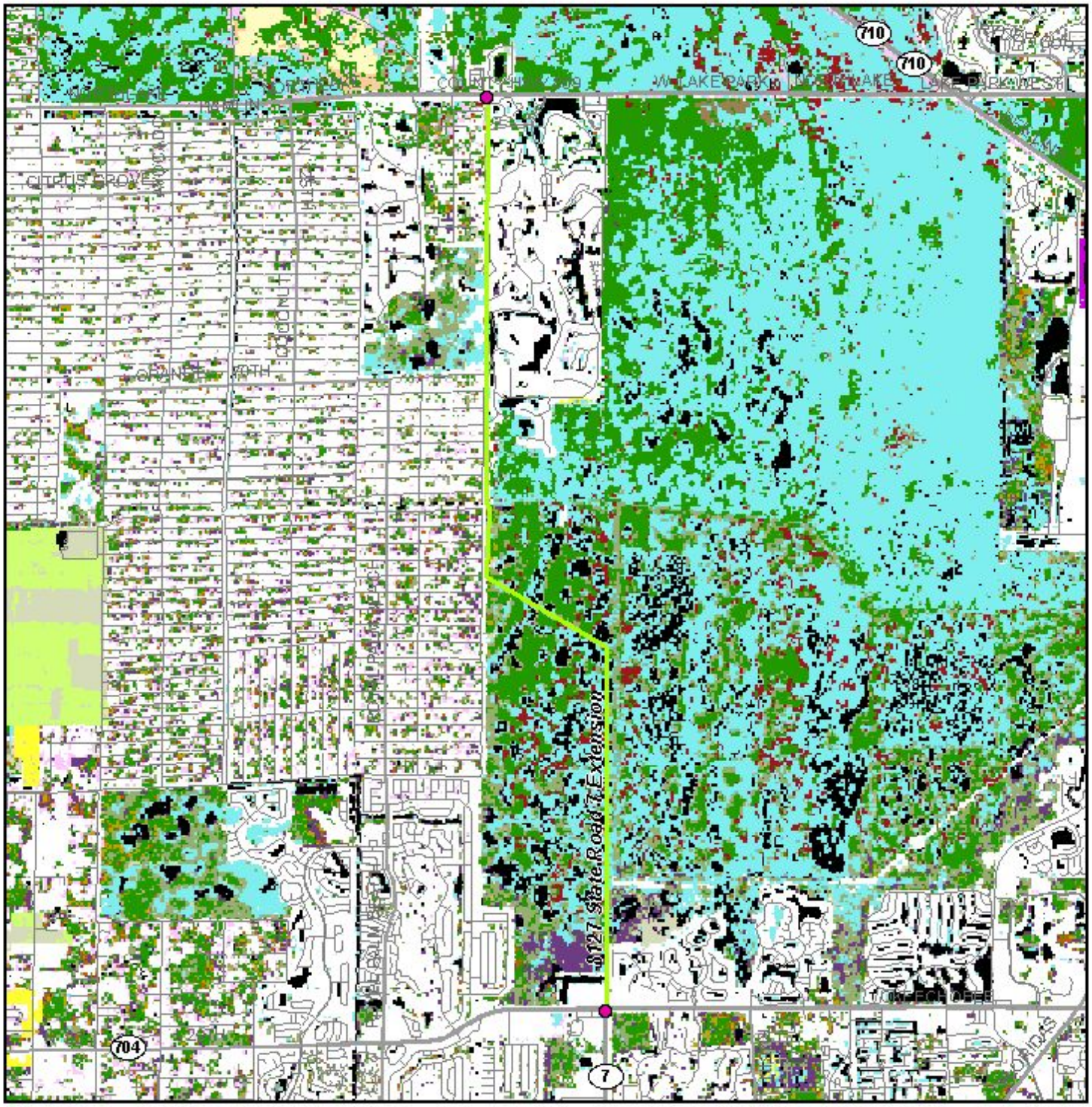
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

Potential Habitat for Focal Species

- 1 - 6 Species
- 7 - 12 Species
- 13 - 18 Species
- > 18 Species

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0.08 Miles

Vegetation and Land Cover Map

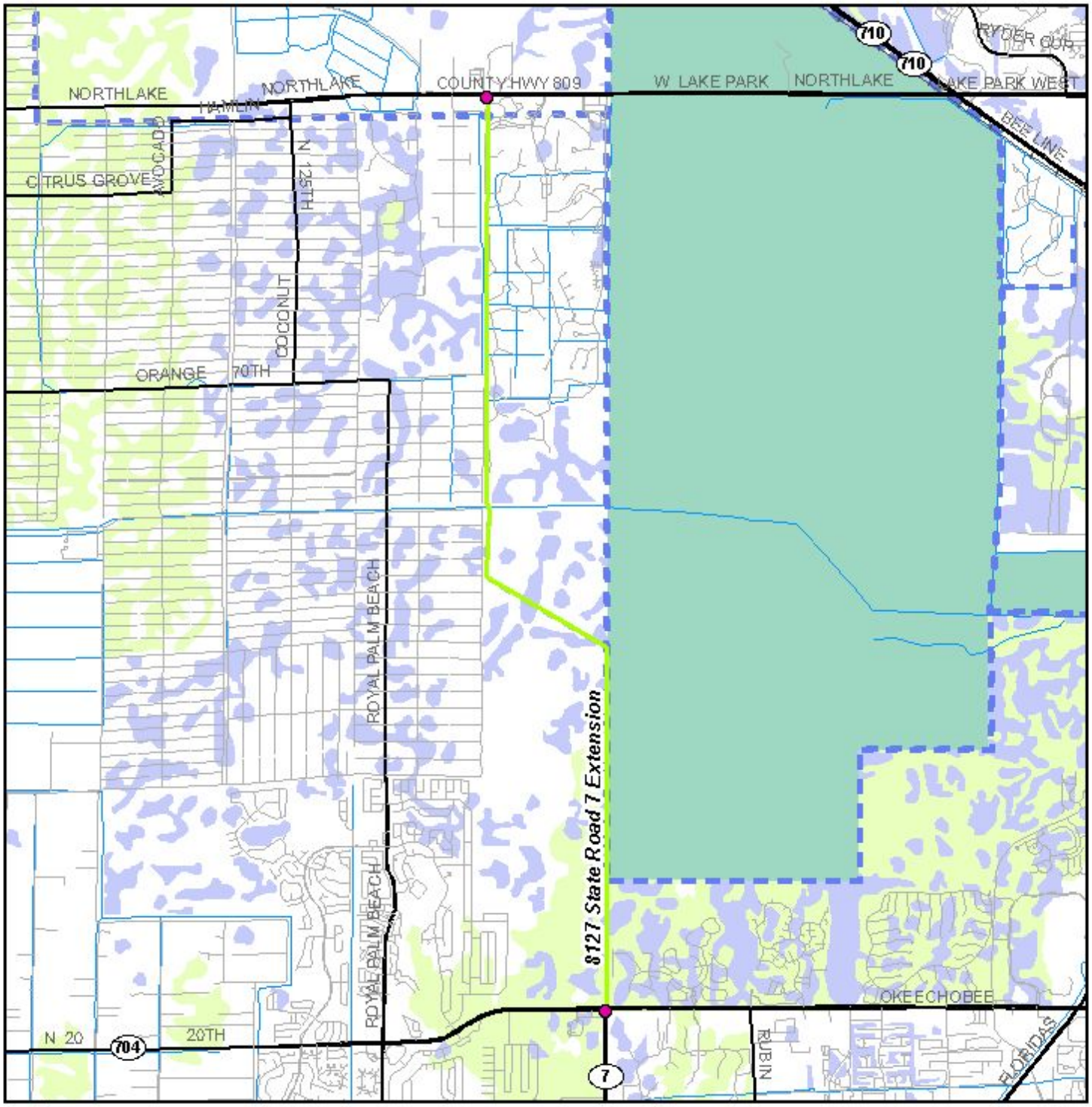
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail

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

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

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #2
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Water Resources Map

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

Data Sources:

Geographic Data Technology, Inc.
US Geological Survey

Florida Department of Transportation
Florida Department of Environmental Protection

Florida Geological Survey
US Bureau of Transportation Statistics

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #2
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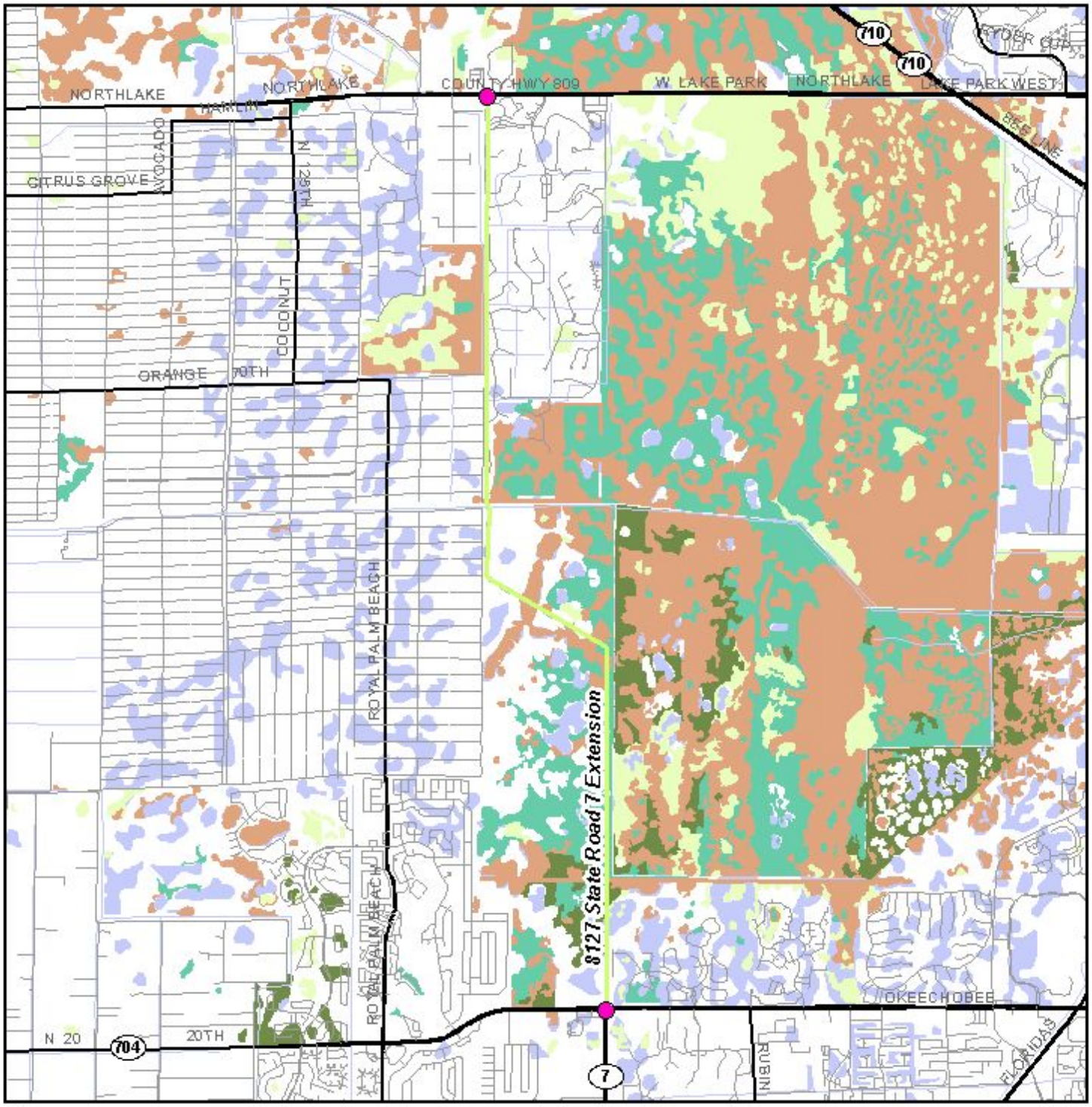


Wetland Resource Map

0.1 Miles

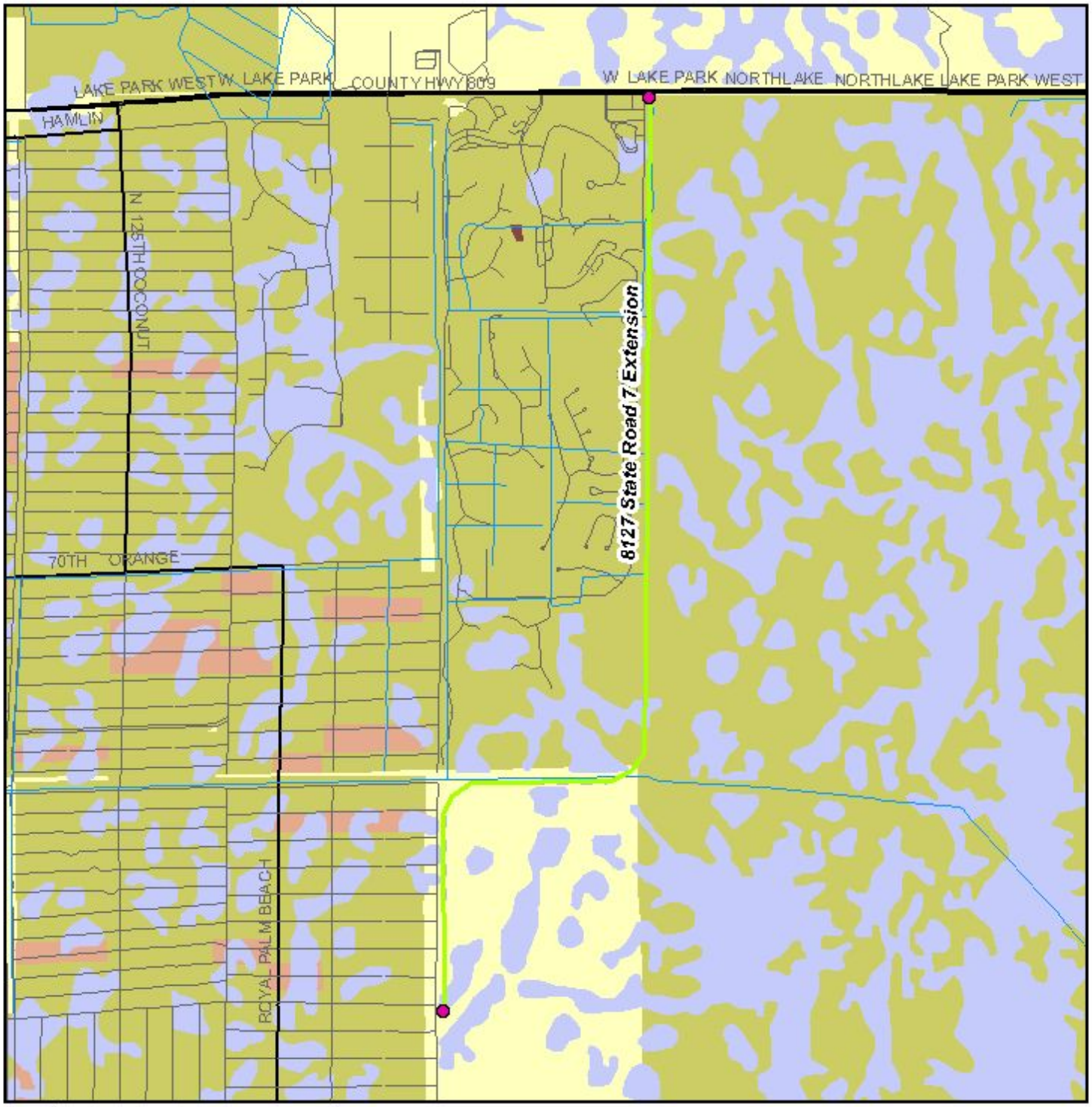
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Wetland Hardwood Forest
- Wetland Coniferous Forest
- Wetland Forested Mixed
- Vegetated Non-forested Wetland
- Non-vegetated Wetland
- Cut Over Wetland
- Wetland Scrub Shrub

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

Map Generated on: 12/4/2006

Hardcopy Maps: Alternative #3

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Population Age Distribution Map

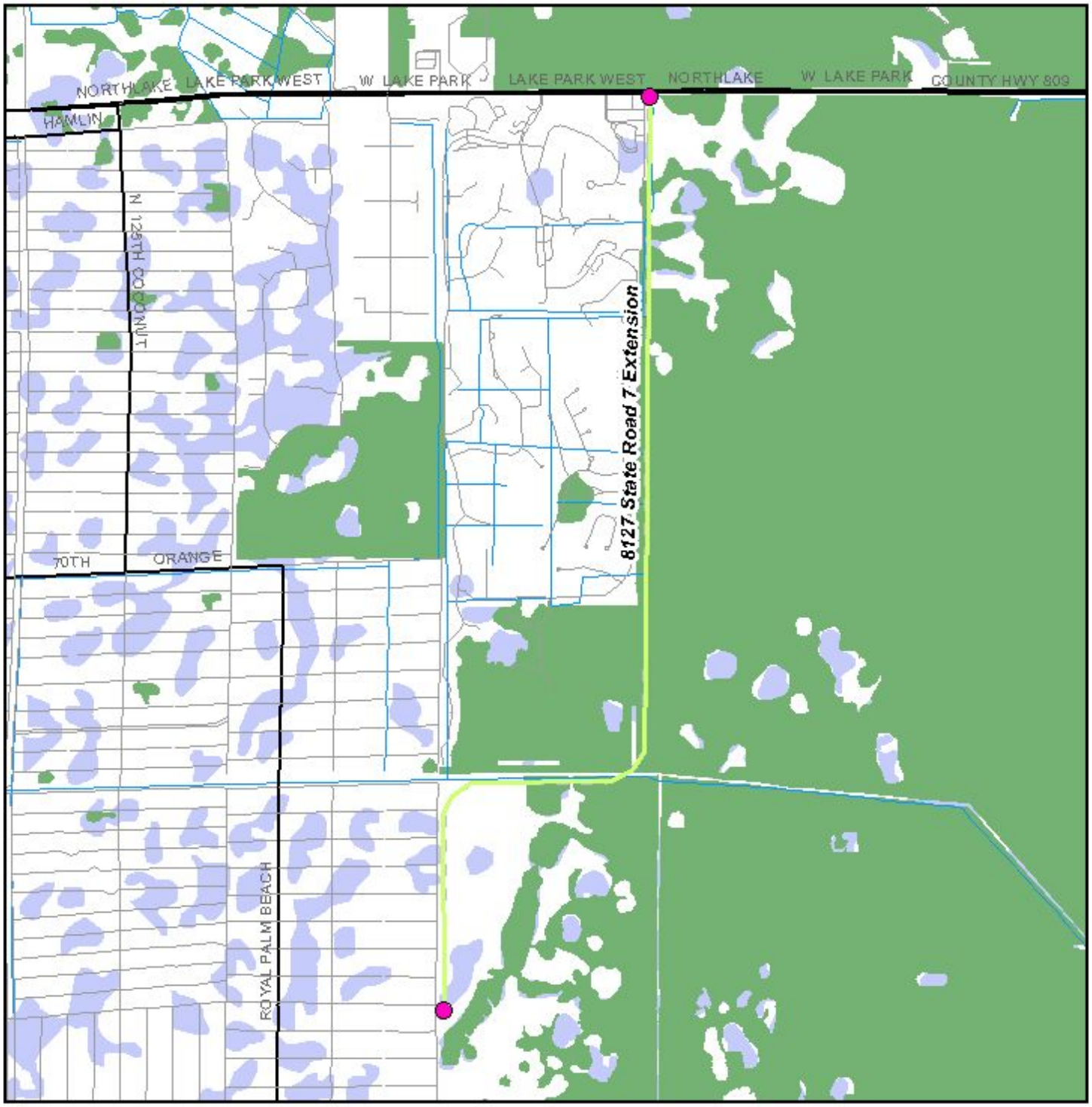
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

