

July 9, 2012

113-89610

Ms. Cindy Mulkey
Program Administrator
Siting Coordination Office
Florida Department of Environmental Protection
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

RE: PETITION FOR MODIFICATIONS OF THE PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY LAKE AGNES SUBSTATION TO THE PLANNED GIFFORD SUBSTATION—A JOINT 230-kV TRANSMISSION LINE PROJECT CORRIDOR CERTIFICATION (TA07-16)

Dear Ms. Mulkey:

Florida Power Corporation, dba Progress Energy Florida, Inc. (PEF) is submitting to the Florida Department of Environmental Protection (FDEP) a Petition for a Corridor Modification of the PEF and Tampa Electric Company (TECO) Lake Agnes Substation to the Planned Gifford Substation—A Joint 230-kV Transmission Line Project (TA07-16), pursuant to section 403.5315, Florida Statutes (F.S.), and Rule 62-17.680, Florida Administrative Code (F.A.C.) and Condition of Certification No. XV.

PEF and TECO filed its Application for Corridor Certification for the Lake Agnes to Gifford 230-kilovolt (kV) transmission line project under the Florida Transmission Line Siting Act (TLSA), Sections 403.52 through 403.5365, F.S., and Chapter 62-17, Part II, F.A.C. on December 12, 2007. The Siting Board issued its certification approval on February 5, 2009. The Lake Agnes to Gifford (LAG) certified corridor extends from TECO's existing Lake Agnes substation in Polk County, Florida to PEF's recently constructed Gifford substation in Orange County, Florida.

Since the certification, PEF's Gifford substation and a new double circuit 69-kV transmission line have been permitted, constructed, and are operational. The new 69-kV transmission line traverses south from the Gifford substation to US 192 and is located on the western side of State Road (SR) 429 right-of-way primarily within FDOT's limited-access right-of-way. Separate and individual permits were obtained for the Gifford substation and 69-kV transmission line that were not a part of the TLSA process.

In addition, PEF has been working with the Florida Department of Transportation (FDOT) to determine the best route location for the 230-kV transmission line within the LAG certified corridor. Based on discussions with FDOT, PEF is proposing to modify the LAG certified corridor in two areas along SR429 to extend around FDOT's SR429 retention ponds in order to allow for additional routing opportunities, including co-locating with PEF's new 69-kV transmission line, to satisfy FDOT's requests. These will entail minor modifications of the LAG certified corridor. PEF is also proposing various minor technical modifications relating to hardware and equipment.

The petition for modification describes the proposed project and the proposed modifications to the LAG certified corridor, and addresses the potential effects of the modifications. Enclosed is a check in the

amount of \$7,800 payable to the FDEP for the fee required for this Petition for Modification under Rule 62-17.545(3)(a), F.A.C. and Section 403 5365(3)(b), F.S.

Concurrent with this filing, the indicated number of copies of this Petition for Modification are being distributed to the persons on the attached Distribution List. By this letter, this Petition for Modification is also being served upon the parties or their representatives in this certification proceeding.

Sincerely,



Dan Hendricks
Project Manager Transmission Siting
Progress Energy Florida, Inc.

cc: Virginia Dailey and Carolyn S. Raeppe, Hopping Green & Sams
Wayne Richardson, Progress Energy Florida
Arlee Jones, Tampa Electric Company
Larry Curtin, Holland and Knight
Toni Sturtevant, Esq., FDEP Office of General Counsel

Attachments: Distribution List

Enclosures: Petition for Modification of the LAG certified corridor
Application Check

KLH/RAZ/shm

Distribution List

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Claudia Llado, Clerk and
Judge Donald R. Alexander, ALJ
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PROGRESS ENERGY FLORIDA

LAKE AGNES SUBSTATION TO THE PLANNED GIFFORD SUBSTATION
A JOINT 230-kV TRANSMISSION LINE PROJECT

TRANSMISSION LINE SITING ACT CERTIFICATION

REQUEST FOR MODIFICATION OF CERTIFICATION

July 2012

TABLE OF CONTENTS

1.0	PROPOSED MODIFICATIONS AND EXISTING CONDITIONS	1
1.1	Modification Area 1	2
1.2	Modification Area 2	3
2.0	JUSTIFICATION FOR THE MODIFICATIONS	5
3.0	ANTICIPATED EFFECTS OF THE MODIFICATIONS	6
4.0	POTENTIAL TO AFFECT CONDITIONS OF CERTIFICATION.....	7
5.0	AFFECTED SECTIONS OF PEF’S APPLICATION FOR CORRIDOR CERTIFICATION	8
6.0	LEGAL AUTHORITY	9

LIST OF FIGURES

Figure 1.1-1 Modification Area 1
Figure 1.2-1 Modification Area 2

LIST OF APPENDICES

Appendix A –Florida Department of Environmental Protection Final Determination Letter for PEF’s
230-kV Circuit: Intercession City – Gifford
Appendix B - Changes to Pages, Tables and Figures of Lake Agnes to Gifford TLSA Application as a
Result of the Modification Requests

1.0 PROPOSED MODIFICATIONS AND EXISTING CONDITIONS

Florida Power Corporation, dba Progress Energy Florida, Inc. (PEF), and Tampa Electric Company (TECO) filed its Application for Corridor Certification for the Lake Agnes to Gifford 230-kilovolt (kV) transmission line under the Florida Transmission Line Siting Act (TLSA), Sections 403.52 through 403.5365, Florida Statutes (F.S.), and Chapter 62-17, Part II, Florida Administrative Code (F.A.C.), on December 12, 2007. The Siting Board issued its certification approval on February 5, 2009. The Lake Agnes to Gifford (LAG) certified corridor extends from TECO's existing Lake Agnes substation in Polk County, Florida to PEF's recently constructed Gifford substation in Orange County, Florida. The LAG certified corridor widths range from 500 feet to one mile. At the time the LAG corridor was certified, PEF was in the design and permitting phase of the Gifford substation, which was permitted separately from the TLSA process through local governments and regulatory agencies. The Gifford substation is now permitted, constructed, and operational. PEF is proposing to modify the LAG certified corridor in two areas along State Road (SR)429.