Median Age: 0 - 18, 18 - 30, 30 - 65, > 65

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 .04 Miles

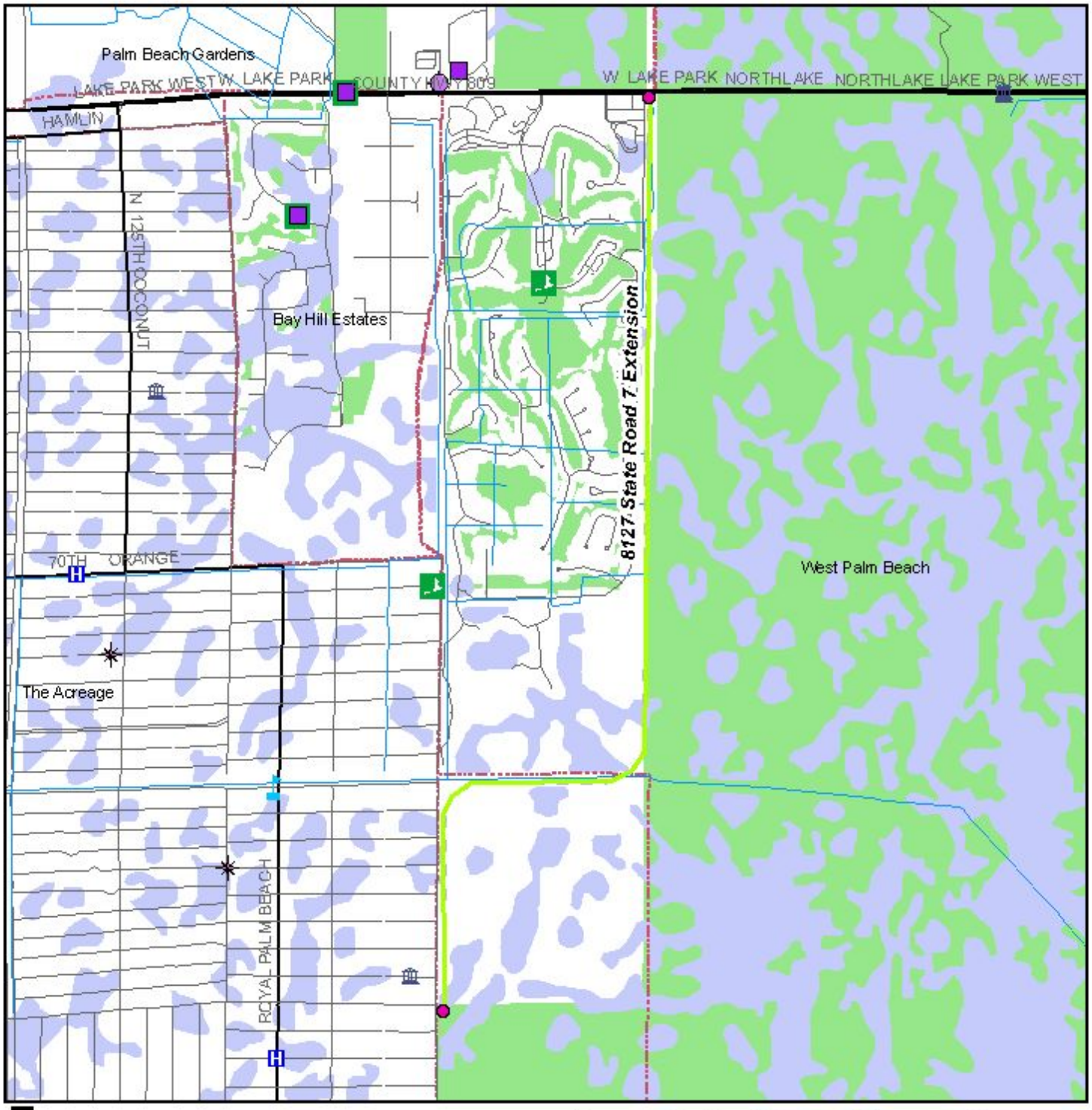
Coastal and Marine Resource Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 0.1 Miles

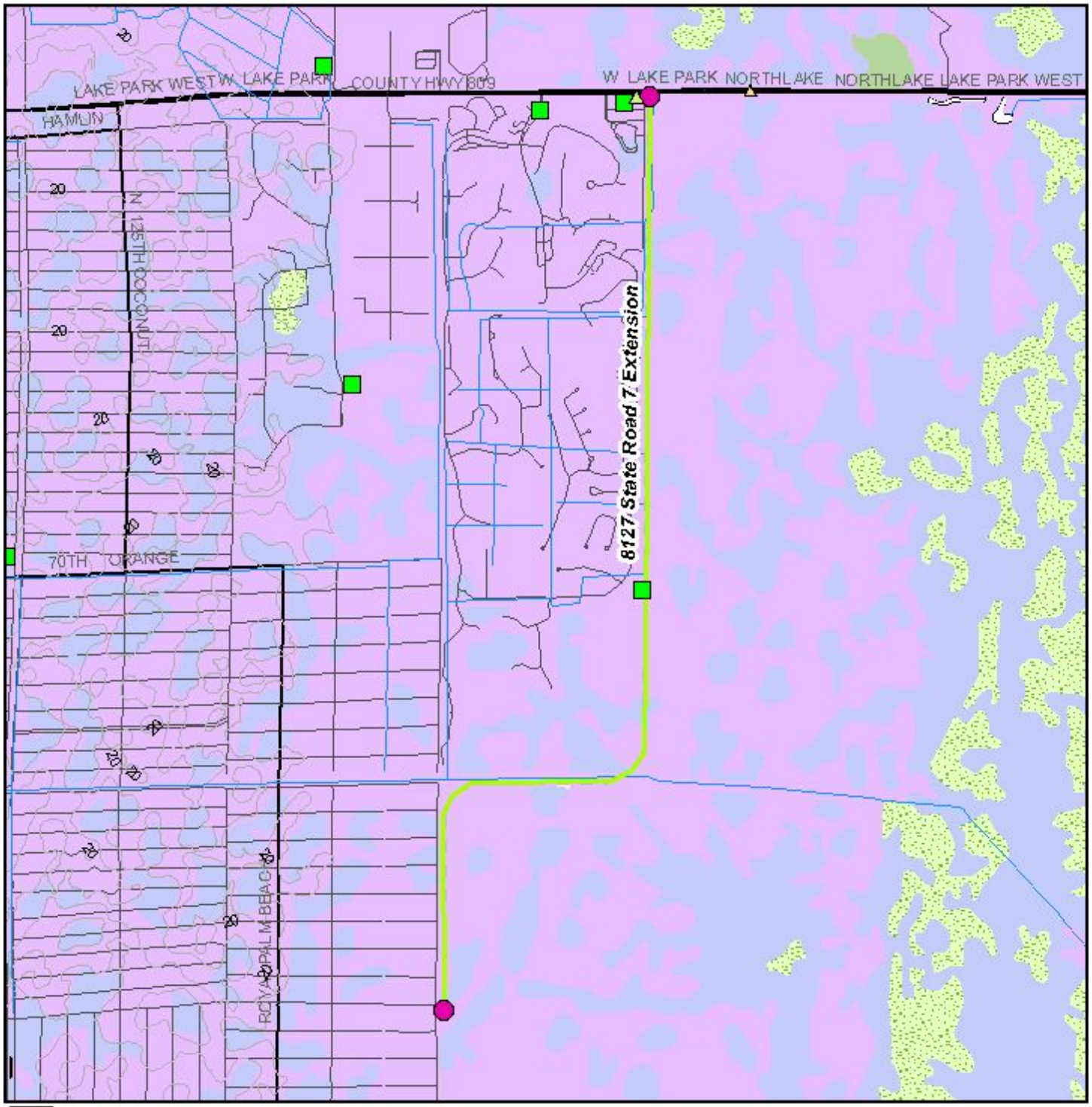
Community Facilities and Services Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Potential Contamination Assessment Map

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Toxic Release Inventory
- Dry Cleaning Facility
- Gasoline Service Station
- Solid Waste Facility
- NPL Remediation Site
- Hazardous Material Site
- Power Plant
- Superfund Site
- Nuclear Site
- Petroleum Tank
- Brownfield Area
- 5 FT Contour

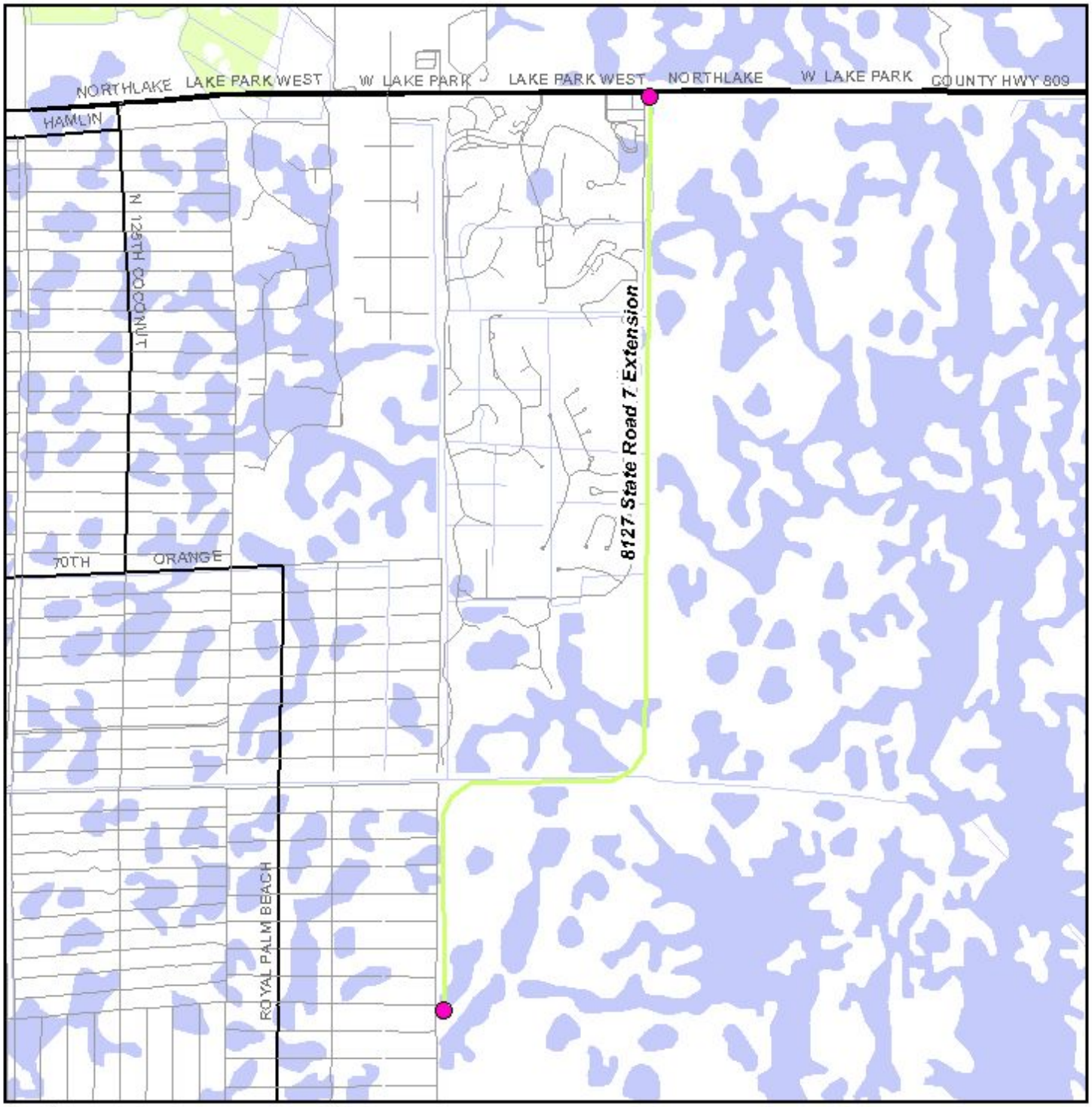
Soil Drainage

- Excellent to Well
- Well to Moderate Well
- Moderate Well to Poor
- Poor to Very Poor
- Unclassified
- Water Body
- Swamp/Marsh

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



Farmlands Resource Map

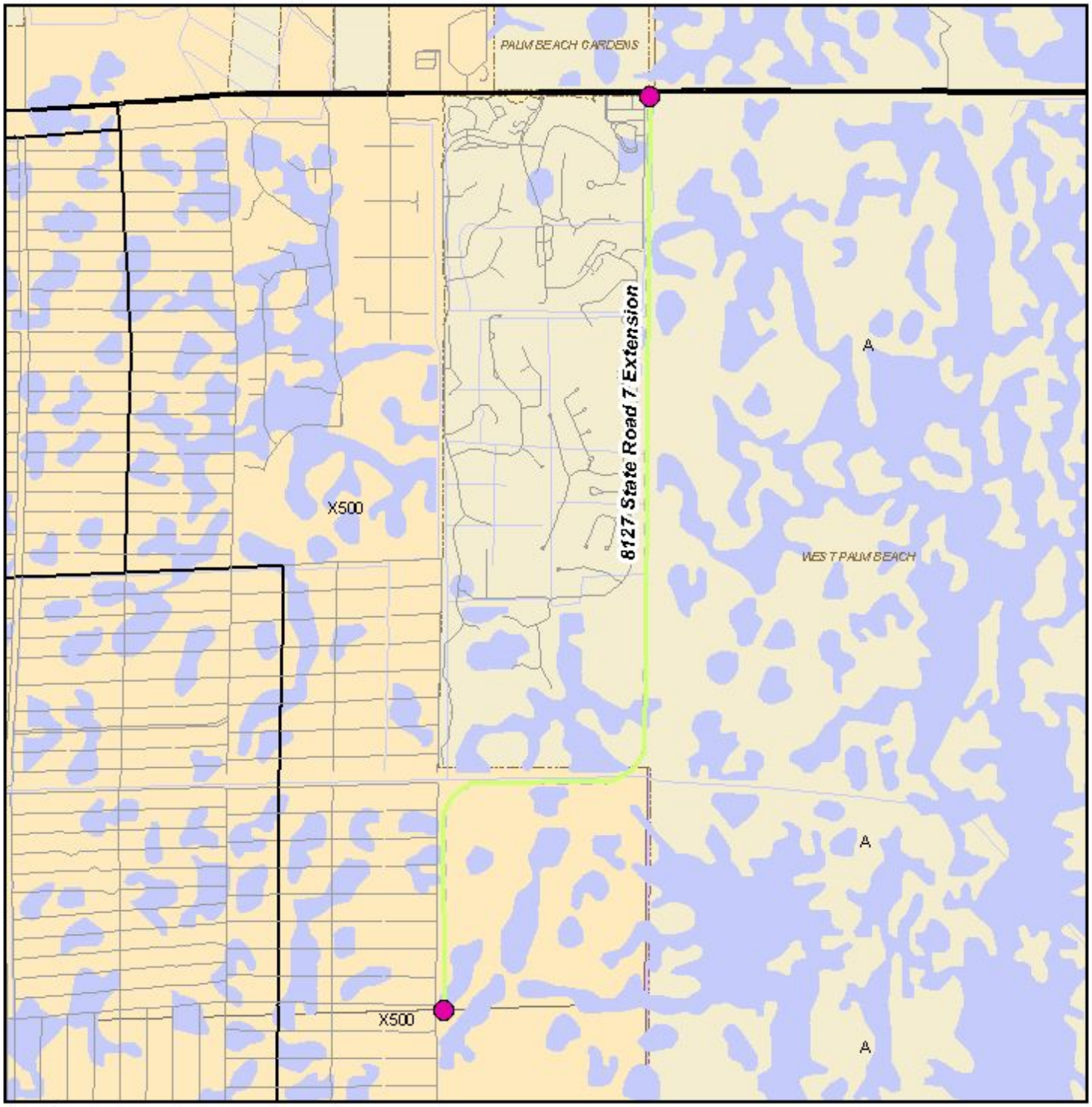
0 0.2 Miles

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Major Road
- Local Road or Trail
- Water Body
- Prime Farmland Soils
- Cropland/Pastureland
- Feeding Operations
- Nurseries/Vineyards
- Specialty Farms
- Tree Crops
- Rural Open Lands

Data Sources: Geographic Data Technology, Inc.
Florida Water Management Districts
US Geological Survey
Natural Resources Conseration Services

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



Floodplain Resource Map

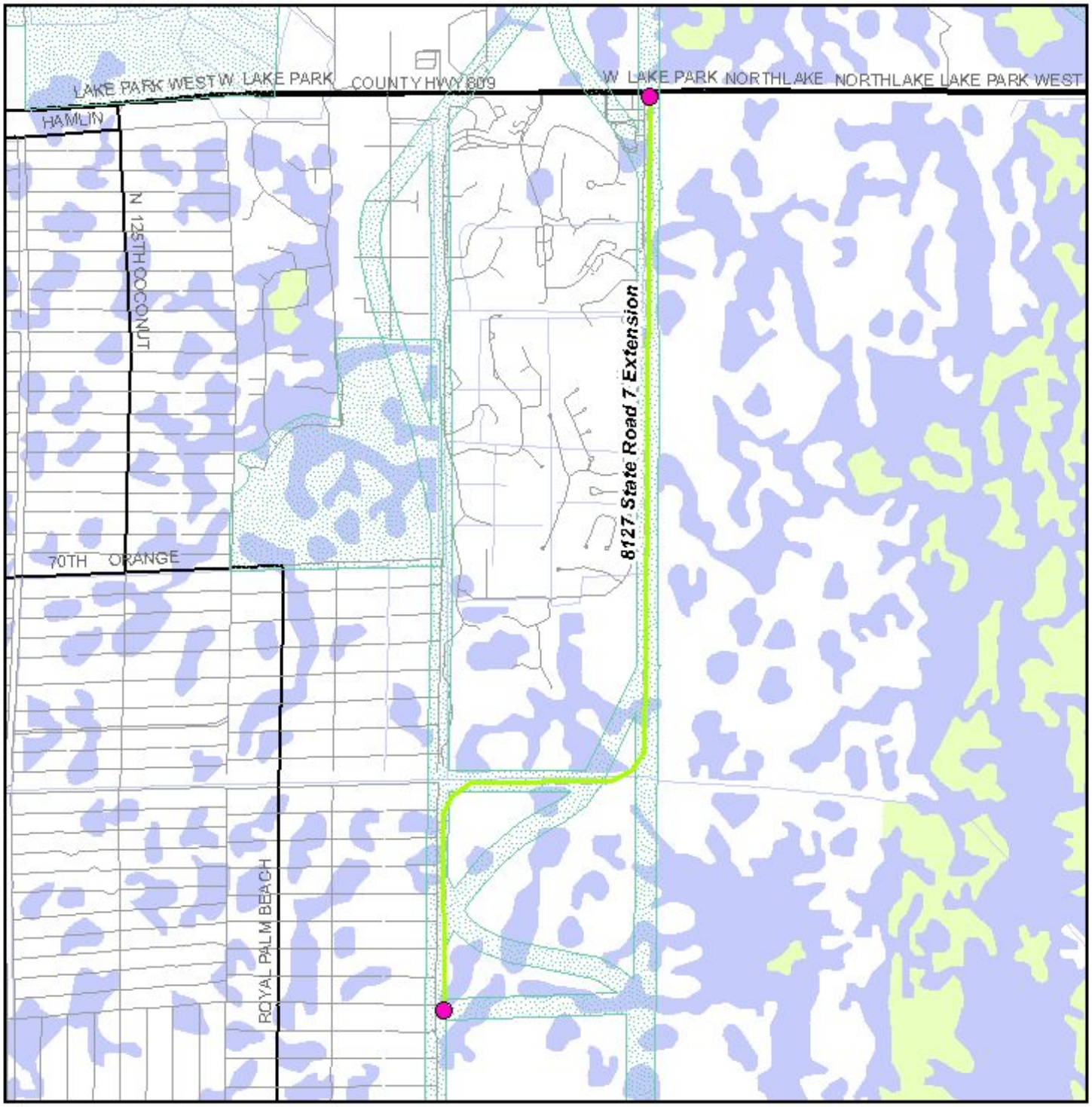
0 0.2 Miles

ETDM Alternative Terminus
ETDM Alternative
Major Road
Local Road or Trail
River, Stream or Canal
Water Body
Inside Special Flood Hazard Area
Outside Special Flood Hazard Area
FEMA Data Not Available

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 .04 Miles

Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
Florida Department of Transportation
Florida Department of State,
Bureau of Archaeological Research

Historic Resources Map

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Major Road
- Local Road or Trail
- Railroad
- Historic Structure
- Historic Cemetery
- Historic Bridge
- Historic Resource Group
- Cultural Resource Field Survey Area
- State Historic Highway

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). Absense of features on the map does not necessarily indicate an absense of resources in the project vicinity.

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.

0 0.2 Miles

Hydrogeology Resource Map

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Other 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

- Eocene
- Holocene
- Miocene
- Miocene/Pliocene
- Oligocene
- Oligocene/Miocene
- Pleistocene
- Pleistocene & Holocene
- Pliocene
- Pliocene/Pleistocene

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.

0.05 Miles

Income Distribution Map

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

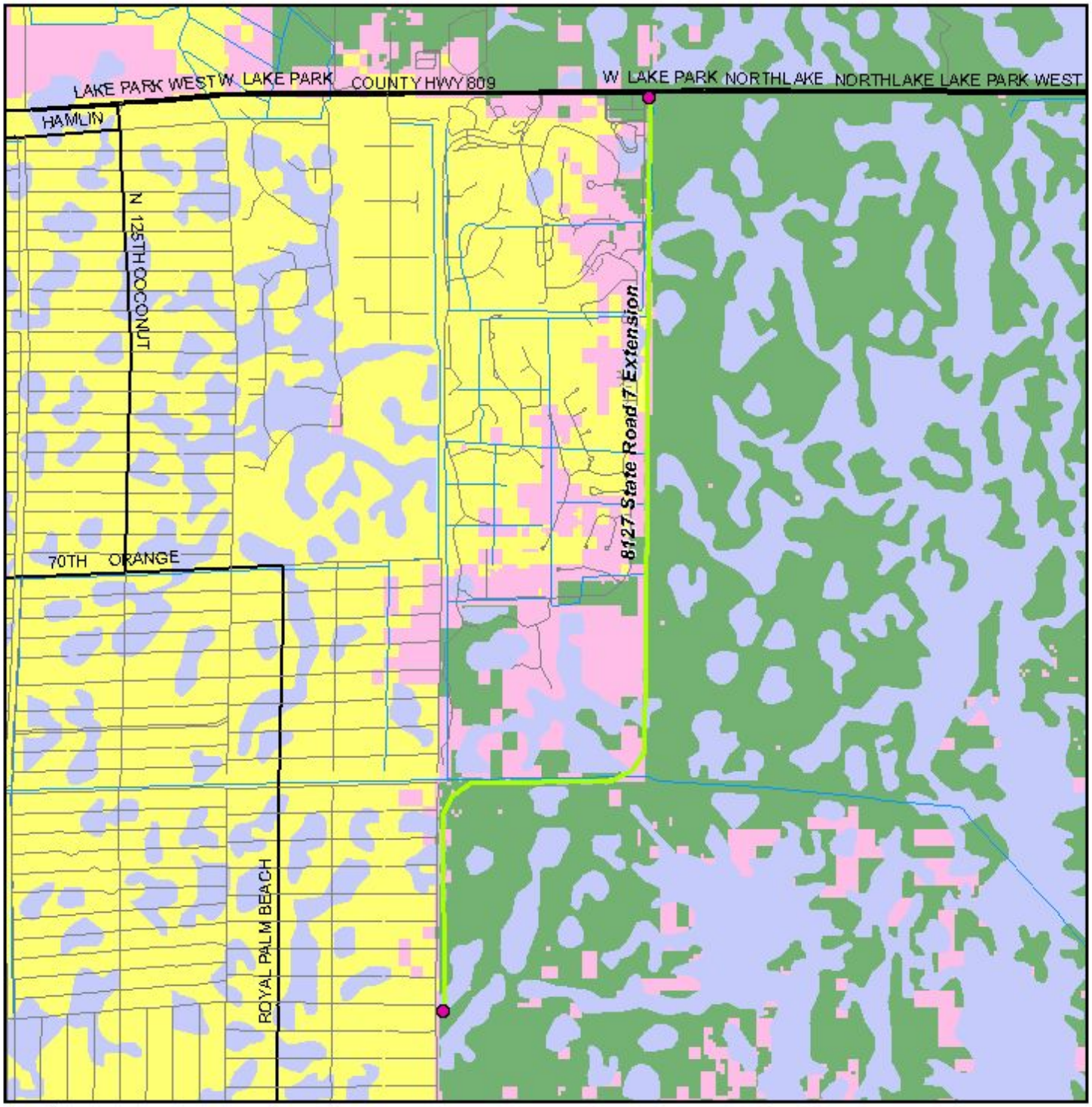
Median Household Income

0 - 10000
10001 - 29999
30000 - 49999
50000 - 79999
80000 - 125000
> 125000

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

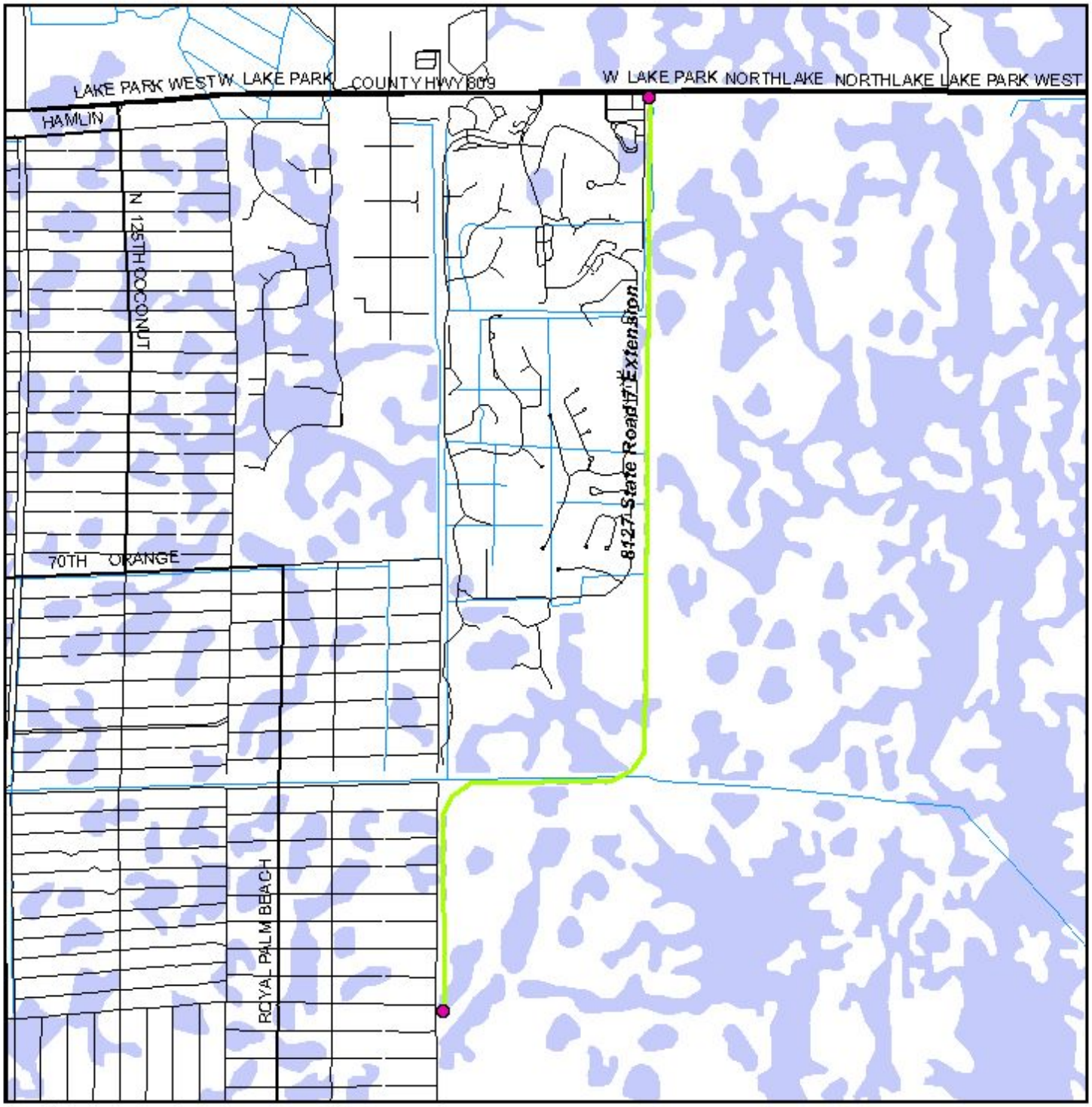
Integrated Wildlife Habitat Ranking System Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

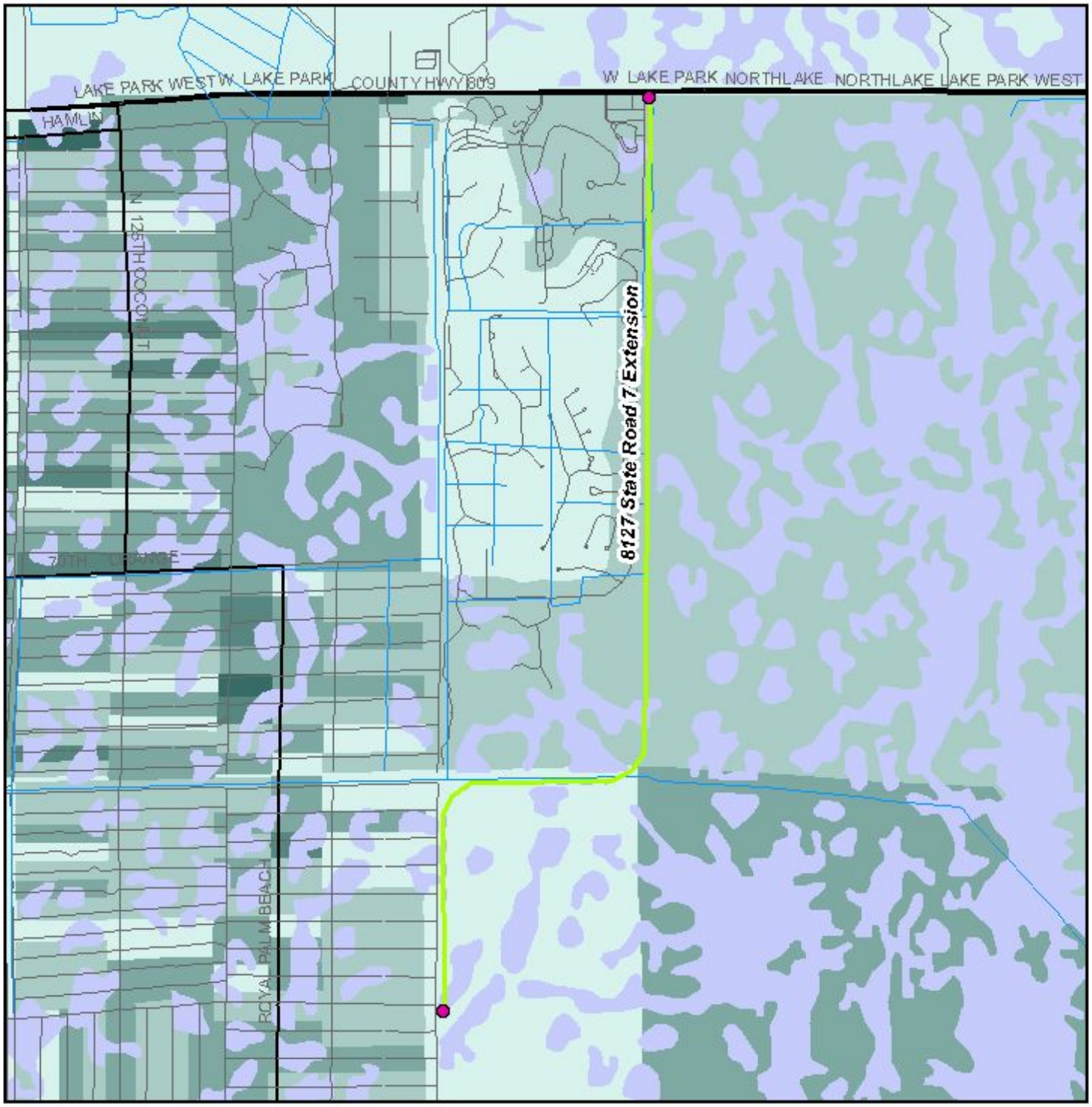
Land Use Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Minority Population Distribution Map

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

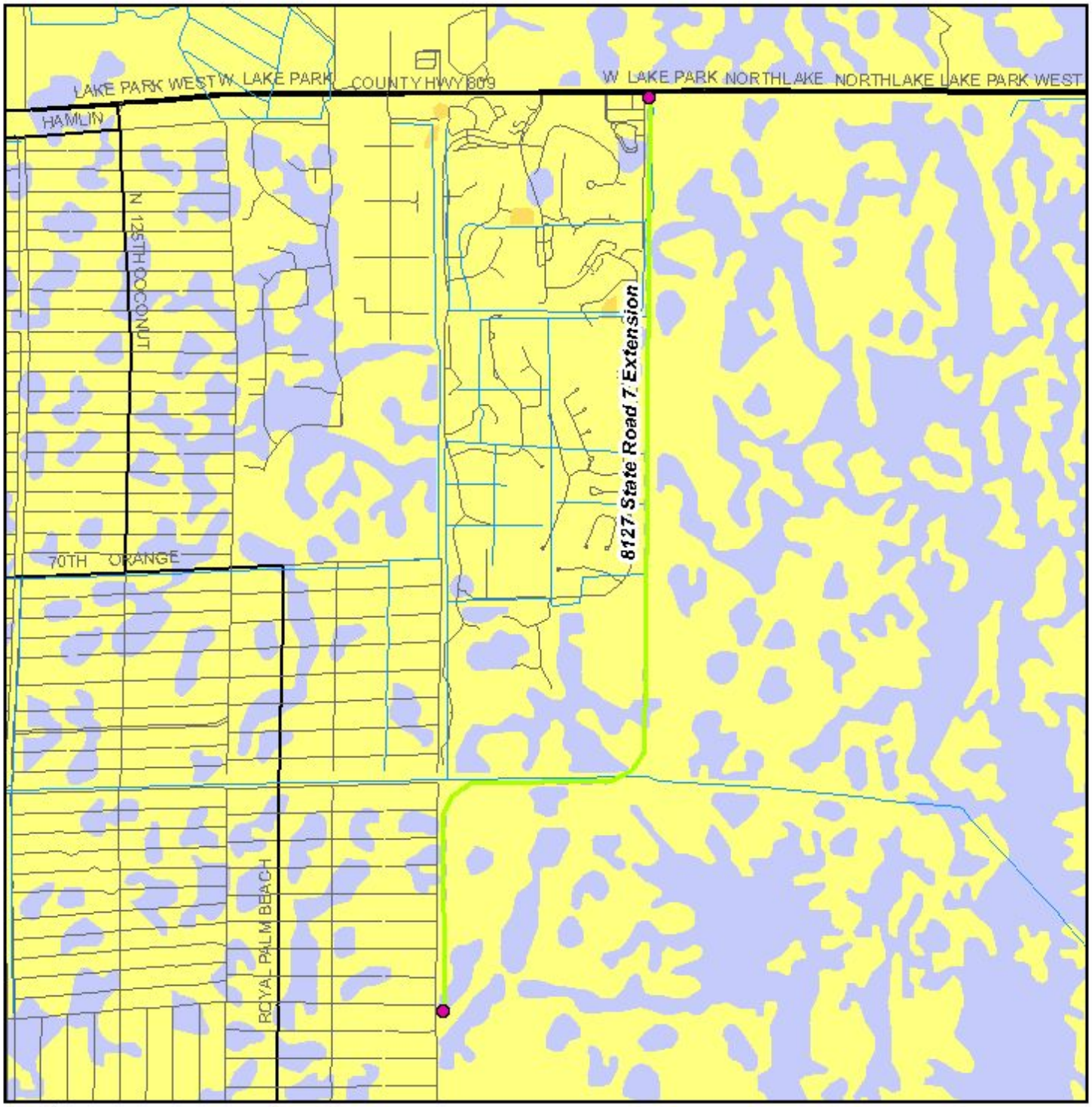
Percent Minority Population

0 - 6 | 7 - 20 | 21 - 38 | 39 - 60 | 61 - 85 | 86 - 100

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Population Density Map

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

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

Population per Acre
0 - 4.9
5 - 29.9
30 - 99.9
100 - 349.9
350 - 600
> 600

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.

0.06 Miles

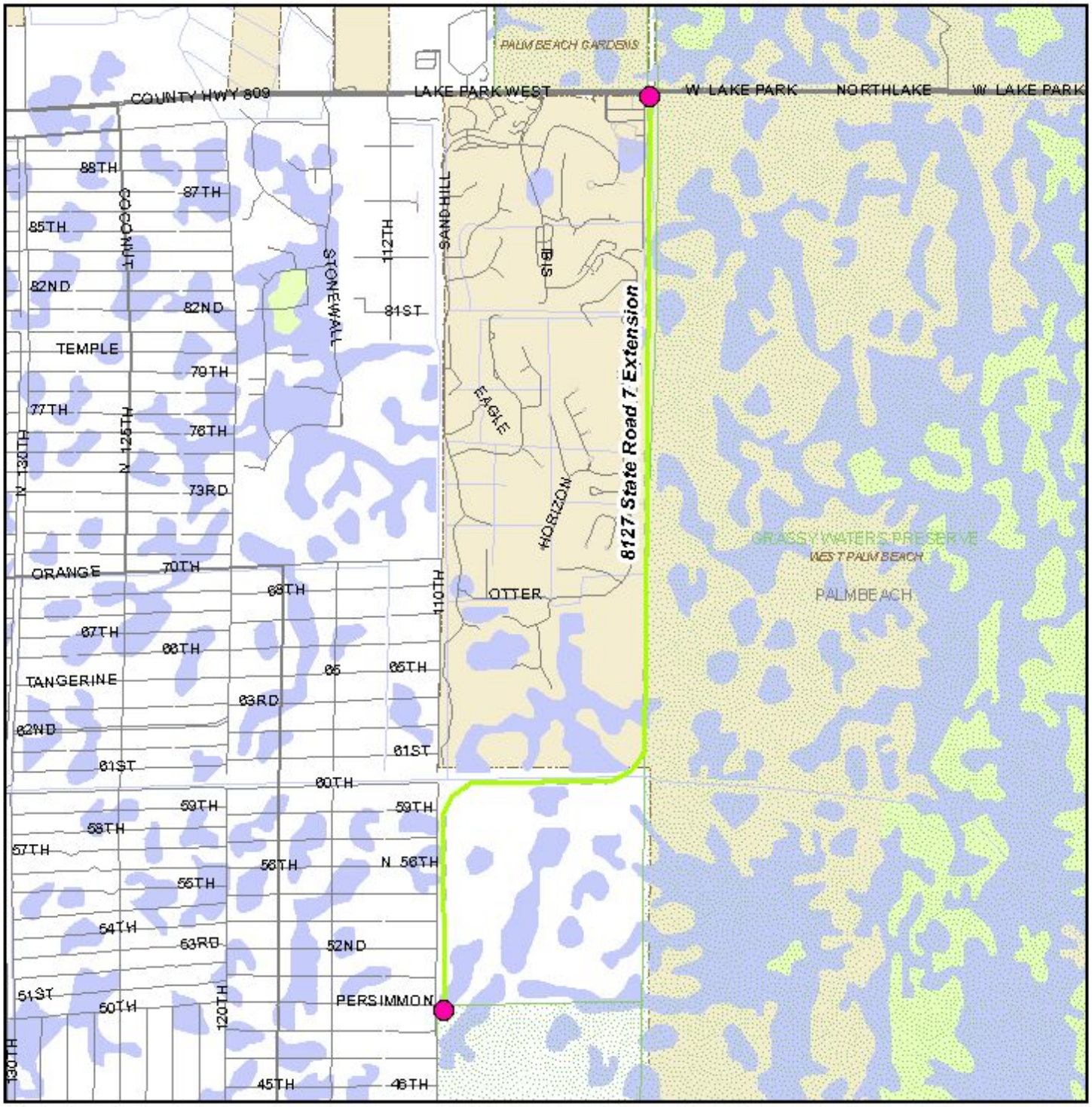
Project Aerial Map

ETDM Alternative Terminus
ETDM Alternative
Primary and Limited Access Highway
Secondary, Unlimited Access Highway
Other Highway Feature