Since the LAG certification, PEF developed additional plans to construct a 230-kV transmission line from the Intercession City substation in Osceola County to the Gifford substation in Orange County and place it in service by June 2013. The Intercession City-Gifford 230-kV circuit will provide a much needed parallel path for the flow of energy into the Greater Orlando area. This line will start at PEF's Intercession City substation and power plant site, which is part of the 230 kV transmission network connected to generation in Osceola, Polk and Hardee Counties, and end at PEF's Gifford substation. The Gifford substation is connected to the 230-kV transmission network entering the Greater Orlando Area from the west. In addition, and equally important, the Intercession City-Gifford circuit will resolve some critical regional National Electric Reliability Corporation (NERC) reliability constraints on the bulk electric system. From the intersection of Interstate-4 (I-4) and SR429 to the Gifford substation, this proposed transmission line would parallel the LAG certified corridor.

Rather than construct a parallel 230-kV transmission line separate from the already certified LAG 230-kV circuit segment from the Gifford substation to the I-4/SR429 intersection, PEF plans to construct that segment under the LAG certification (TA07-16), in compliance with all conditions of that certification. The segment from the I-4/SR429 intersection to the Intercession City substation is less than five miles in length and is, therefore, exempt from the TLSA. In addition, PEF received a

Final Determination Letter from Florida Department of Environmental Protection (FDEP) dated January 25, 2011 stating that the Siting Coordination Office has determined the activity described above is exempt from licensing under the TLSA (see Appendix A). For that southerly segment of the Intercession City-Gifford circuit, PEF will obtain all necessary regulatory permits and approvals prior to construction by securing individual permits separate from the TLSA requirements of the LAG certification.

Consistent with Conditions of Certification Nos. XIX(A) and XXIX, PEF has been working with the Florida Department of Transportation (FDOT) to evaluate route options for the 230-kV transmission line within the LAG certified corridor. As a result of these efforts, PEF is proposing to modify the LAG certified corridor in two areas along SR429 to allow for additional routing opportunities. These will entail minor modifications of the LAG certified corridor boundary, as set forth below.

In addition, PEF has determined based on final engineering design that its intent is to use different conductors, different phase separation distances, and different pole heights than was originally identified in the Site Certification Application. PEF plans to use conductors that are single conductor 2627 Aluminum Conductor Steel Support/Trapezoidal Wire (ACSS/TW) “Santee”, and a phase separation distance of ten (10) feet rather than thirteen (13) feet shown in the original Figure 1.3-3 because of the difference in conductors. Further, PEF is proposing to use different pole heights, ranging from 85 feet to 185 feet rather than 85 feet to 175 feet. These proposed changes are not anticipated to have any impacts different than those outlined in the LAG certification application and explained at the certification hearing.

1.1 Modification Area 1

The first area proposed for modification is located along SR429 north of Indian Creek Blvd and south of Funie Steed Road (Figure 1.1-1).

Modification Area 1 is proposing to expand the LAG certified corridor boundary approximately an additional 440 feet to the east around FDOT’s SR429 retention pond. Modification Area 1 begins approximately 800 feet north of the Indian Creek Boulevard overpass along the SR429 right-of-way boundary and ends along the SR429 right-of-way boundary south of the Oak Island Harbor

Community retention pond parcel boundary. Modification Area 1 generally follows existing parcel boundaries and SR429 right-of-way boundaries.

Modification Area 1 is located within Osceola County. The future land use designation is low density residential, and the zoning districts are agricultural and planned development within portions of this area. There are no existing developments within Modification Area 1. The land area within Modification Area 1 is predominantly occupied by FDOT's retention pond. The remaining portion of the area consists of land that has been previously cleared with shrubs and brush remaining. Gopher tortoises were observed during field reconnaissance (November 2011) along FDOT's SR429 property's fence line. During the field reconnaissance (November 2011), no additional significant ecological constraints were observed. Furthermore, there are no designated lands within this area. A detailed species survey will be conducted prior to any construction pursuant to Condition XX of the LAG Conditions of Certification. Portions of the Davenport Swamp (OS49) cultural resource site extend slightly into a small section of the northern portion of Modification Area 1 that is predominantly occupied by a retention pond. Portions of the Davenport Swamp area have been previously disturbed with the construction of SR 429. The Davenport Swamp extends south through the LAG certified corridor through SR429, and was included and evaluated in the LAG TLSA certification. The Davenport Swamp is a prehistoric lithic scatter/ quarry that has not been evaluated for listing in the National Register of Historic Places (Florida Master Site File November 2011).

1.2 Modification Area 2

The second area proposed for modification is located along SR429 south of United States (US)192 and north of Funie Steed Road (Figure 1.2-1).

Modification Area 2 is proposing to expand the LAG certified corridor boundary approximately an additional 150 to 200 feet to the west around FDOT's SR429 retention pond. The Modification Area 2 begins approximately 400 feet from the southern edge of the southernmost retention pond and ends at the northern edge of the US192 right-of-way. Modification Area 2 generally follows the SR429 right-of-way boundaries.

Modification Area 2 is located within Osceola County. The future land use designations are low density residential and tourist commercial, and the zoning districts are agricultural and planned

development within this area. There are no existing developments within Modification Area 2. The land area within Modification Area 2 is predominantly occupied by FDOT's SR429 retention pond. The remaining land use consists of open land, hydric pine flatwoods to the north and portions of fresh water marshes along the southern boundary. During the field reconnaissance (November 2011), no significant ecological constraints were observed. Furthermore, there are no designated lands or known cultural resources within this area.