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



Project Location Map

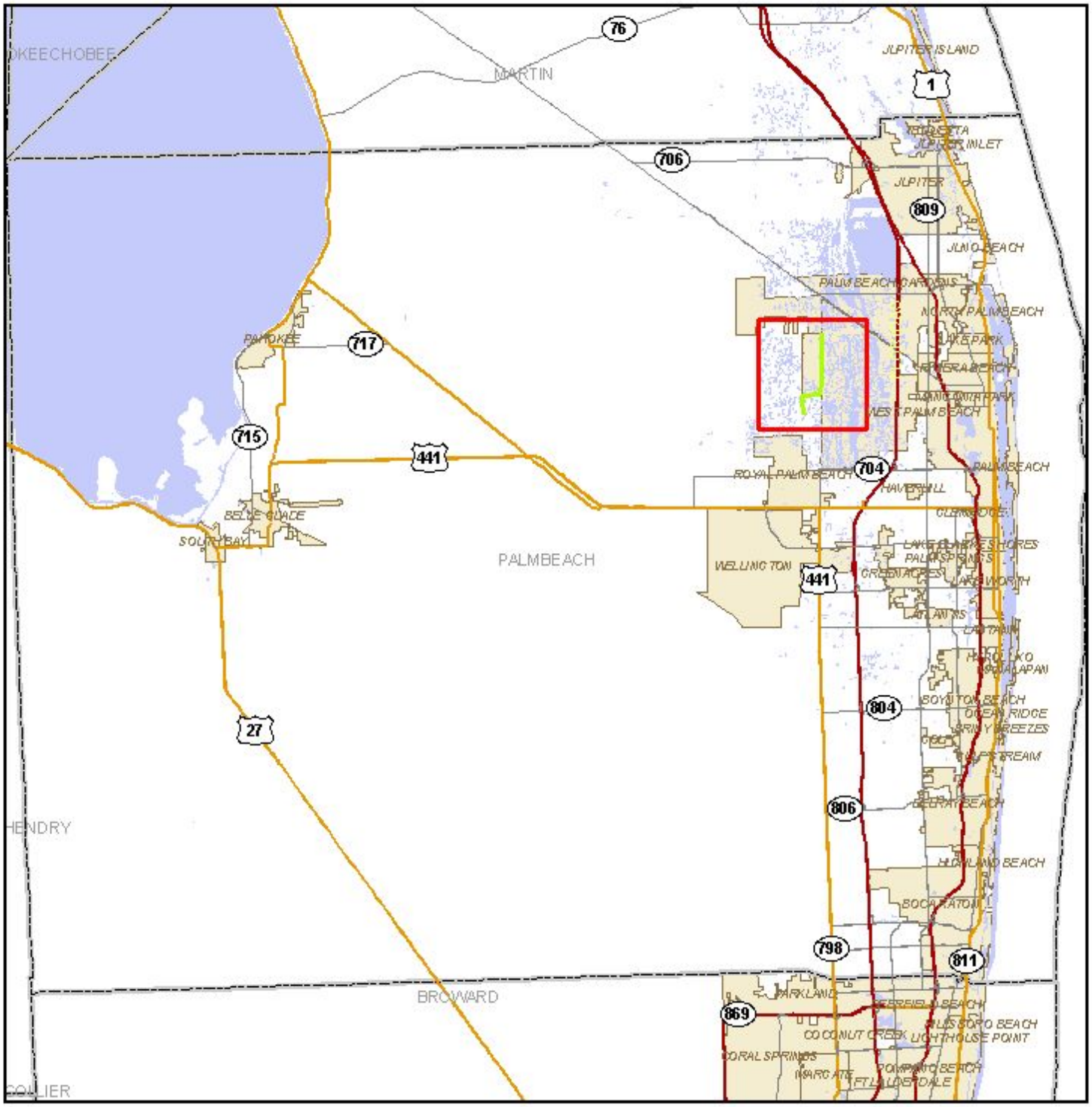
0.05 Miles

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 7 Miles

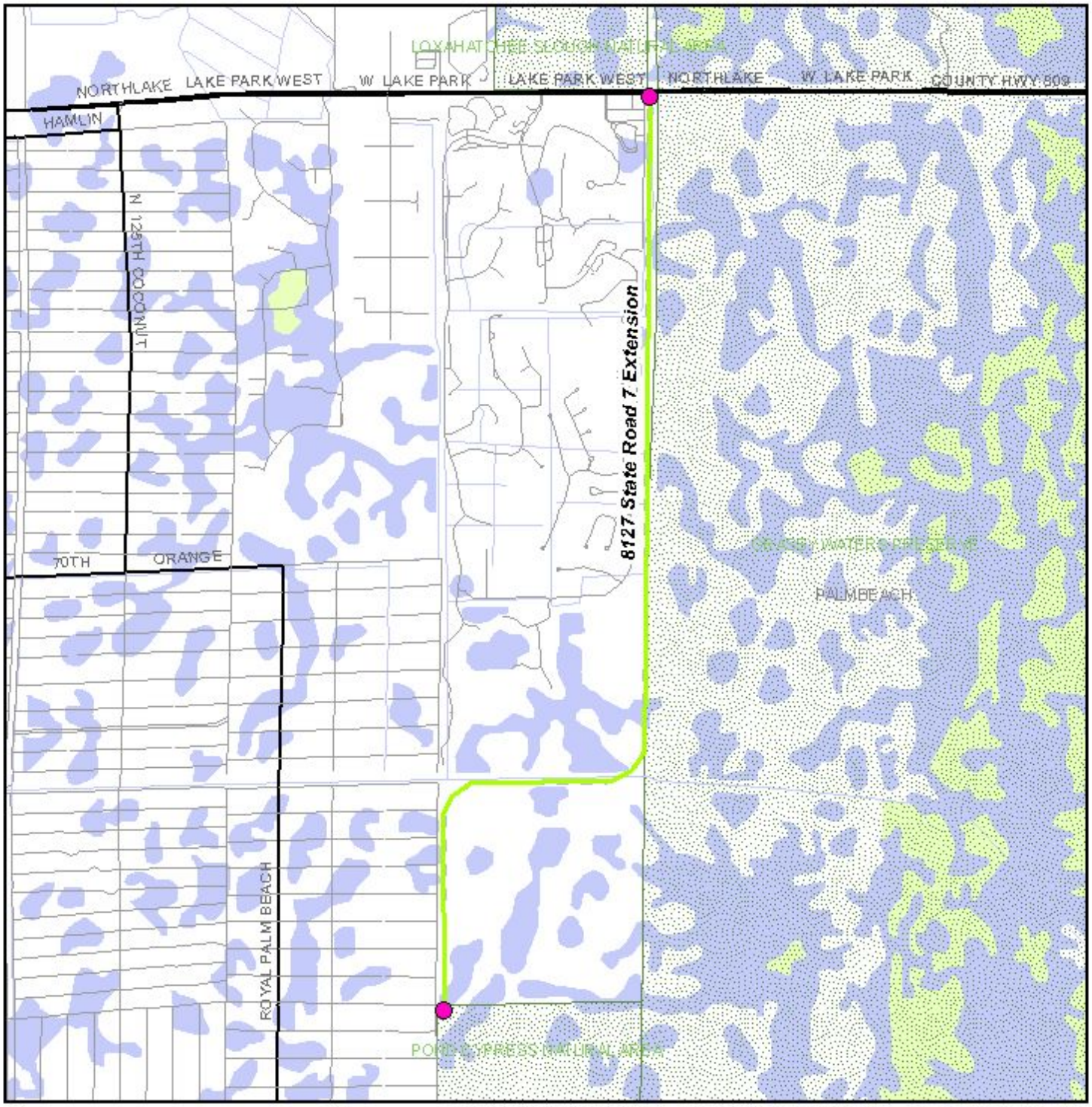
County Location Map

- ETDM Alternative
- Primary and Limited Access Highway
- Secondary, Unlimited Access Highway
- Other Highway Feature
- Water Body
- City Limit
- County Boundary
- Project Extent

Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
US Census Bureau
County Property Appraisers

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0.06 Miles

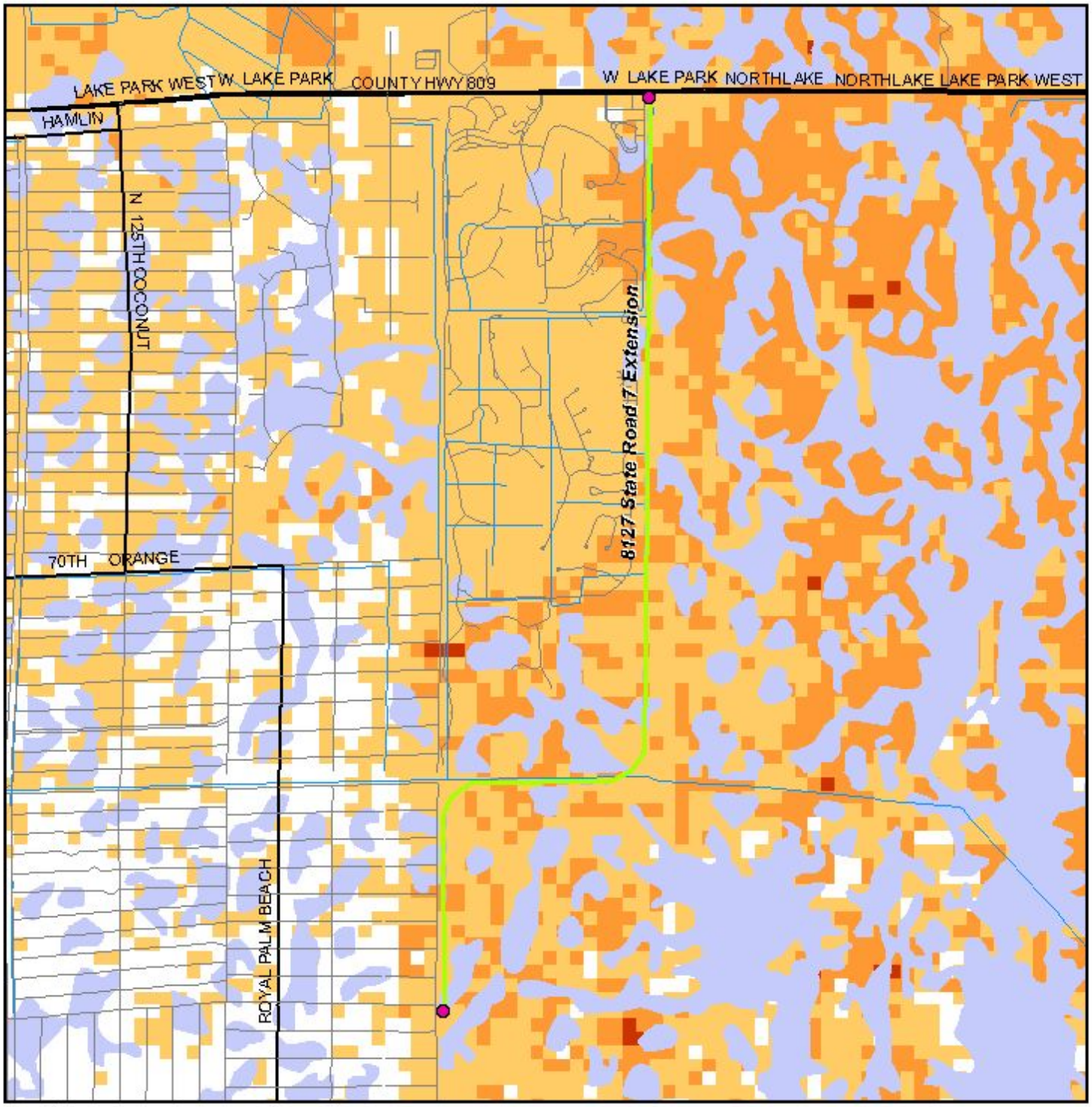
Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
Florida Natural Areas Inventory

Conservation and Recreation Area Map

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Conservation or Recreation Area
- Major Road
- Local Road or Trail
- Railroad
- County Boundary

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

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

Species Potential Habitat Model Map

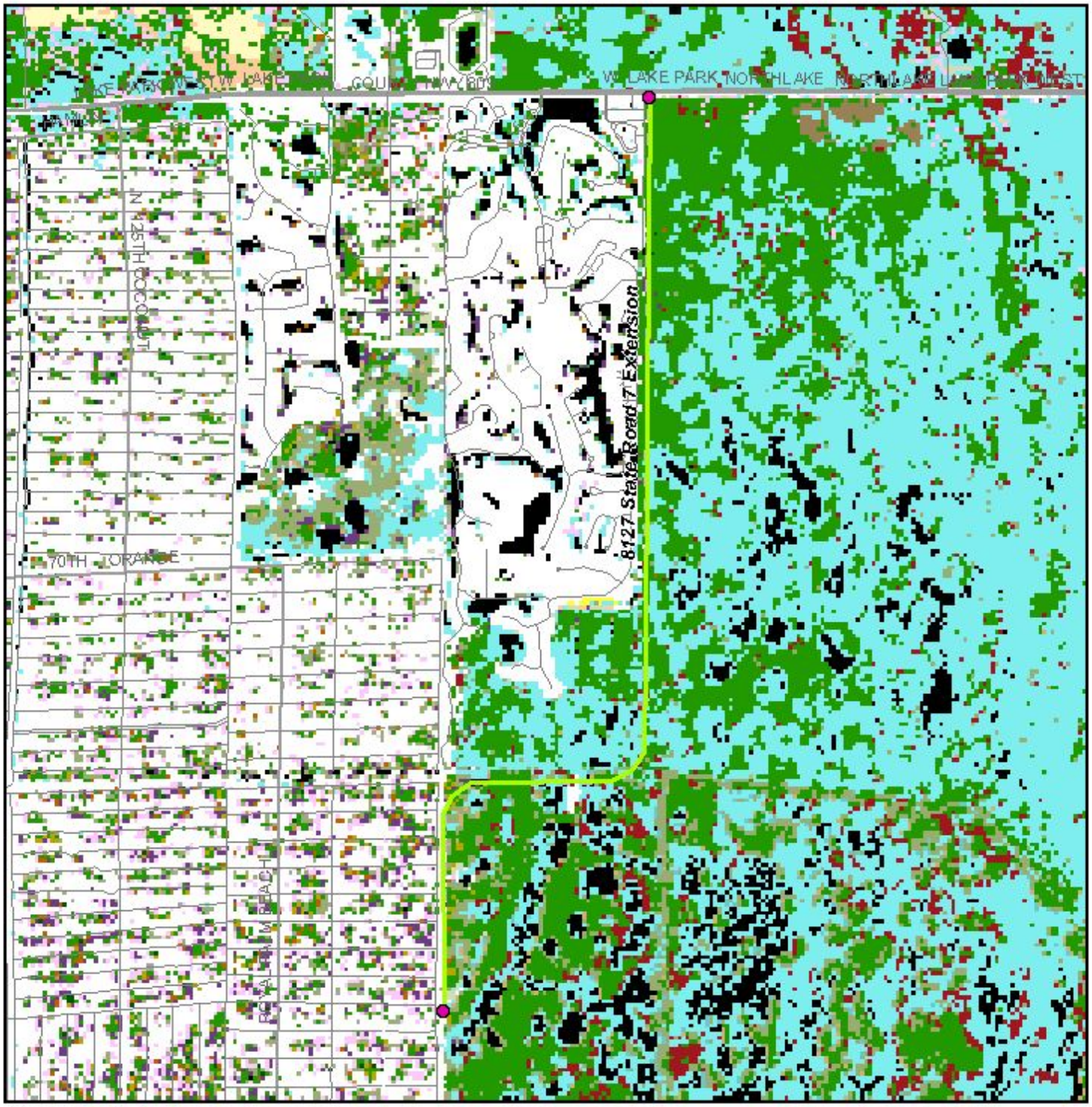
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

Potential Habitat for Focal Species

- 1 - 6 Species
- 7 - 12 Species
- 13 - 18 Species
- > 18 Species

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0.05 Miles

Vegetation and Land Cover Map

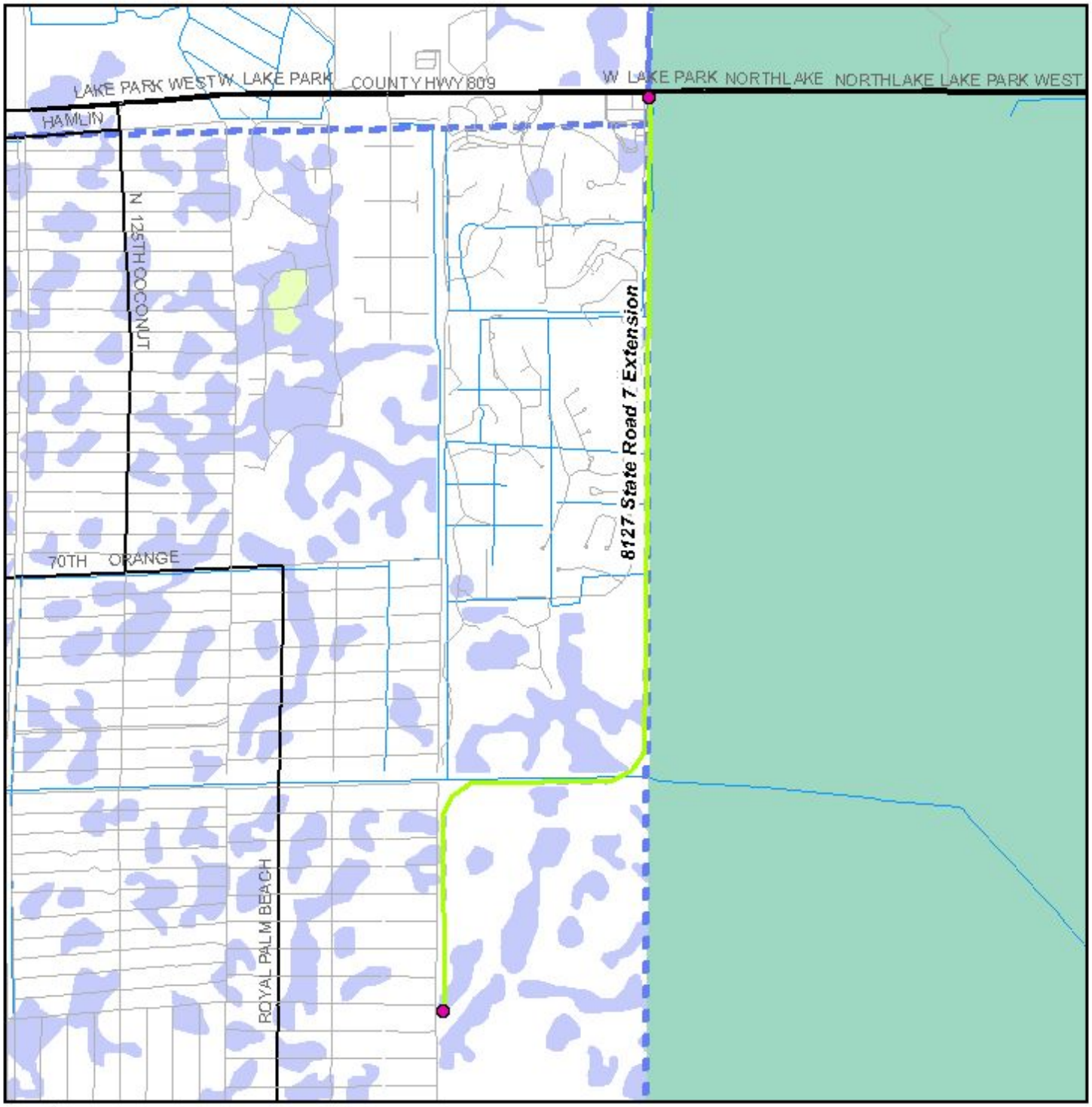
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail

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

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

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



0 0.2 Miles

Water Resources Map

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

Data Sources:

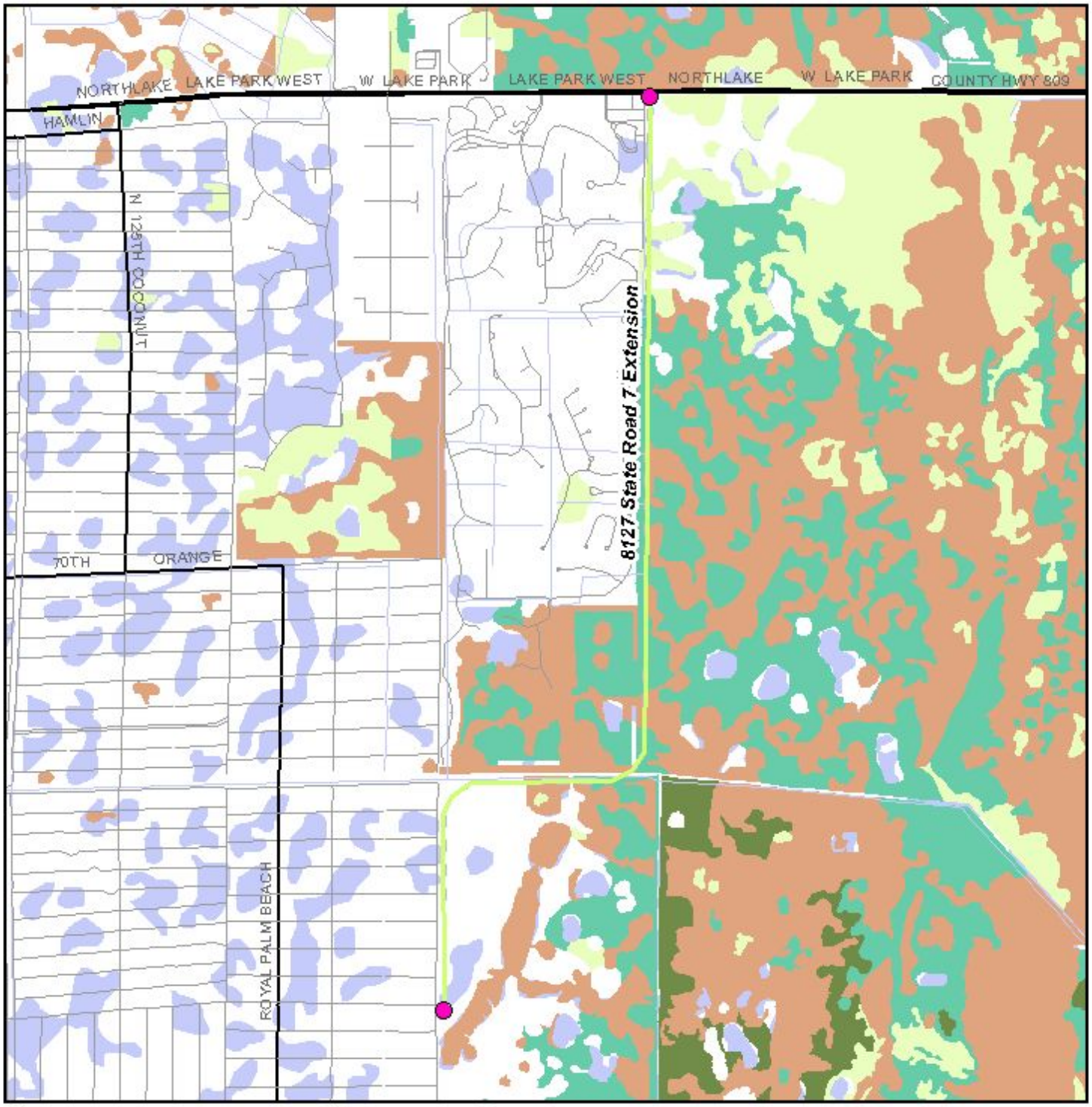
Geographic Data Technology, Inc.
US Geological Survey

Florida Department of Transportation
Florida Department of Environmental Protection

Florida Geological Survey
US Bureau of Transportation Statistics

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #3
Persimmon Blvd. to Northlake Blvd.