2.0 JUSTIFICATION FOR THE MODIFICATIONS

PEF and FDOT are collaborating on the exact pole locations within SR-429 right-of-way to locate the facilities in a manner that will allow future expansion of the roadway with the least amount of impact to the proposed transmission line and to adjacent property parcels and natural resources. The two modification areas are being proposed because both FDOT and PEF believe that the proposed transmission line should be located behind the retention ponds to allow for existing road maintenance and future road expansion while minimizing impacts to natural resources. The current LAG certified corridor limits allow for the facilities to be located at the limits of SR-429 right-of-way in most locations; however, the LAG certified corridor restricts the location of the transmission line to front of the ponds in these locations. FDOT prefers the transmission line to be located behind the retention ponds in these locations. PEF is proposing these modifications to accommodate FDOT's routing preferences.

During the original development of the design specifications to be included in the LAG TLSA, PEF proposed the use of bundled 954 ACSS/TW Cardinal conductor to be compatible with TECO's design. As the parameters of the project have changed, the conductor design has changed to a single 2627 ACSS/TW Santee. Santee is the standard conductor for PEF that satisfies the load requirement for the proposed 230-kV transmission line. Utilities commonly select standard conductors to facilitate stock management and maintenance. Due to its increased weight, the Santee conductor sags slightly more than the bundled conductor; this, together with the number of road crossings and distribution crossings on the project, requires a slight increase in the average pole height (from a maximum of 175 feet to 185 feet).

The proposed modifications are consistent with PEF's commitment to locate the transmission line to the extent practicable within existing previously disturbed rights-of-way (see Section 3.1 of the LAG TLSA, page 3-1), minimizing potential impacts on human populations, water bodies, archaeological and historic sites, vegetation, and wildlife.

3.0 ANTICIPATED EFFECTS OF THE MODIFICATIONS

The anticipated effects of the proposed modifications to the Lake Agnes to Gifford certified corridor are anticipated to be minimal because the modification areas were included in the study area and evaluated as part of the detailed corridor selection study that was conducted in accordance with the TLSA guidelines. The modification areas are predominantly retention ponds adjacent to the LAG certified corridor with open land, shrubs, brush, hydric pine flatwoods, fresh water marsh, bay swamp, and mixed wetland hardwoods along the perimeter of the areas. There are no designated lands, significant ecological constraints, or known undisturbed cultural resources located within the modification areas. Although gopher tortoises were identified during the field reconnaissance (November 2011), this is not considered a significant constraint because PEF has already agreed to avoid and minimize impacts to the gopher tortoises in the LAG certified corridor Conditions of Certification (Condition XX).

PEF is requesting the expansion of the certified corridor in the two areas in order to allow the transmission line route to traverse the outside of FDOT's SR429 retention ponds within the SR429 right-of-way rather than locations between retention ponds and traffic lanes. The additional area provides flexibility in the placement of structures to minimize overall impacts to the SR429 right-of-way ; these proposed modifications are not expected to cause any incremental effect on natural resources such as wetlands any different than those described in the original corridor certification.

4.0 POTENTIAL TO AFFECT CONDITIONS OF CERTIFICATION

The construction and operation of 230-kV transmission line within the two proposed modification areas will comply with the LAG certifications and conditions of certification.

5.0 AFFECTED SECTIONS OF PEF’S APPLICATION FOR CORRIDOR CERTIFICATION

The primary changes to the LAG TLSA application that are affected by the four modifications are the figures depicting the locations of the LAG certified corridor. The following list presents the text changes (pages), tables, and figures that are revised as a result of these modification requests. All pages, tables, and figures that are revised as a result of these modifications are provided in Appendix A in the order presented below.

- Page 1-4.
- Figure 1.1-3, Page 1-5.
- Figure 1.2-1 (2 of 3 and 3 of 3), Page 1-8, Page 1-9.
- Page 1-10
- Figures 1.3-3, Page 1-13
- Figure 1.3-5, Page 1-15
- Page 1-17.
- Figure 2.1-2, Page 2-5.
- Figure 2.2-1 (2 of 3 and 3 of 3), Page 2-18, Page 2-19
- Page 2-23.
- Page 2-29.
- Page 2-43.
- Page 2-44.
- Table 2.3-1, Page 2-45.
- Table 2.3-2, Page 2-46, Page 2-47.
- Page 2-50.
- Page 2-51.
- Table 2.3-3, Page 2-52.
- Page 2-54.
- Figure 2.3-1, Page 2-55.
- Page 2-56.
- Page 2-57.
- Attachment 2-1 (9 of 11 and 10 of 11) of Appendix B.
- Attachment 2-2 (9 of 11 and 10 of 11) of Appendix B.
- Attachment 2-3 (9 of 11 and 10 of 11) of Appendix B.
- Attachment 2-4 (9 of 11 and 10 of 11) of Appendix B.

6.0 LEGAL AUTHORITY

Legal authority for these proposed modifications is provided by:

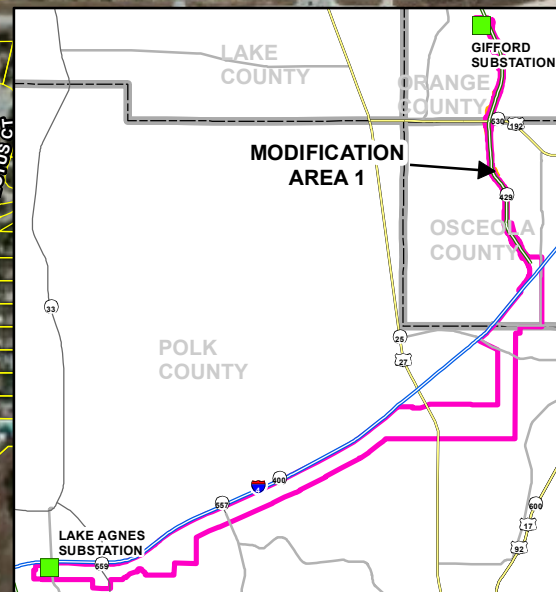
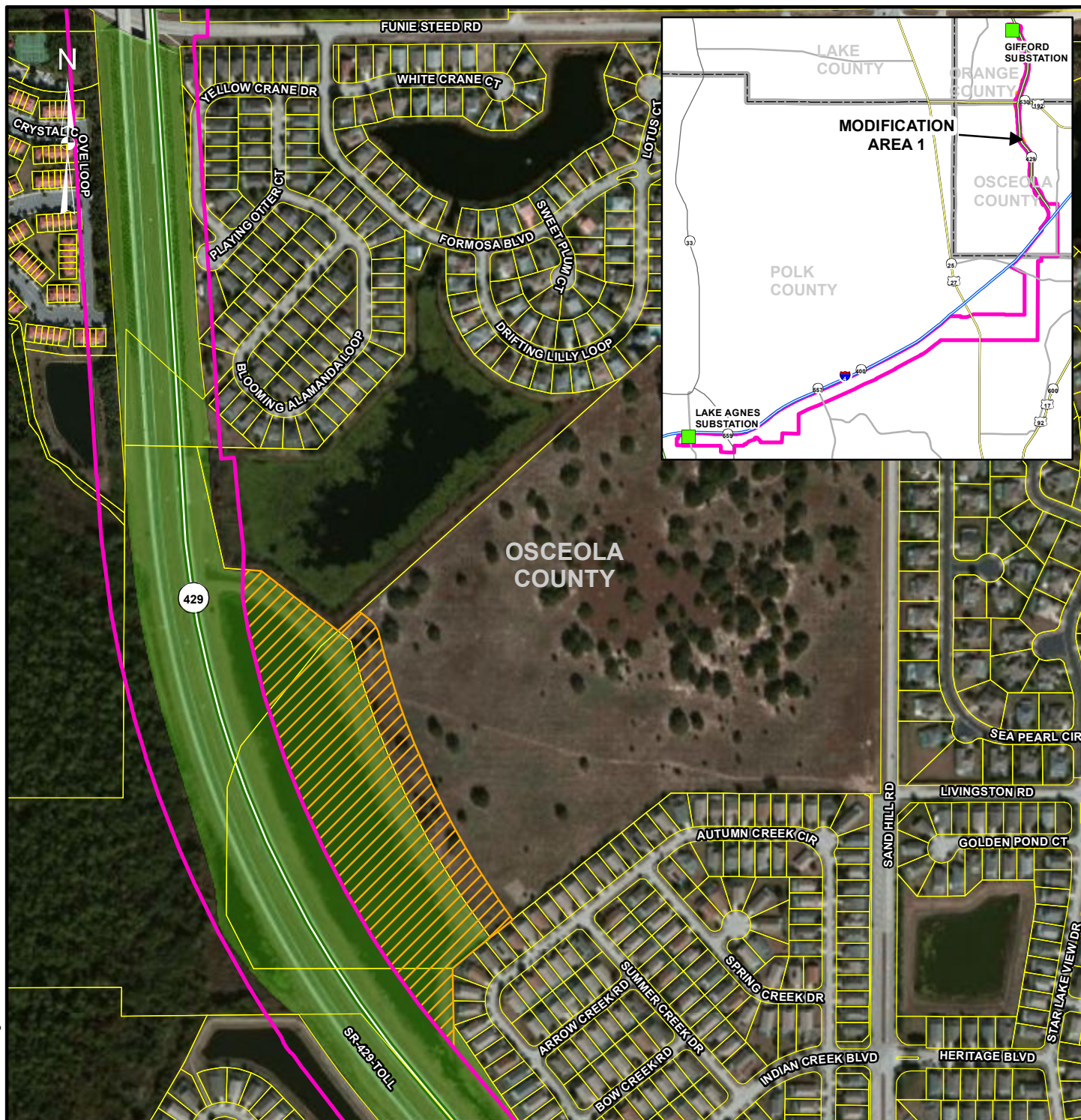
- Section 403.5315 F.S. – Modification of Certification.
- Section 62-17.680, F.A.C. – Modification of Certification.
- Lake Agnes to Gifford Progress Energy Florida Tampa Electric Company Condition of Certification, Condition XV – Modification of Certification.

XV. *Modification of Certification*

- A. *Pursuant to Section 403.5315(1), F.S., Section 120.569(2)(n), F.S., and Rule 62-17.680, F.A.C., the Siting Board hereby delegates the authority to the Secretary of the Department of Environmental Protection to modify these Conditions of Certification, after notice and receipt of no objection by a party or other substantially affected person. In addition, the Secretary of the Department is delegated the authority to modify conditions as follows:*
1. *The Secretary of the Department may modify any condition of this certification after notice and opportunity for hearing.*
 2. *The Secretary of the Department may grant modifications necessary to meet licensing conditions or requirements imposed on PEF/TECO by any federal regulatory agency. PEF/TECO shall notify DEP at least 30 days prior to the issuance of the federal license that would require such a modification, if known, or in any event, as soon as the federal agency notifies PEF/TECO.*
 3. *The Secretary of the Department may authorize the reconstruction of the ROW or transmission line necessary to avoid or mitigate an emergency condition. Such a modification shall be obtained only when an emergency replacement of a transmission line pursuant to Rule 62-17.695, F.A.C., is not required or when an emergency replacement must be further modified after the emergency conditions requiring the original reconstruction are no longer present.*
- B. *DEP shall give written notice to the parties to the original certification, at their last address of record, of any requests for modification filed by PEF/TECO.*