Wetland Resource Map

0.05 Miles

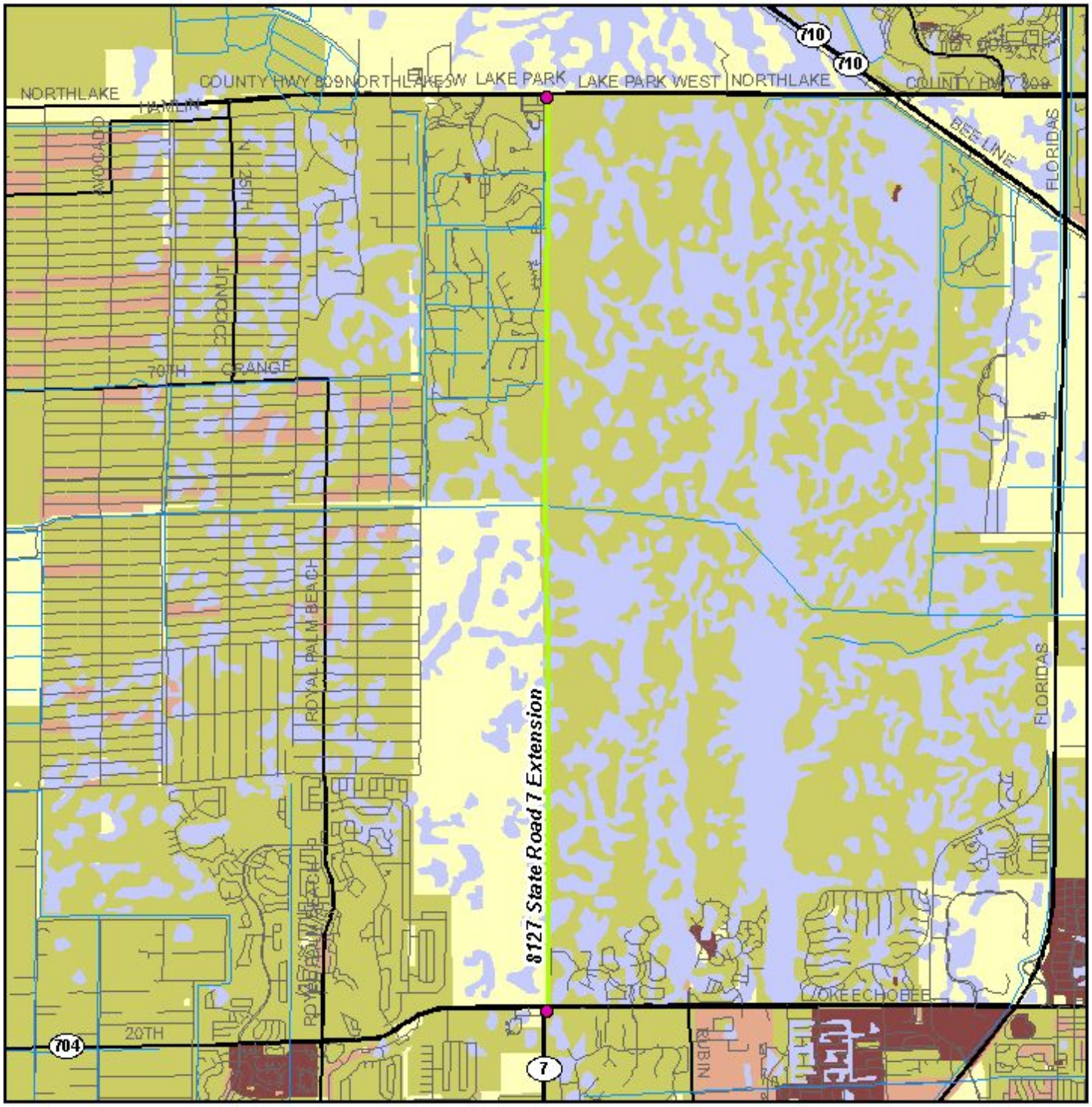
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Wetland Hardwood Forest
- Wetland Coniferous Forest
- Wetland Forested Mixed
- Vegetated Non-forested Wetland
- Non-vegetated Wetland
- Cut Over Wetland
- Wetland Scrub Shrub

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

Map Generated on: 12/4/2006

Hardcopy Maps: Alternative #4

8127 State Road 7 Extension, Alternative #4
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Population Age Distribution Map

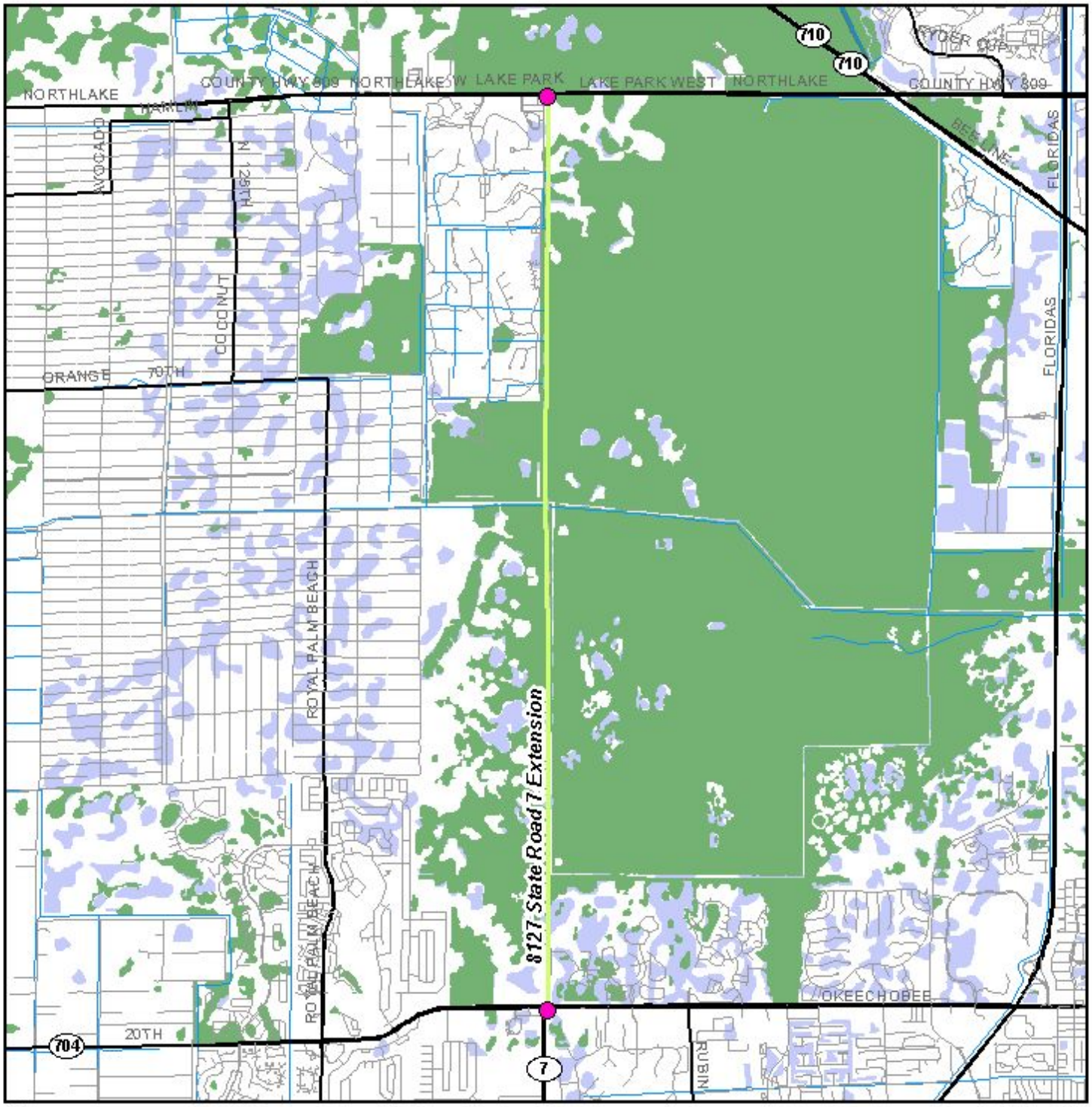
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

Median Age: 0 - 18, 18 - 30, 30 - 65, > 65

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4
SR 704 Okeechobee Blvd. to Northlake Blvd.



0.07 Miles

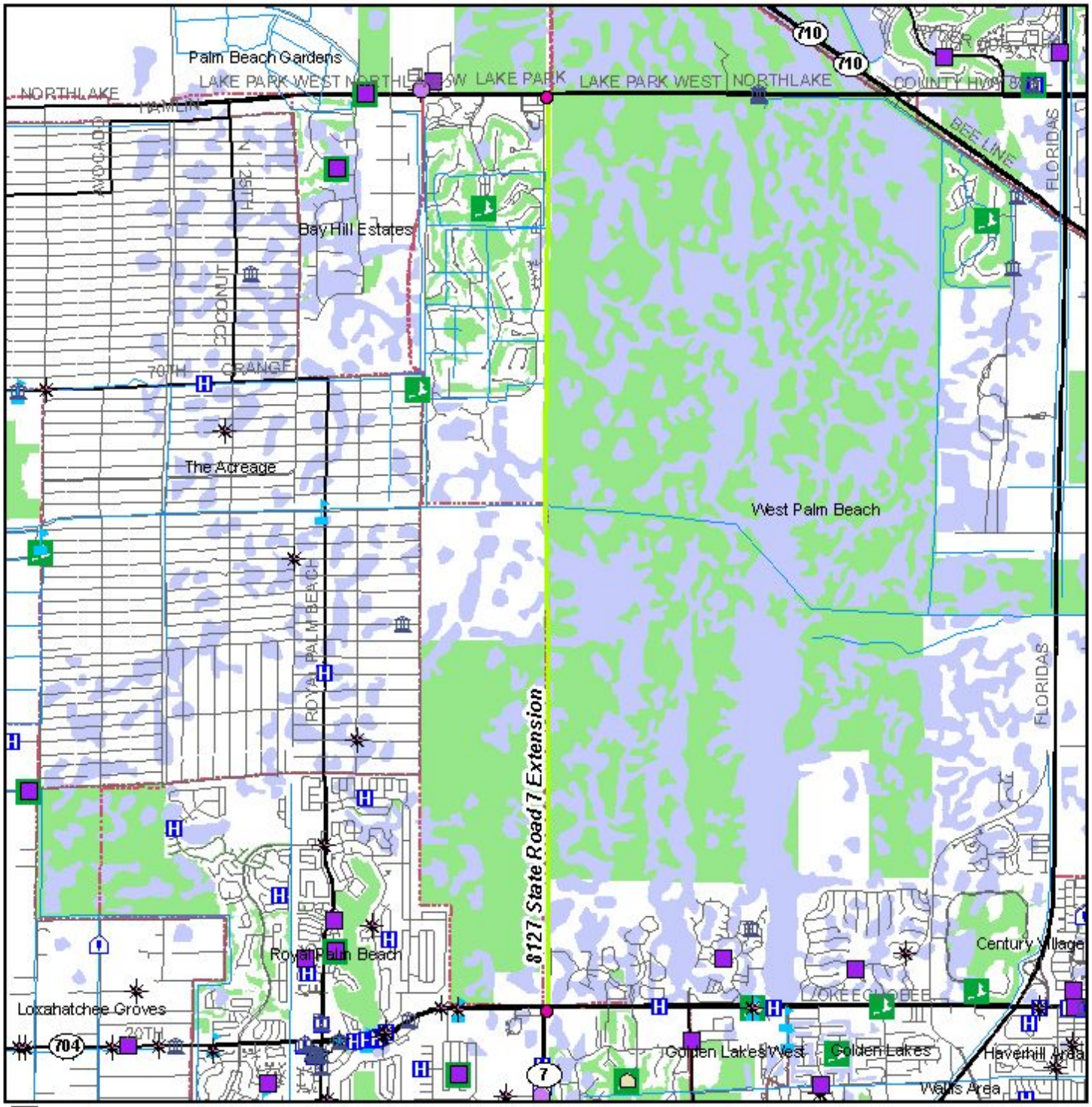
Coastal and Marine Resource Map

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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.2 Miles

Community Facilities and Services Map

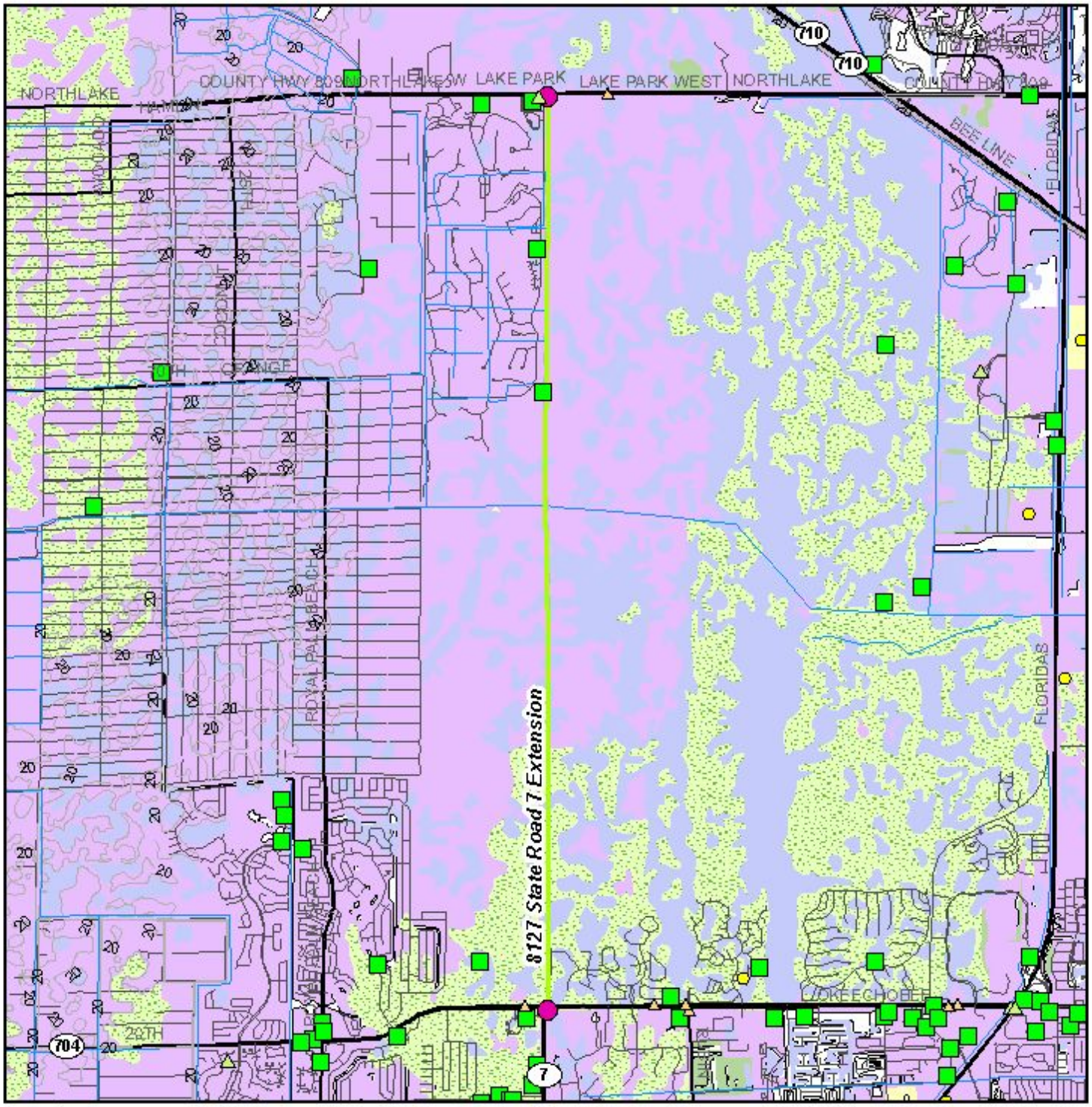
- ETDM Alternative Terminus
- ETDM Alternative
- Government
- Civic Center
- Cemetery
- Social Service
- Community Center
- Law Enforcement
- Place of Worship
- Cultural Center
- Fire Station
- Health Care
- School
- Park
- River, Stream or Canal
- Recreational Trail
- Major Road
- Local Road or Trail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

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.4 Miles

Potential Contamination Assessment Map

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Toxic Release Inventory
- Dry Cleaning Facility
- Gasoline Service Station
- Solid Waste Facility
- NPL Remediation Site
- Hazardous Material Site
- Power Plant
- Superfund Site
- Nuclear Site
- Petroleum Tank
- Brownfield Area
- 5 FT Contour

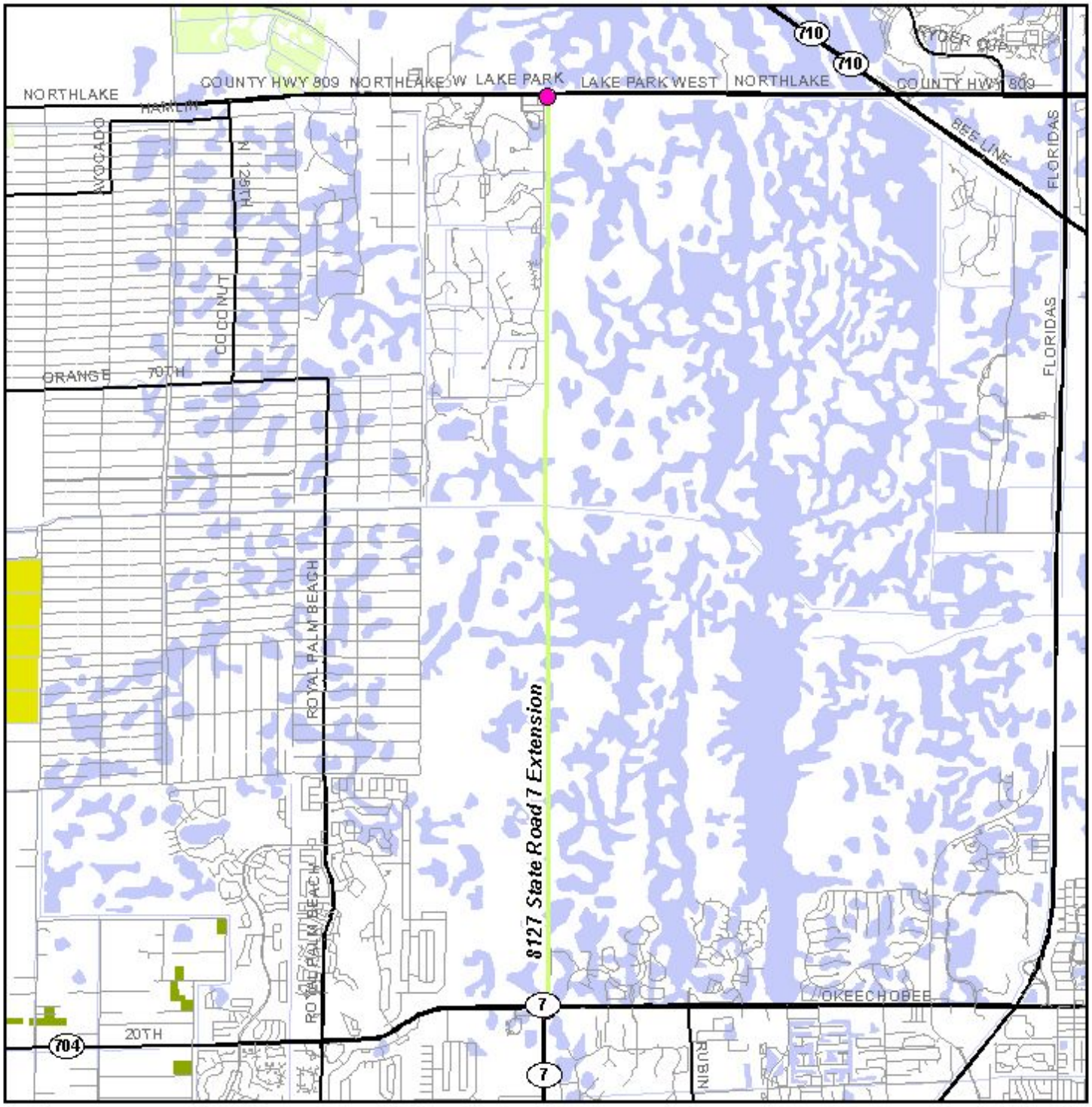
Soil Drainage

- Excellent to Well
- Well to Moderate Well
- Moderate Well to Poor
- Poor to Very Poor
- Unclassified
- Water Body
- Swamp/Marsh

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4
SR 704 Okeechobee Blvd. to Northlake Blvd.