XV. Citations: Sections 120.569(2)(n) and 403.5315, F.S.(2007); Rules 62-17.680 and 62-17.695, F.A.C.

FIGURES



LEGEND

- LAKE AGNES TO GIFFORD CERTIFIED CORRIDOR
- FDOT ROAD ROW
- CORRIDOR MODIFICATION AREA
- TOLL ROAD
- PARCEL BOUNDARY
- COUNTY BOUNDARY

REFERENCES

1. MODIFICATION AREAS: PROGRESS ENERGY FLORIDA AND GOLDER ASSOCIATES INC., 2011
2. CERTIFIED CORRIDOR: PROGRESS ENERGY FLORIDA AND GOLDER ASSOCIATES INC., 2007
3. ROADS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2011
4. PARCEL BOUNDARY: OSCEOLA COUNTY PROPERTY APPRAISER, NOVEMBER 2011
5. FDOT ROAD ROW: FLORIDA DEPARTMENT OF TRANSPORTATION, 2000
6. COUNTY BOUNDARIES: FLORIDA GEOGRAPHIC DATA LIBRARY, 2008
7. AERIAL: ARC GIS ONLINE-BING MAPS AERIAL; MICROSOFT CORPORATION AND ITS DATA SUPPLIERS, 2010



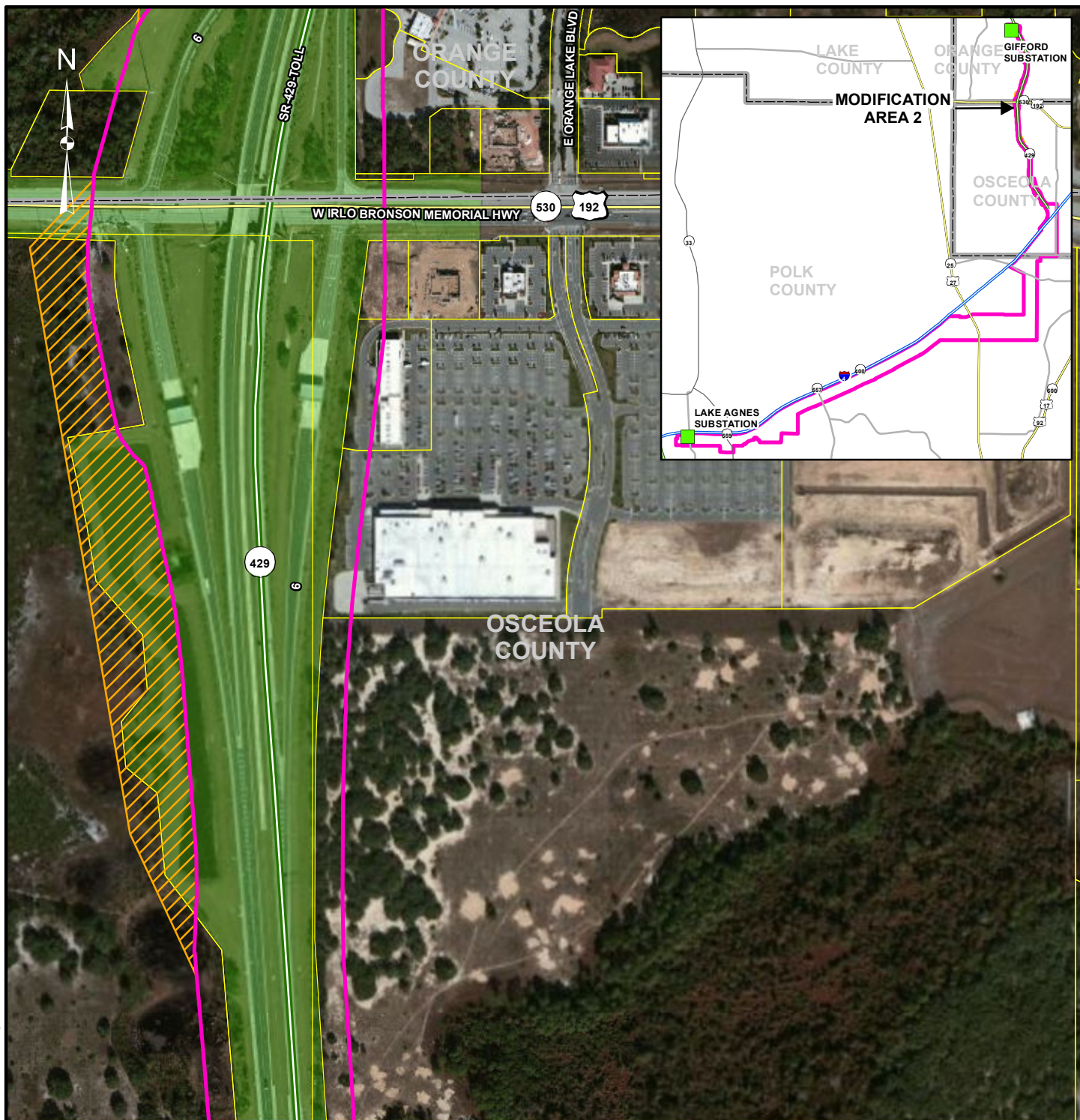
REV.	DATE	DES.	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT
**LAKE AGNES TO GIFFORD
230-kV JOINT TRANSMISSION LINE PROJECT
CERTIFIED CORRIDOR MODIFICATION**

TITLE
MODIFICATION AREA 1



PROJECT No. 113-89610			FILE No. 113-89610A018		
DESIGN	JDG	12/01/2011	SCALE: AS SHOWN	REV.	0
GIS	JDG	06/27/2012	FIGURE 1.1-1		
CHECK	KLH	06/27/2012			
REVIEW	RAZ	06/27/2012			