Farmlands Resource Map

0 0.3 Miles

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Major Road
- Local Road or Trail
- Water Body
- Prime Farmland Soils
- Cropland/Pastureland
- Feeding Operations
- Nurseries/Vineyards
- Specialty Farms
- Tree Crops
- Rural Open Lands

Data Sources: Geographic Data Technology, Inc.
Florida Water Management Districts
US Geological Survey
Natural Resources Conseration Services

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4
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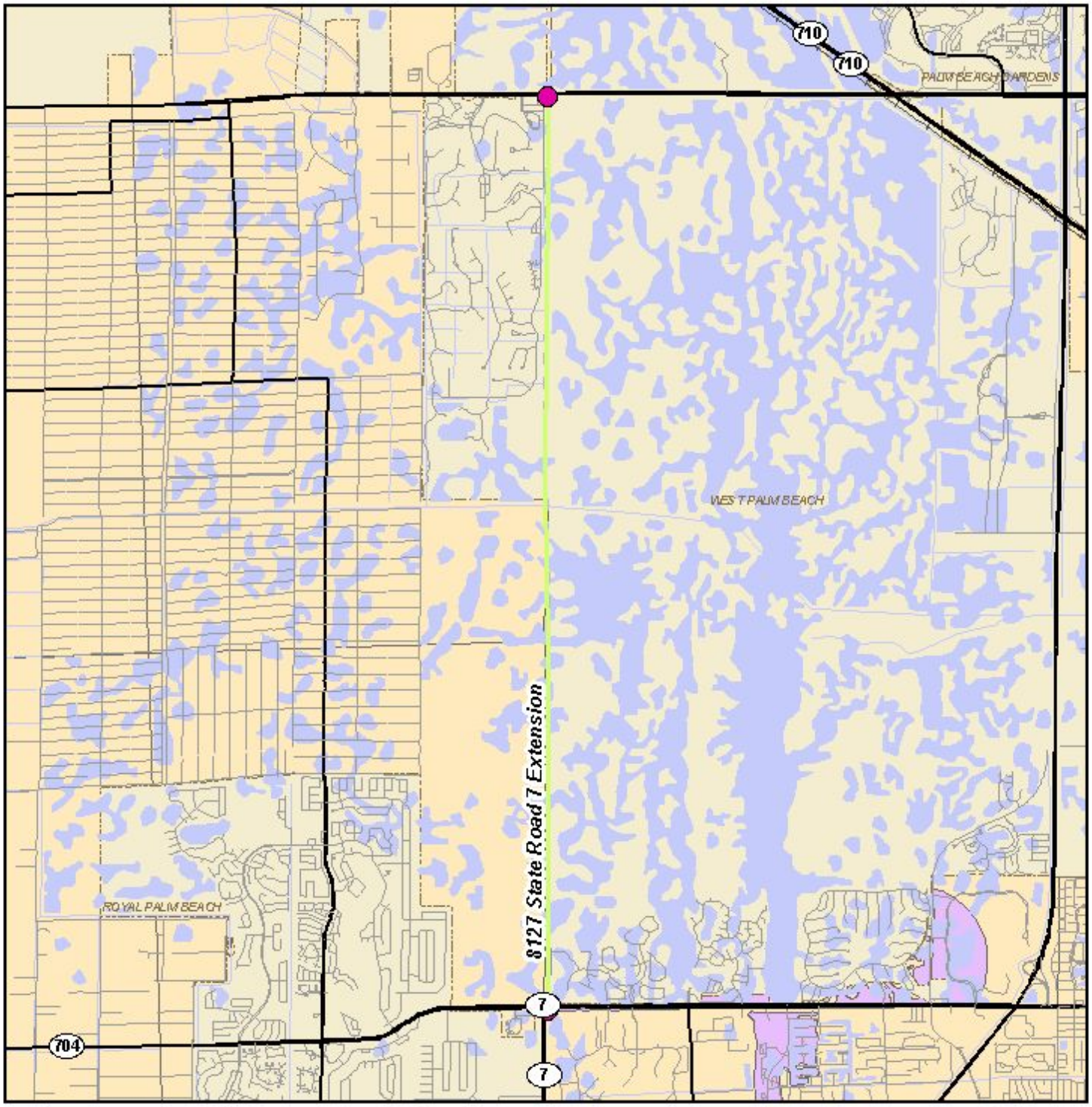


Floodplain Resource Map

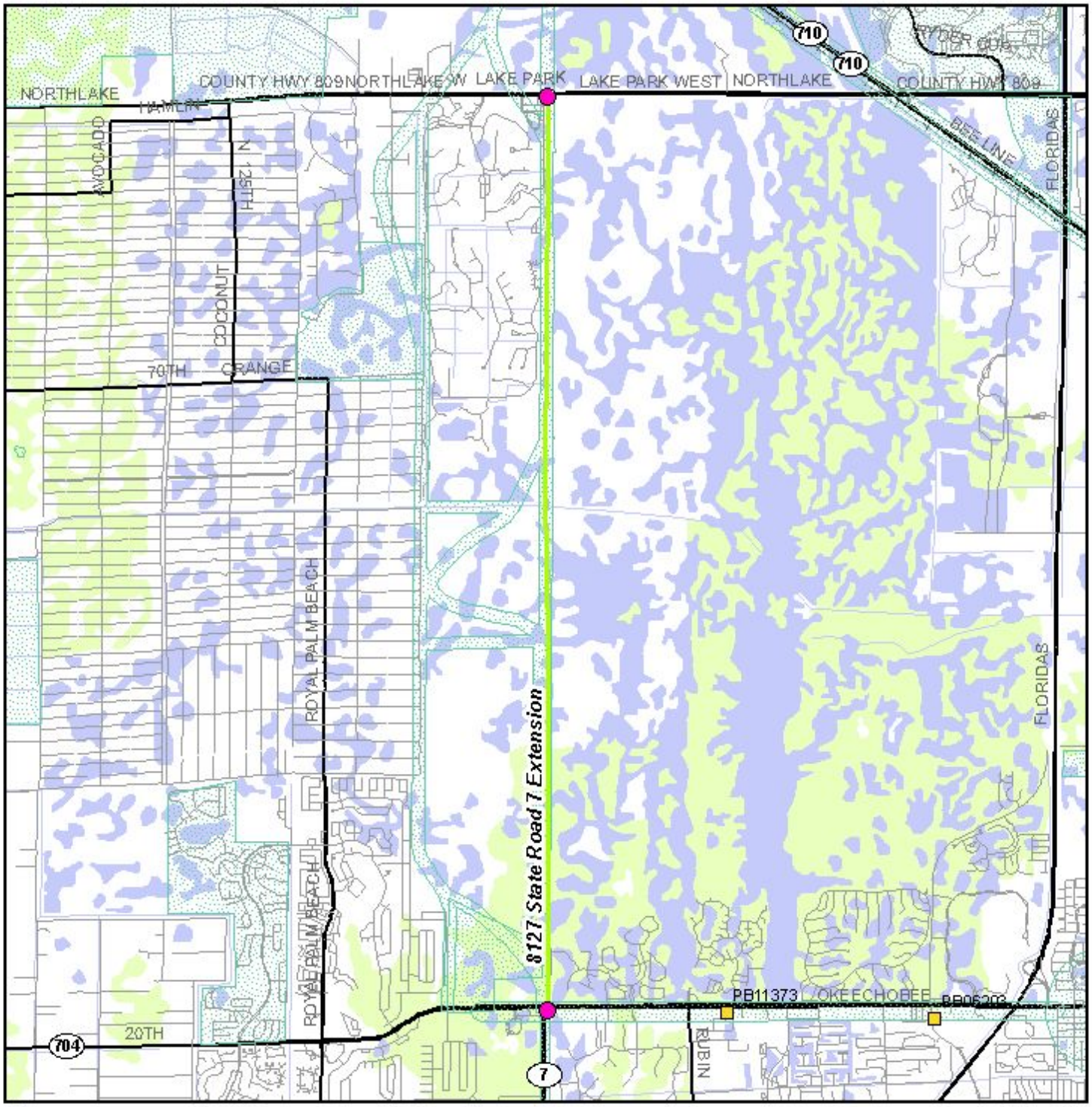
0 0.3 Miles

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Inside Special Flood Hazard Area
- Outside Special Flood Hazard Area
- FEMA Data Not Available

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 .06 Miles

Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
Florida Department of Transportation
Florida Department of State,
Bureau of Archaeological Research

Historic Resources Map

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Major Road
- Local Road or Trail
- Railroad
- Historic Structure
- Historic Cemetery
- Historic Bridge
- Historic Resource Group
- Cultural Resource Field Survey Area
- State Historic Highway

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). Absense of features on the map does not necessarily indicate an absense of resources in the project vicinity.

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4

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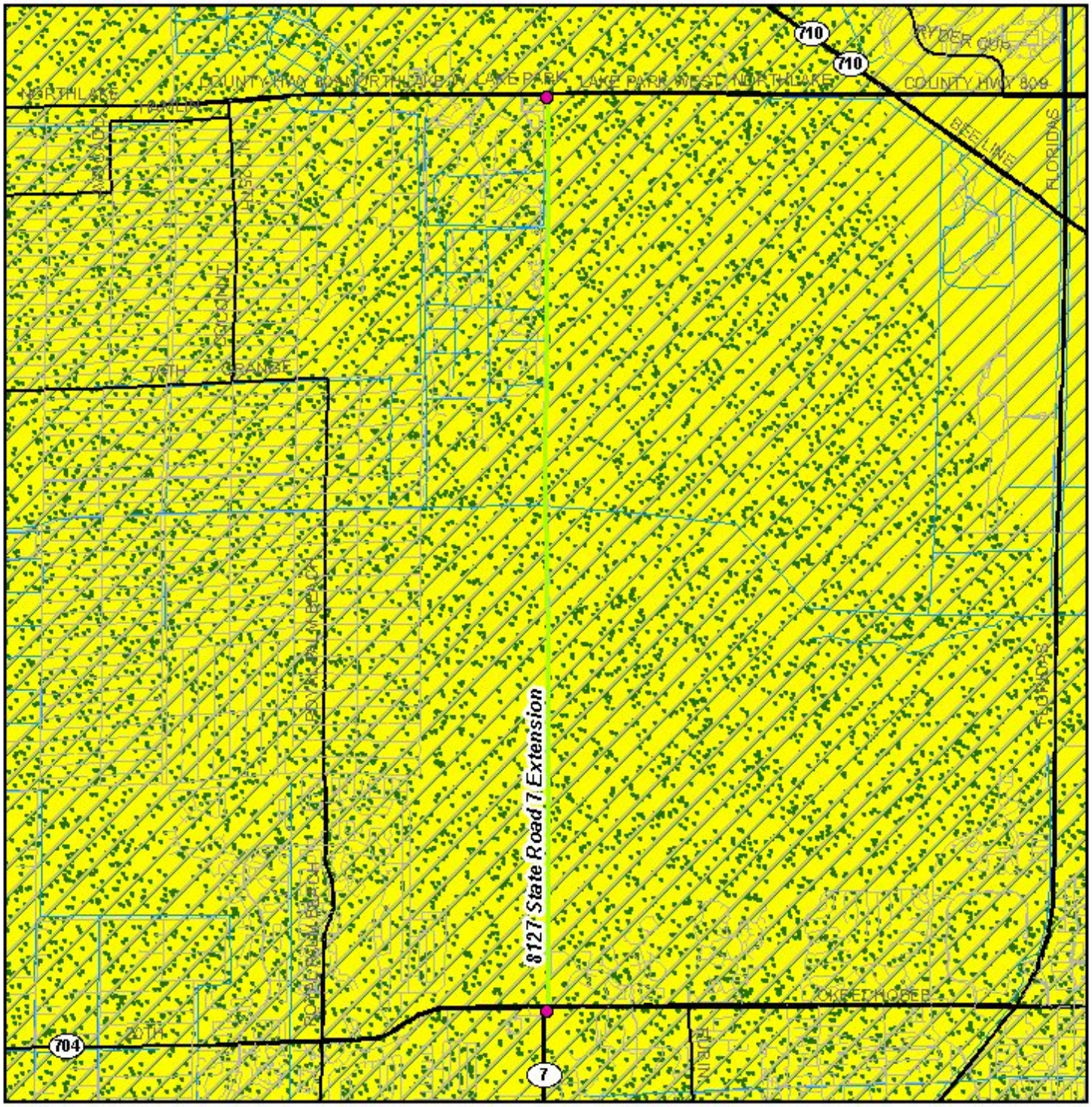


0 0.3 Miles

Hydrogeology Resource Map

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Other 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

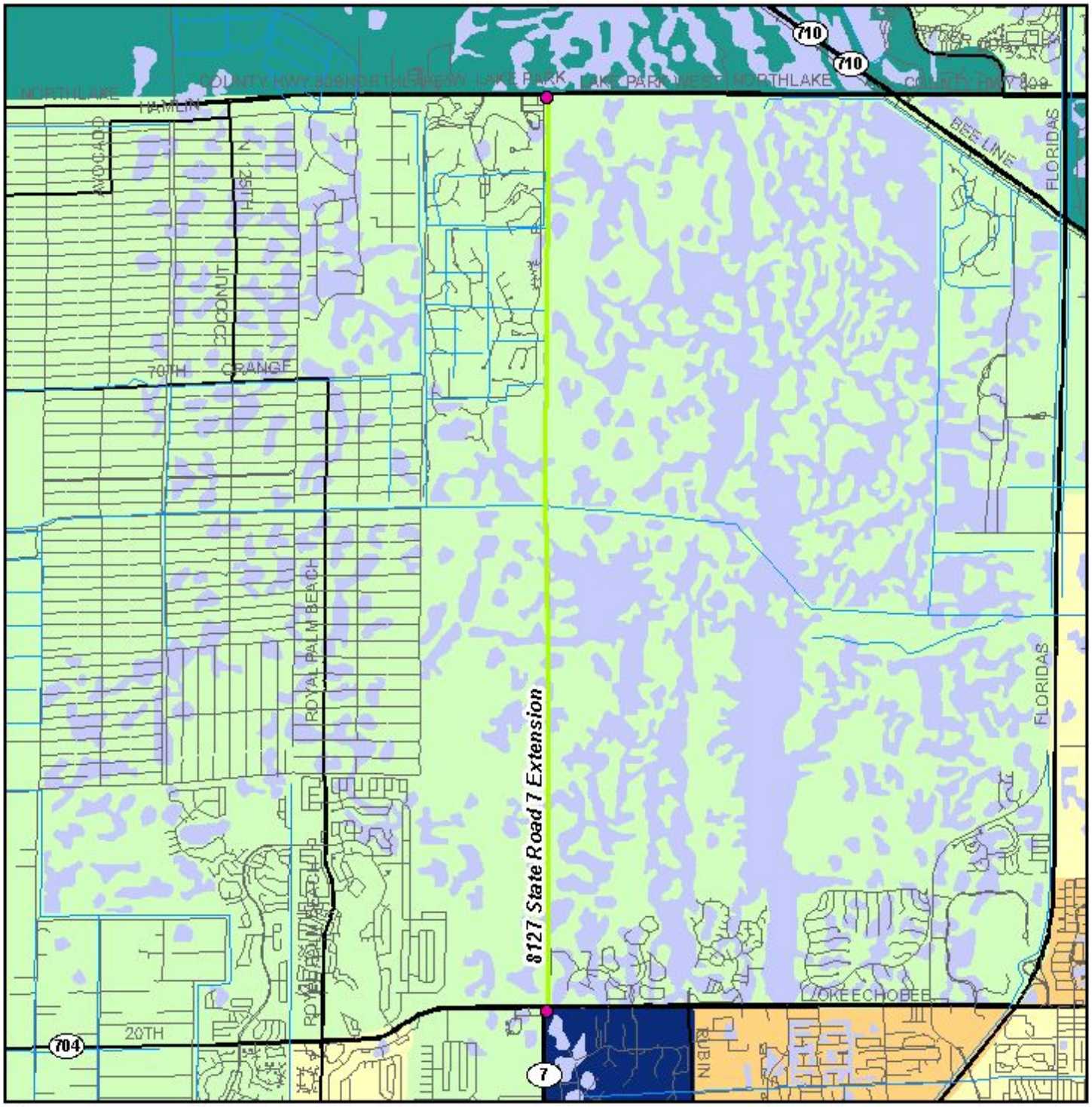
- Eocene
- Holocene
- Miocene
- Miocene/Pliocene
- Oligocene
- Oligocene/Miocene
- Pleistocene
- Pleistocene & Holocene
- Pliocene
- Pliocene/Pleistocene

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0.07 Miles

Income Distribution Map

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

Median Household Income

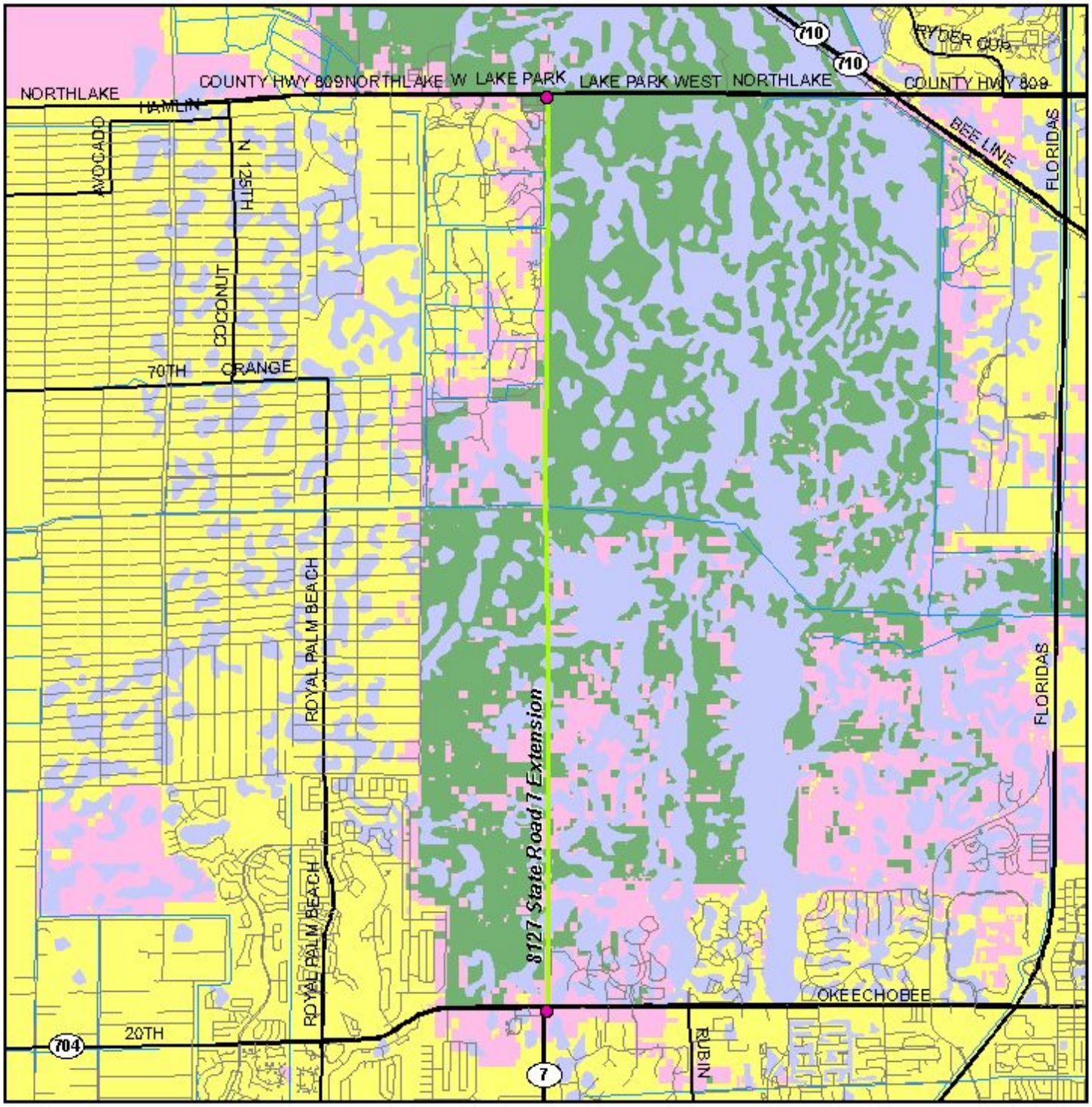
0 - 10000
10001 - 29999
30000 - 49999
50000 - 79999
80000 - 125000
> 125000

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Integrated Wildlife Habitat Ranking System Map

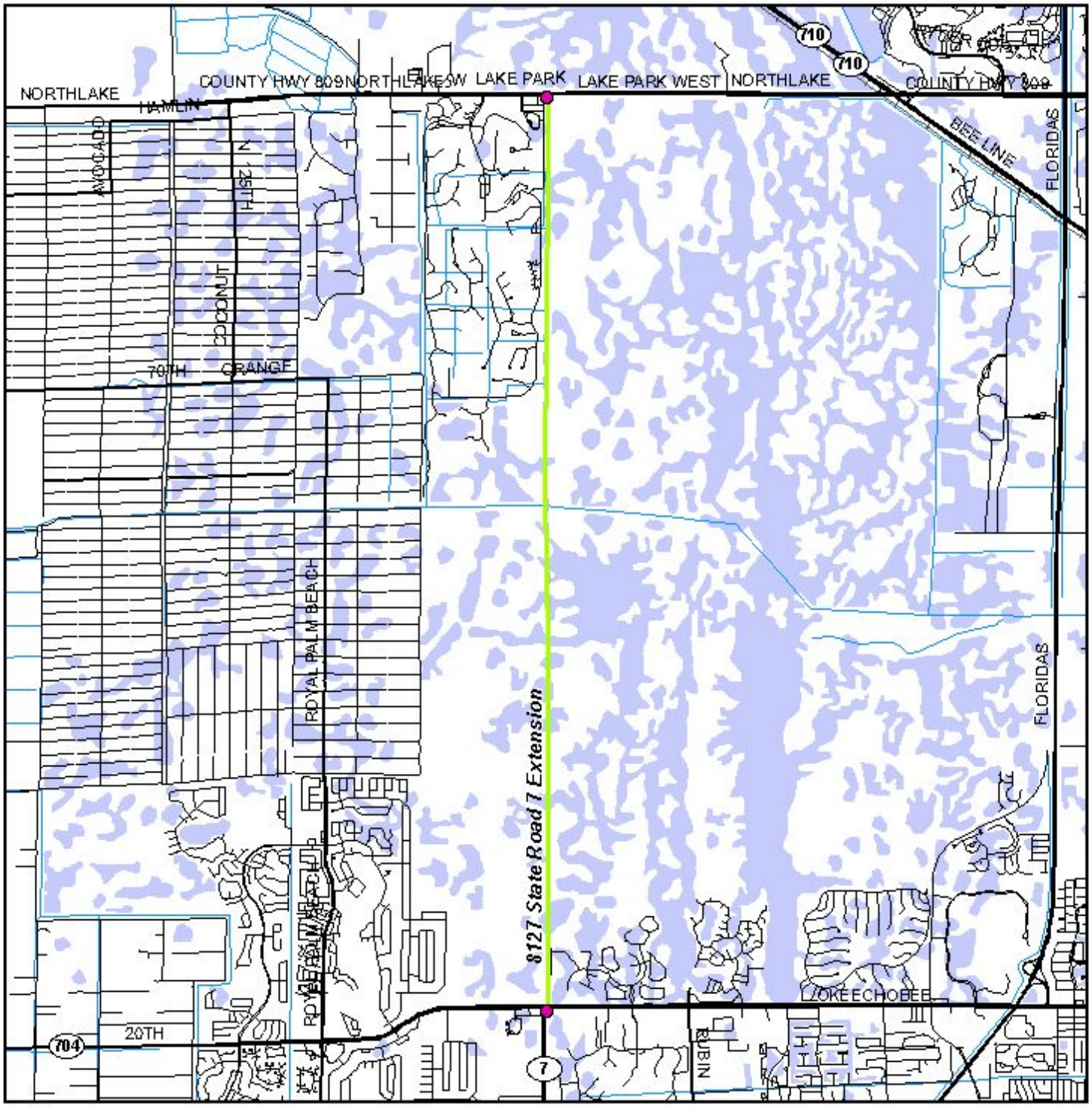
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body
- Low Habitat Quality
- Medium Habitat Quality
- High Habitat Quality