LEGEND

- LAKE AGNES TO GIFFORD CERTIFIED CORRIDOR
- CORRIDOR MODIFICATION AREA
- PARCEL BOUNDARY
- FDOT ROAD ROW
- TOLL ROAD
- US ROAD

REFERENCES

1. MODIFICATION AREAS: PROGRESS ENERGY FLORIDA AND GOLDER ASSOCIATES INC., 2011
2. CERTIFIED CORRIDOR: PROGRESS ENERGY FLORIDA AND GOLDER ASSOCIATES INC., 2007
3. ROADS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2011
4. PARCEL BOUNDARY: OSCEOLA COUNTY PROPERTY APPRAISER, NOVEMBER 2011 AND ORANGE COUNTY PROPERTY APPRAISER, OCTOBER 2010
5. FDOT ROAD ROW: FLORIDA DEPARTMENT OF TRANSPORTATION, 2000
6. COUNTY BOUNDARIES: FLORIDA GEOGRAPHIC DATA LIBRARY, 2008
7. AERIAL: ARC GIS ONLINE-BING MAPS AERIAL; MICROSOFT CORPORATION AND ITS DATA SUPPLIERS, 2010



REV.	DATE	DES.	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT
LAKE AGNES TO GIFFORD
230-kV JOINT TRANSMISSION LINE PROJECT
CERTIFIED CORRIDOR MODIFICATION

TITLE
MODIFICATION AREA 2



PROJECT No. 113-89610			FILE No. 113-89610A019		
DESIGN	JDG	12/01/2011	SCALE: AS SHOWN	REV.	0
GIS	JDG	03/23/2012	FIGURE 1.2-1		
CHECK	KLH	03/23/2012			
REVIEW	RAZ	03/23/2012			

APPENDIX A
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION FINAL
DETERMINATION FOR PEF'S 230-kV CIRCUIT: INTERCESSION CITY – GIFFORD



Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard, Jr.
Secretary

Sent by Electronic Mail – Read Receipt Requested

January 25, 2011

Dan Hendricks, Project Manager Transmission Siting
Progress Energy Florida, Inc.
3300 Exchange Place NP3B
Lake Mary, FL 32746

Re: Final Determination
Progress Energy Florida (PEF), Inc.
230 kv Circuit: Intercession City - Gifford
Related Case TA07-16: PEF TECo Lake Agnes-Gifford

Dear Mr. Hendricks:

On December 15, 2010, PEF submitted a request for a determination regarding the requirement to modify the transmission line certification for PEF/TECo Lake Agnes - Gifford. The proposed 230 kV tie between the Intercession City substation and the already-certified Lake Agnes - Gifford 230 kV transmission line corridor will be less than 15 miles in length. As indicated in the request, the proposed project will resolve critical regional NERC reliability constraints on the bulk electric system.

Enclosed are the following documents: Written Notice of Determination, and Public Notice of Intent to Issue Determination. The Public Notice of Intent is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please contact me at (850)245-2002.

Sincerely,

Michael P. Halpin, P.E.
Administrator, Siting Office

Enclosures

In the Matter of a Request for a Determination:

Progress Energy Florida, Inc.
3300 Exchange Place NP3B
Lake Mary, FL 32746

Related Case No. TA07-16
Intercession City – Gifford
Osceola County, Florida

Authorized Representative:

Dan Hendricks, Project Manager Transmission Siting

Project and Location: Progress Energy Florida (PEF), Inc. proposes to construct a new 230 kV transmission line, less than 15 miles in length, that start at PEF's Intercession City Substation (and plant site) and terminate at the certified (but not yet constructed) Lake Agnes-Gifford transmission line, entering the Greater Orlando area from the west. Additional details of the proposed project are provided in the letter dated December 10, 2010.

Licensing Authority: Applications for certification for 230 kV transmission lines are subject to the Transmission Line Siting Act (TLSA) in accordance with the provisions of Sections 403.52 through 403.5365, Florida Statutes (F.S.) and Chapter 62-17, Part II of the Florida Administrative Code (F.A.C.). The Siting Coordination Office is the licensing authority responsible for making a determination regarding the necessity of Site Certification under the TLSA for this project. The licensing authority's physical address is: 3900 Commonwealth Blvd., Tallahassee, Florida. The licensing authority's mailing address is: 3900 Commonwealth Blvd, MS #48, Tallahassee, Florida 32399-3000. The licensing authority's telephone number is (850)245-2002.

Project File: A project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the licensing authority. The project file includes the Notice of Determination, the Public Notice of Intent and the request submitted by the applicant. Interested persons may contact the licensing authority for additional information at the address or phone number listed above.

Notice of Intent: The Siting Coordination Office determines that the activity is exempt from licensing under the TLSA. The exemption of a transmission line under the TLSA does not constitute an exemption for the transmission line from other applicable permitting processes under other provisions of law or local government ordinances. The licensing authority gives notice of its intent to authorize PEF to obtain separate and individual permits and approvals for the above described activity. In accordance with Section 403.524(4), F.S., PEF shall provide a submittal filed to the department before the start of construction demonstrating that the transmission line(s) comply with the applicable electric and magnetic field standards. At that same time, the applicant shall additionally provide the licensing authority with amendment pages to the site certification application related to license TA07-16 (Lake Agnes – Gifford) showing the interconnection(s) between the Lake Agnes – Gifford certified corridor and the 230 kV tie to Intercession City. The above decision is made pursuant to Section 403.524(2)(d), F.S. The licensing authority will issue a Final Determination unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions. The license authority's Final Determination of exemption may be revoked

if the proposed activity is substantially modified or the basis for the exemption is determined to be materially incorrect.

Public Notice: The licensing authority requests that you (the applicant) publish at your own expense the enclosed Public Notice of Intent (Public Notice). The Public Notice shall be published one time only in accordance with the applicable portions of Rule 62-110.106, F.A.C. The applicant shall provide proof of publication to the licensing authority at the above: The licensing authority will accept written comments concerning the proposed determination for a period of 21 days from the date of publication of the Public Notice. Written comments must be received by the licensing authority by close of business (5:00 p.m.) on or before the end of the 21-day period. Significant written comments may require a substantial change to the determination with a new Public Notice or may result in the determination that a licensing under the act is required. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed agency action may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 21 days of receipt of this Written Notice of Intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the attached Public Notice. Under Section 120.60(3), F.S., however, any person who asked the licensing authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the licensing authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must state so; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts

upon which the licensing authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the licensing authority's final action may be different from the position taken by it in this Written Notice of Intent. Persons whose substantial interests will be affected by any such final decision of the licensing authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

A handwritten signature in blue ink that reads "Michael P. Halpin, P.E." The signature is written in a cursive, flowing style.

Michael P. Halpin, P.E.
Administrator, Siting Office

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Determination was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on January 25, 2011 to the persons listed below.

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3300 Exchange Place NP3B
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allen.erickson@ocfl.net

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52
Florida Statutes, with the designated
Department Clerk, receipt of which is
hereby acknowledge

(Clerk)



(Date)

1/25/11

APPENDIX B
CHANGES TO PAGES, TABLES, AND FIGURES OF THE LAKE AGNES TO
GIFFORD TLSA APPLICATION AS A RESULT OF THE MODIFICATION REQUESTS

The Lake Agnes to Gifford transmission line project does not propose to certify intermediate or terminal substations.

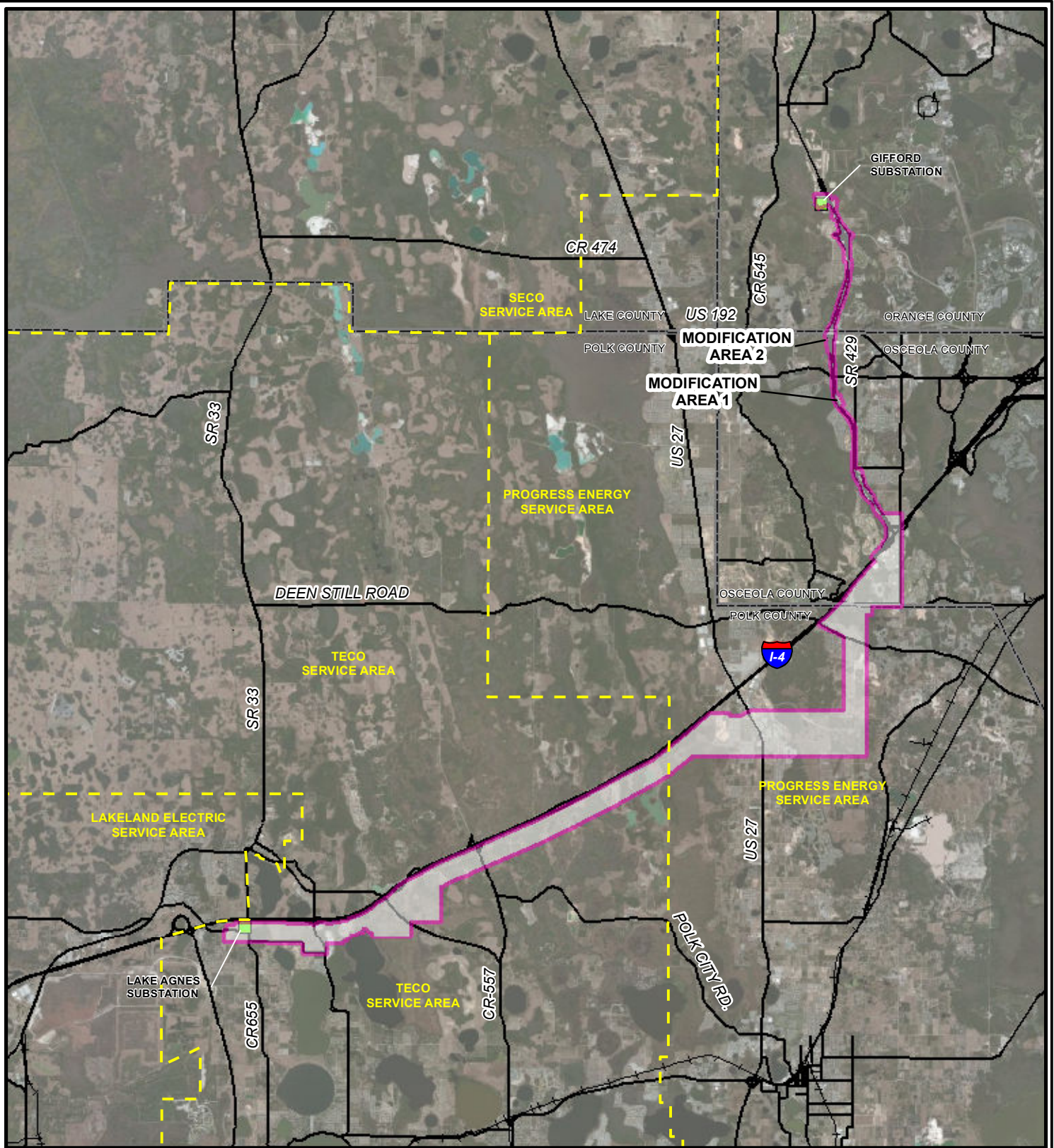
The length of the preferred corridor (measured along the center line) is approximately 27.5 miles from end point to end point (see Figure 1.1-3), with approximately 10.5 mile in TECO's service territory and approximately 17 miles in PEF's service territory. The corridor contains various existing linear facilities, including existing road and utility ROW, parts of which may be used for the Lake Agnes to Gifford transmission line. The availability of these existing linear facilities and the potential for co-location were important factors in the selection of the preferred corridor.