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

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

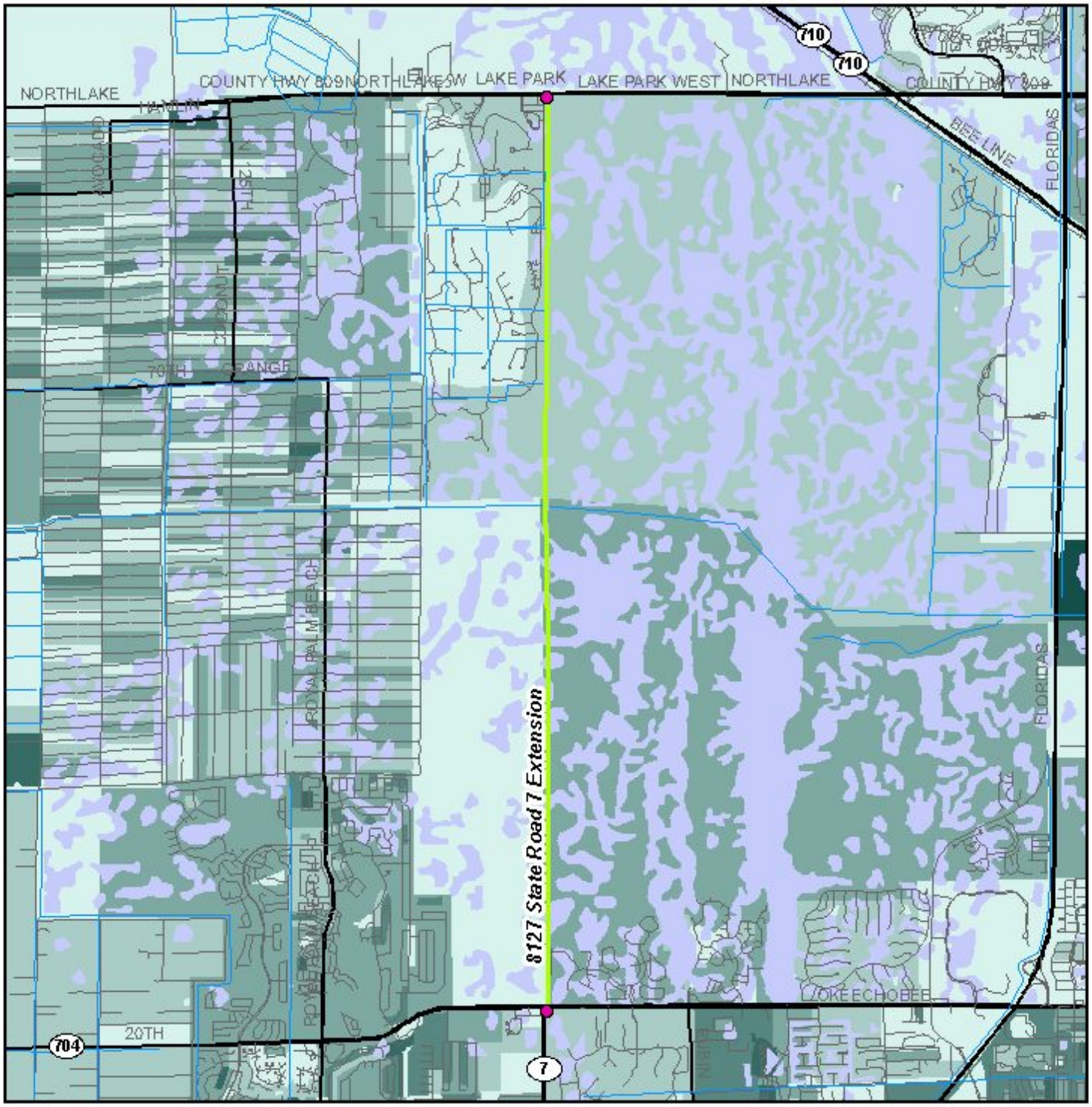
Land Use Map

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

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

Minority Population Distribution Map

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

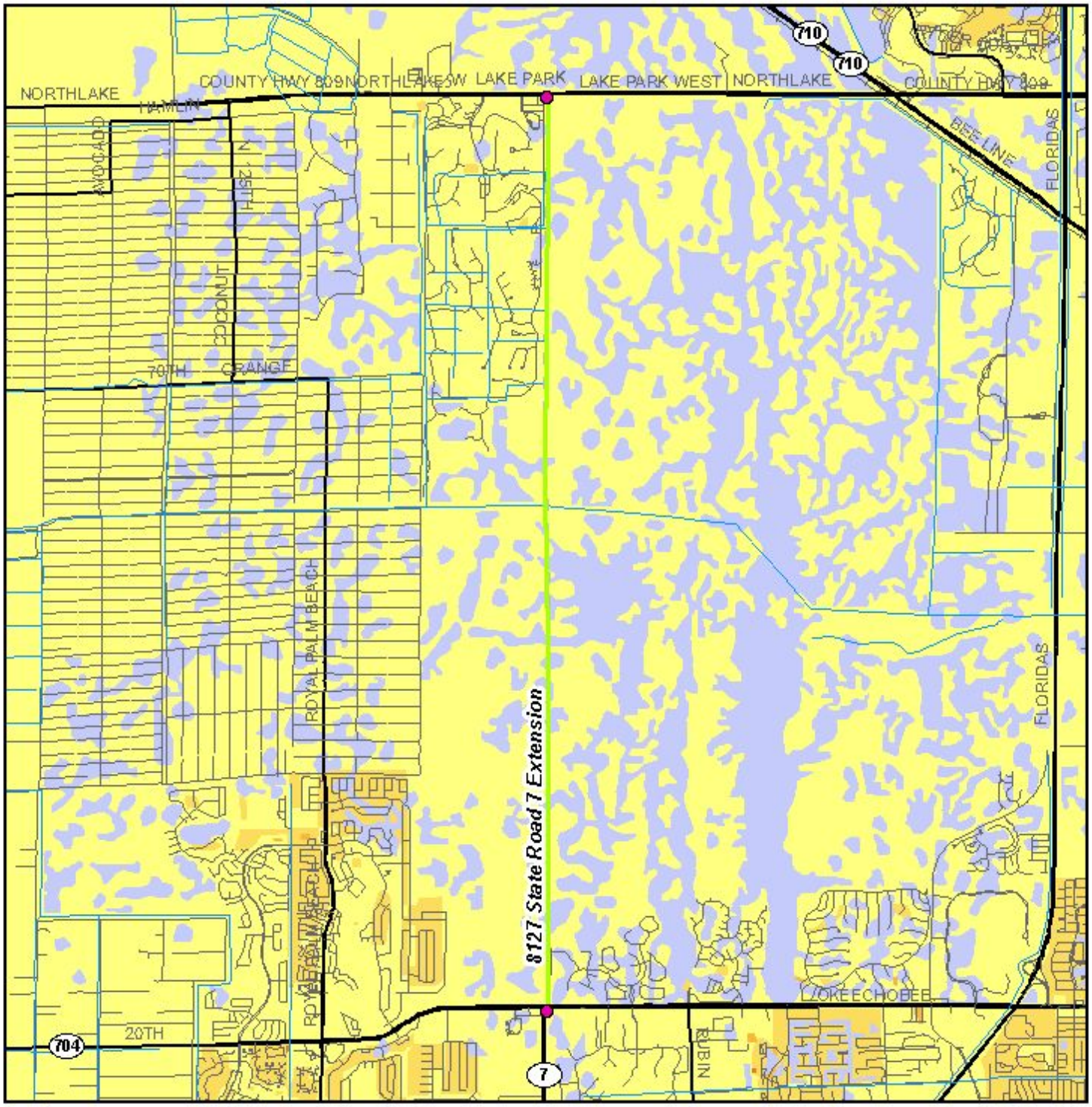
Percent Minority Population

0 - 6 | 7 - 20 | 21 - 38 | 39 - 60 | 61 - 85 | 86 - 100

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Population Density Map

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

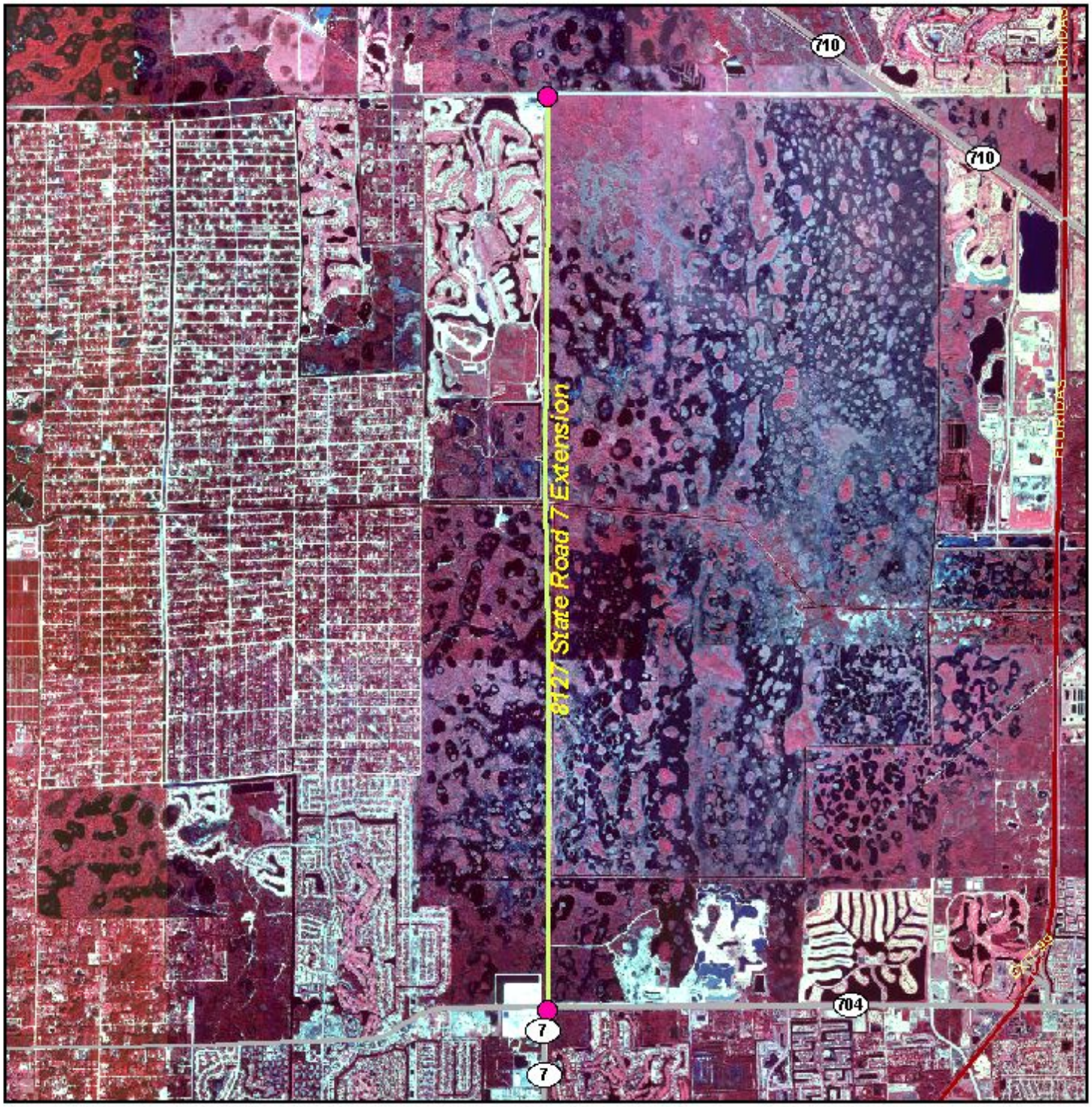
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body

Population per Acre

0 - 4.9 | 5 - 29.9 | 30 - 99.9 | 100 - 349.9 | 350 - 800 | > 800

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4
SR 704 Okeechobee Blvd. to Northlake Blvd.



0.1 Miles

Project Aerial Map

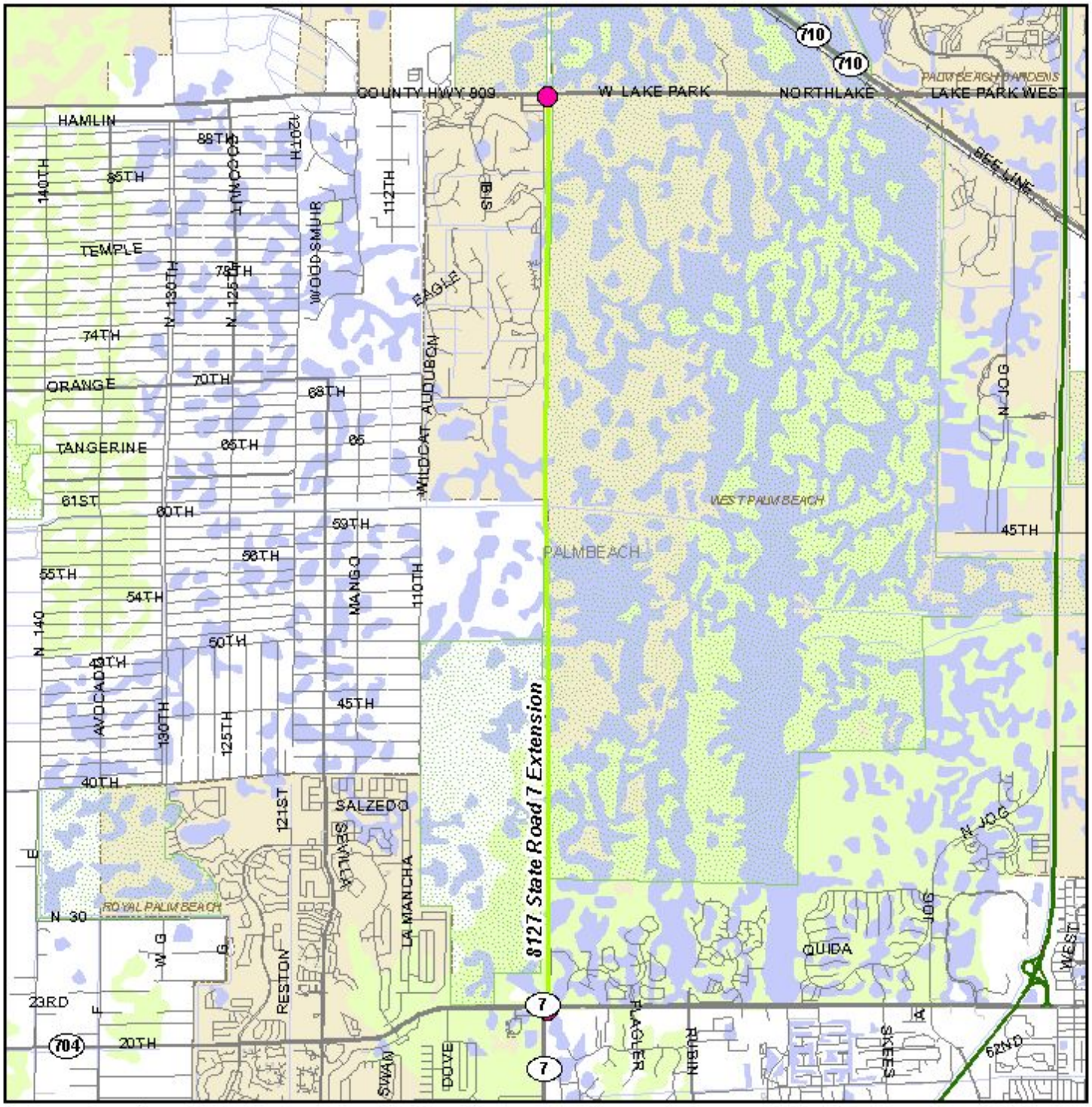
ETDM Alternative Terminus
ETDM Alternative
Primary and Limited Access Highway
Secondary, Unlimited Access Highway
Other Highway Feature

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0 1 Miles

Project Location Map

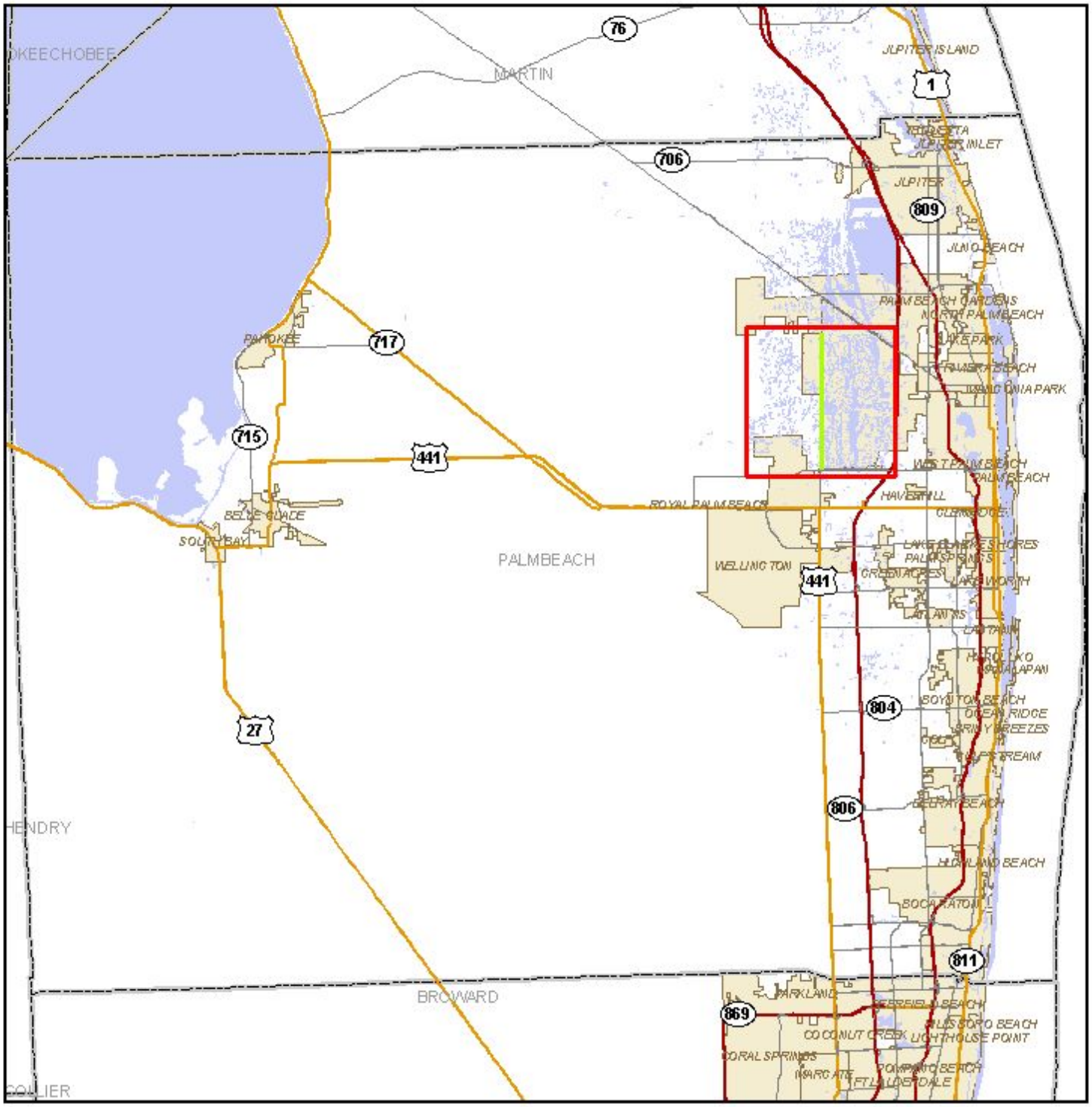
Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
US Census Bureau
County Property Appraisers
Florida Natural Areas Inventory

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

Map Generated on: 12/1/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0 7 Miles

County Location Map

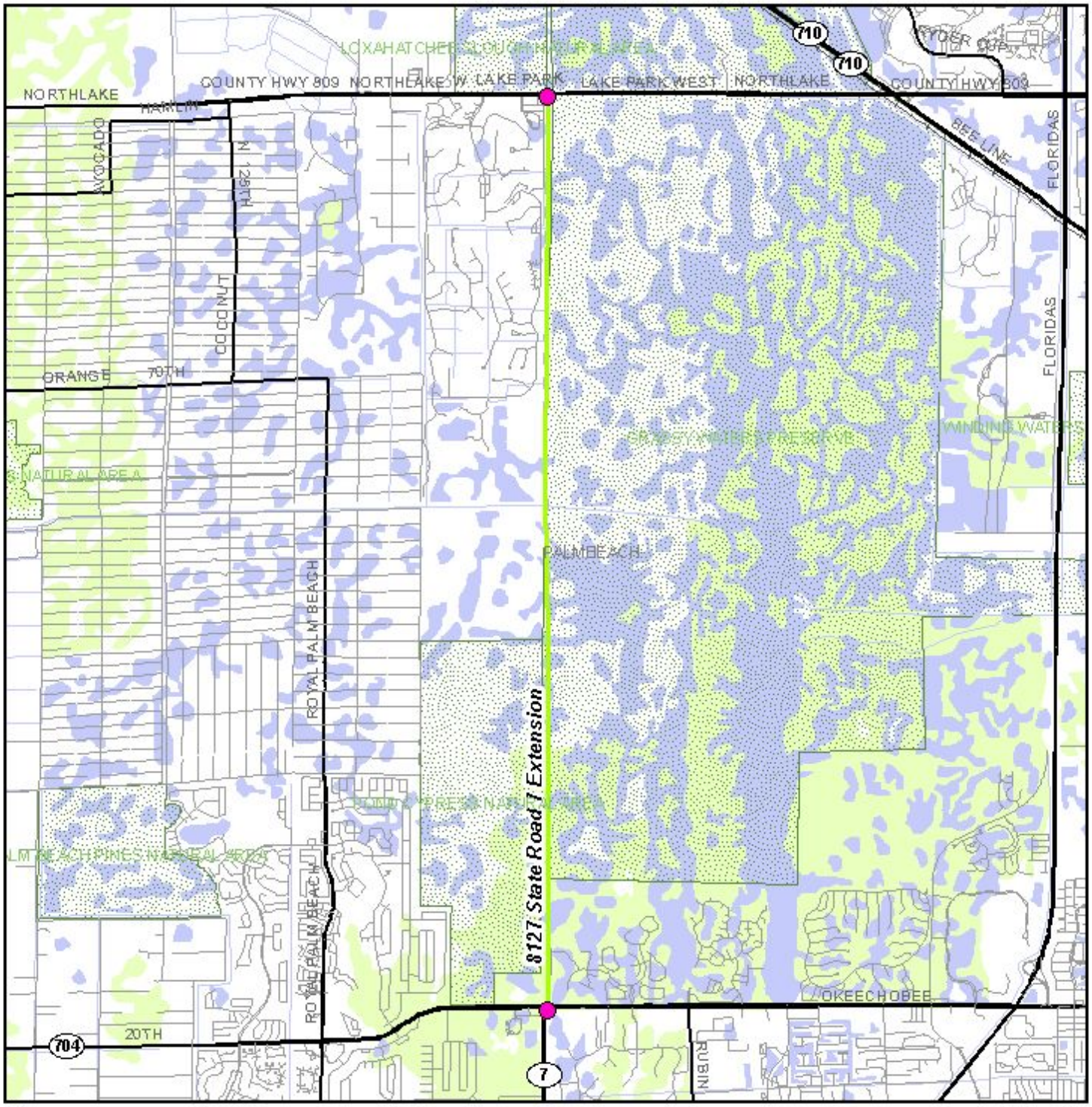
- ETDM Alternative
- Primary and Limited Access Highway
- Secondary, Unlimited Access Highway
- Other Highway Feature
- Water Body
- City Limit
- County Boundary
- Project Extent

Data Sources:
Geographic Data Technology, Inc.
US Geological Survey
US Census Bureau
County Property Appraisers

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0.1 Miles

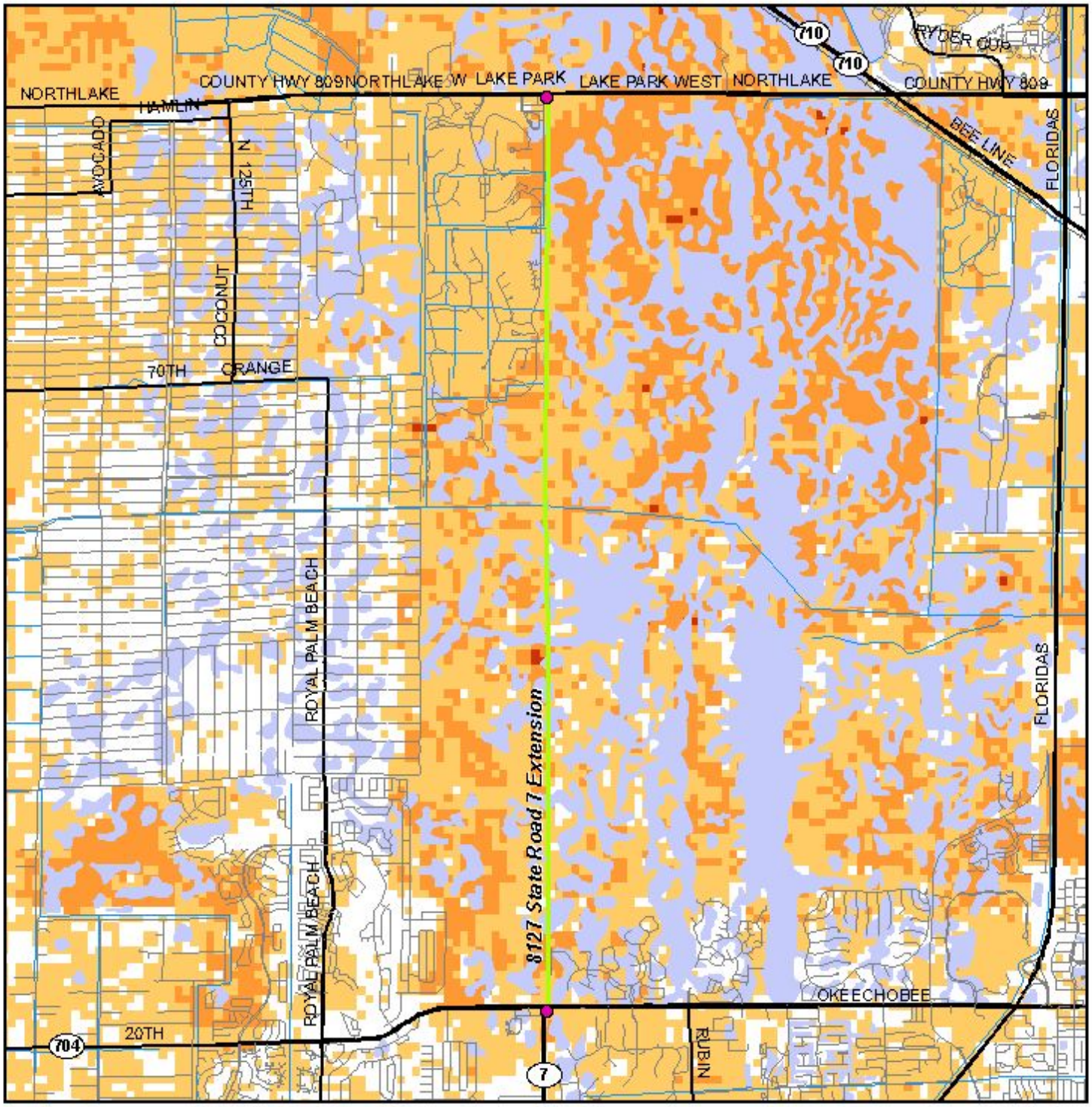
Conservation and Recreation Area Map

- ETDM Alternative Terminus
- ETDM Alternative
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Conservation or Recreation Area
- Major Road
- Local Road or Trail
- Railroad
- County Boundary

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

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #4
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

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

Species Potential Habitat Model Map

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

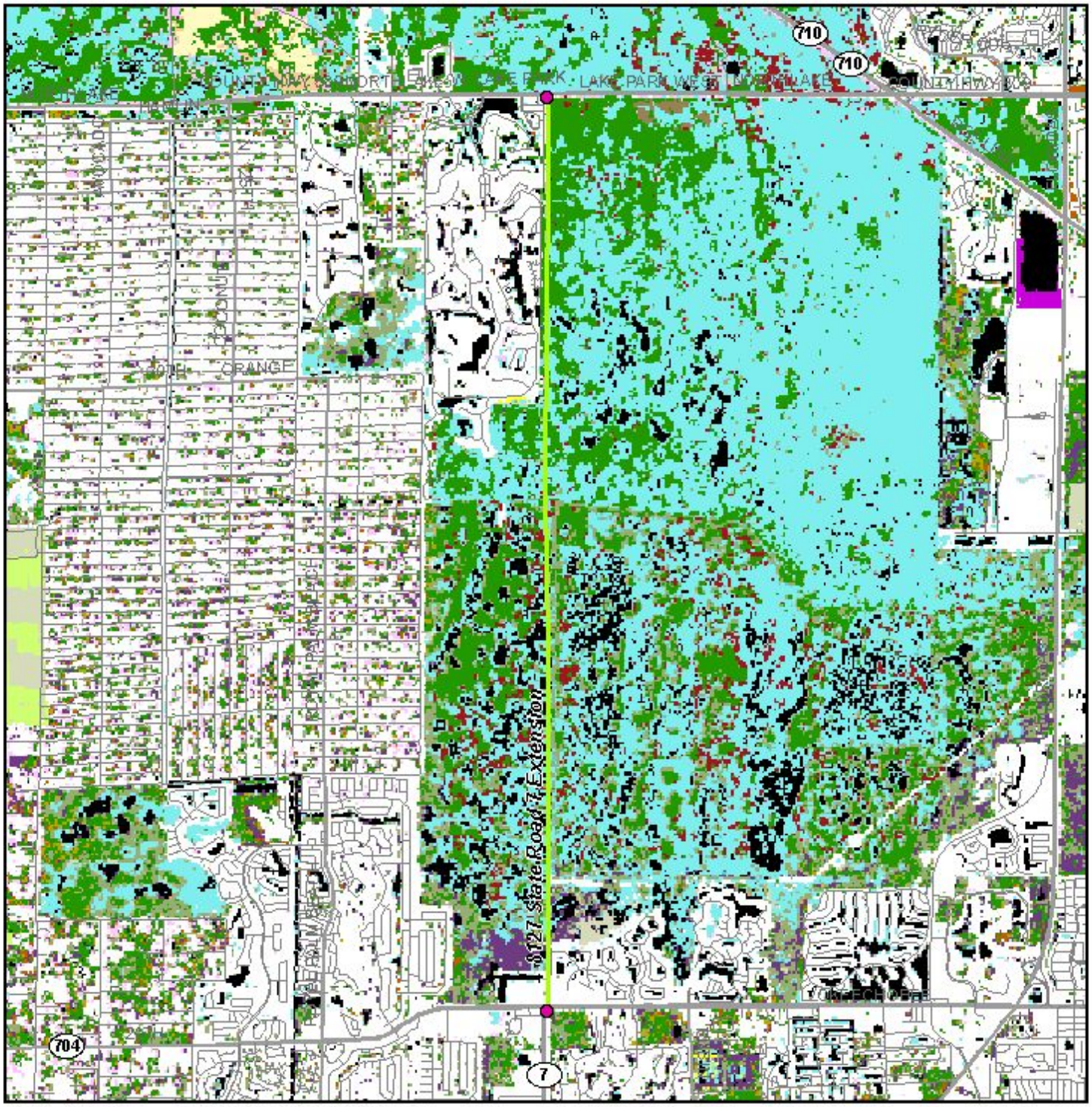
Potential Habitat for Focal Species

- 1 - 6 Species
- 7 - 12 Species
- 13 - 18 Species
- > 18 Species

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #4

SR 704 Okeechobee Blvd. to Northlake Blvd.



0.09 Miles

Vegetation and Land Cover Map

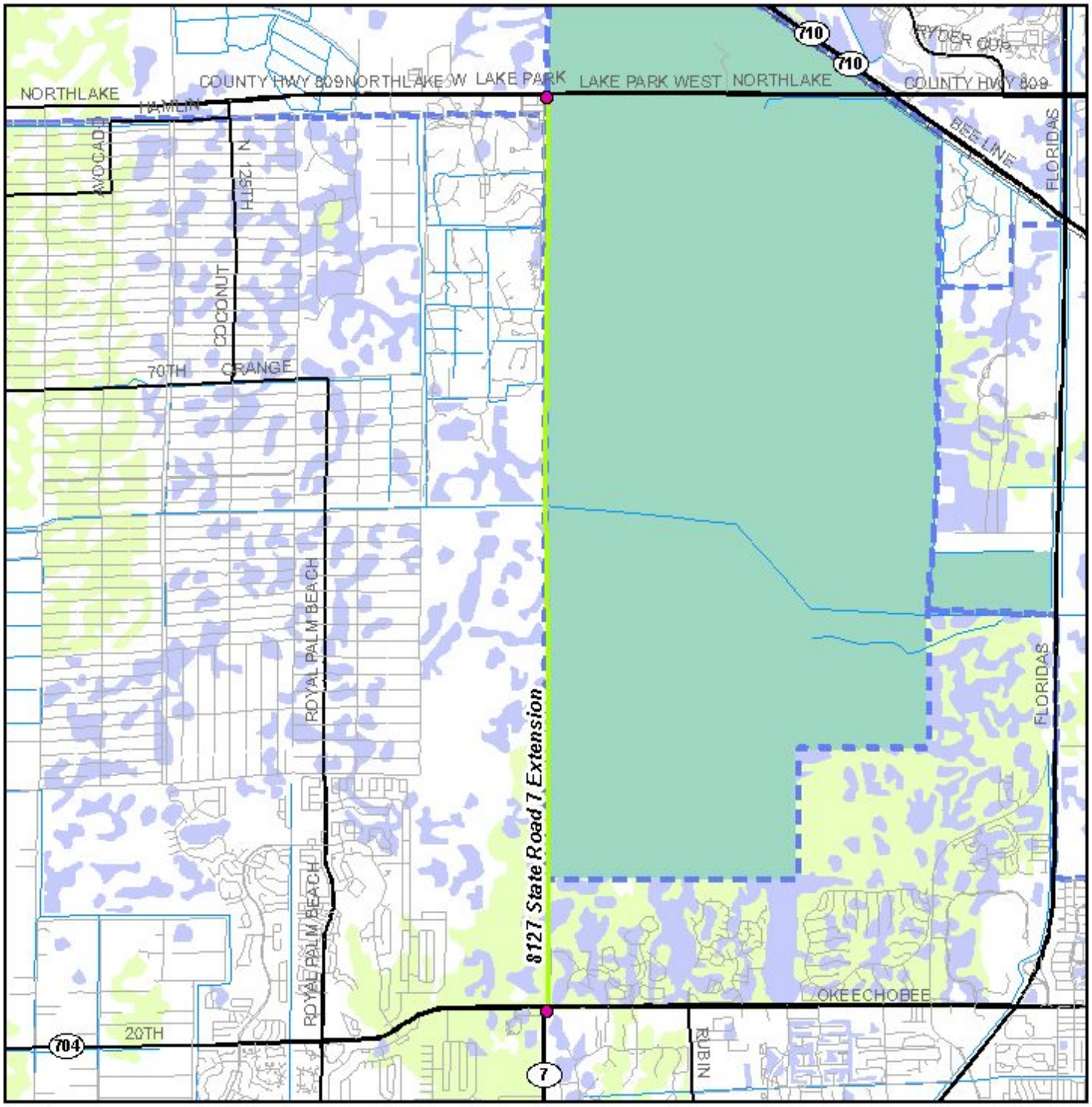
- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail

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

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

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #4
SR 704 Okeechobee Blvd. to Northlake Blvd.



0 0.3 Miles

Water Resources Map

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

Data Sources:

Geographic Data Technology, Inc.
US Geological Survey

Florida Department of Transportation
Florida Department of Environmental Protection

Florida Geological Survey
US Bureau of Transportation Statistics

Map Generated on: 12/4/2006

8127 State Road 7 Extension, Alternative #4

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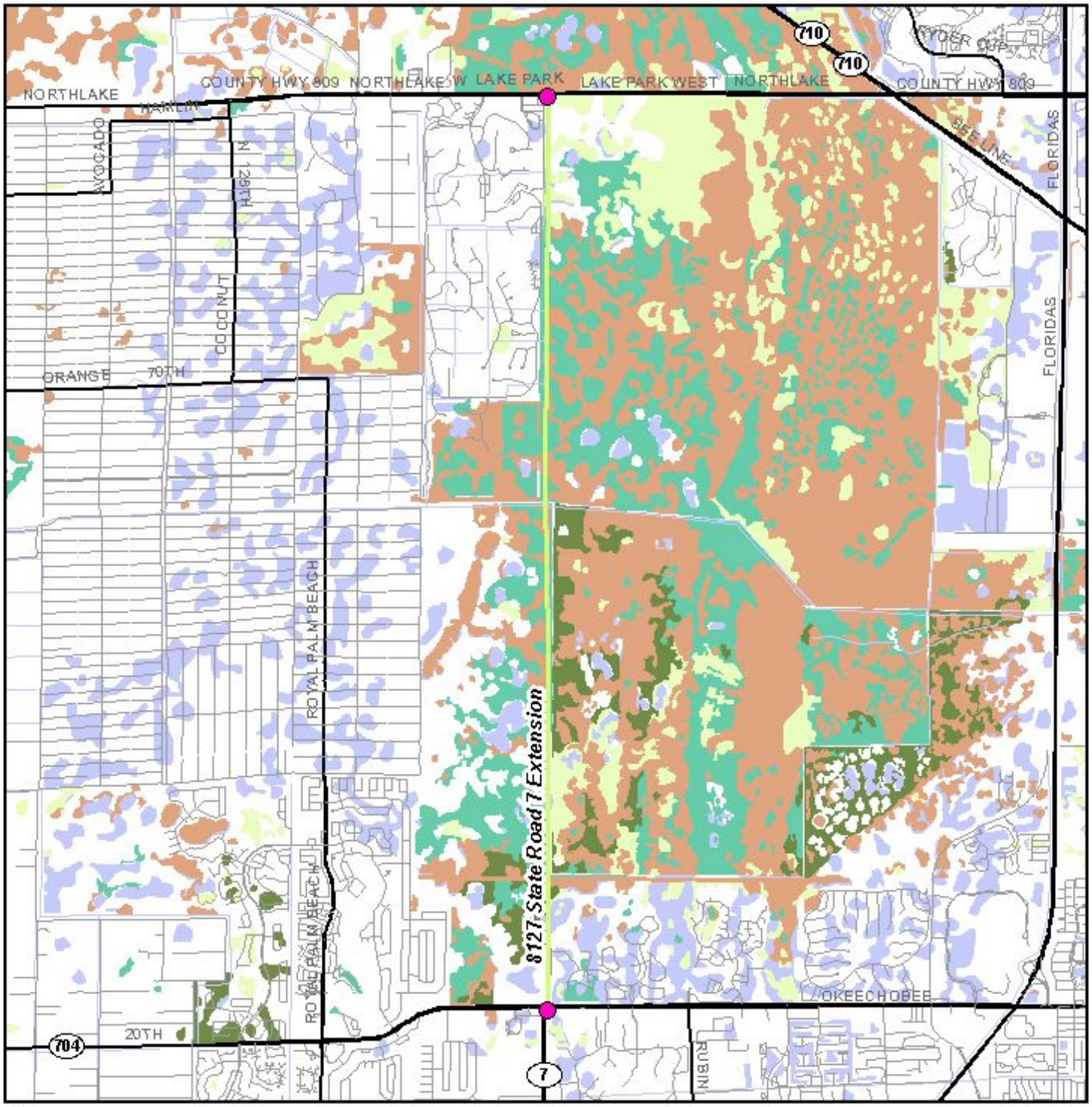

Wetland Resource Map

0.09 Miles

- ETDM Alternative Terminus
- ETDM Alternative
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Wetland Hardwood Forest
- Wetland Coniferous Forest
- Wetland Forested Mixed
- Vegetated Non-forested Wetland
- Non-vegetated Wetland
- Cut Over Wetland
- Wetland Scrub Shrub

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

Map Generated on: 12/4/2006

Appendices

Degree of Effect Legend

Color Code	Meaning	ETAT	Public Involvement
0	None	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 *None* 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 to None -or- 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. The *Minimal* degree of effect is new as of 12/5/2005. Prior to 12/5/2005, a green degree of effect indicated *Minimal to None.*	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 -or- Dispute Resolution	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming. The *Potential Dispute* degree of effect pertains to the Planning Phase, while *Dispute Resolution* degree of effect refers to the Programming Phase.	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 #8127 - State Road 7 Extension, 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.fla-etat.org/est/index.jsp?tpID=8127&startPageName=GIS%20Analysis%20Results

Special Note: Please be sure that when the GIS Analysis Results page loads, the **Programming Screen Summary**

Report Published 04/25/2007 Milestone is selected. GIS Analyses snapshots have been taken for Project #8127 at various points throughout the project's life-cycle, so it is important that you view the correct snapshot.

Project Attachments

Note: Attachments are not included in this Summary Report, but can be accessed by clicking on the links below:

Date	Type	Size	Link	Name / Description
8/09/2006	Ancillary Project Documentation	2.08 MB	http://etdmpub.fla-etat.org/est/servlet/blobViewer?blobID=97	AN comments from FFWCC: AN comments from FFWCC
6/23/2006	Hardcopy Map (from Attach Document Tool)	316 KB	http://etdmpub.fla-etat.org/est/servlet/blobViewer?blobID=18	Corridor 4 Map: Corridor 4 Map
6/23/2006	Hardcopy Map (from Attach Document Tool)	314 KB	http://etdmpub.fla-etat.org/est/servlet/blobViewer?blobID=21	Corridor 3 Map: Corridor 3 Map
6/23/2006	Hardcopy Map (from Attach Document Tool)	314 KB	http://etdmpub.fla-etat.org/est/servlet/blobViewer?blobID=90	Corridor 2 Map: Corridor 2 Map
6/23/2006	Hardcopy Map (from Attach Document Tool)	312 KB	http://etdmpub.fla-etat.org/est/servlet/blobViewer?blobID=86	Corridor 1 Map: Corridor 1 Map