The PEF ~~planned~~ Gifford substation was constructed in 2010 and is currently operational~~.is currently in the design and permitting phases.~~ The substation ~~will be~~ was permitted separately from this TLSA process through local government and regulatory agency permitting.

1.1.1 Need for the Project

Pursuant to Section 403.537, F.S., petition for a determination of need for the Lake Agnes to Gifford 230-kV transmission line was submitted to the Florida Public Service Commission (FPSC) on August 1, 2007. The FPSC held a public hearing on the submitted petition on September 12, 2007 and a Final Order was obtained from the FPSC on September 26, 2007. The FPSC determined that the Lake Agnes to Gifford transmission line is needed to be in service by June 2011. A copy of the Final Order is provided in Appendix A. For informational purposes only, a summary of the basis of the need for the project is provided in the following paragraphs.

The Florida Reliability Coordinating Council (FRCC) coordinates electrical transmission planning studies and reliability assessment activities amongst the electric utilities in peninsular Florida. Their function is to coordinate, assess and ensure continued compliance of the region's bulk electric system (transmission grid) to the reliability standards established by the North American Electric Reliability Corporation (NERC). The Florida Central Coordinated Study (FCCS) and the subsequent FCCS Re-Study were conducted by the FRCC and numerous member utilities in accordance with the NERC Reliability Planning Standards. The FCCS Re-Study identified transmission limitations on the existing 230-kV transmission network between the Polk County area and the Greater Orlando area.

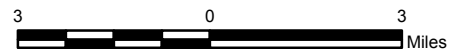


LEGEND

- Preferred Corridor
- County boundaries
- Existing substation
- Railroads
- Service territory
- Major roads

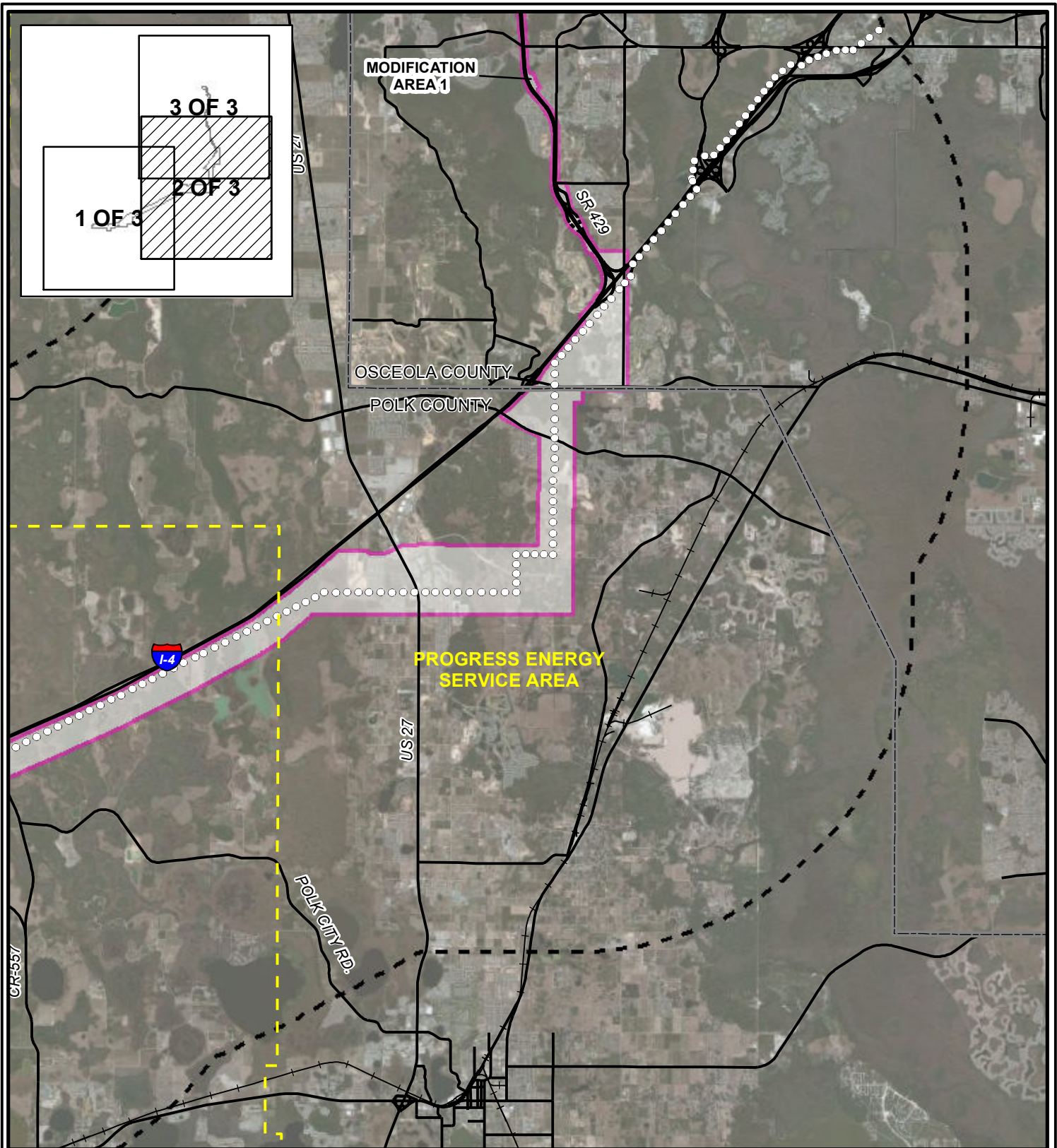
REFERENCE

1. Major roads - Florida Department of Transportation, 4/2006.
2. County boundaries - US Census Bureau, 2000.
3. Electrical service area information - TECO, PEF, Lakeland Electric, SECO, and OUC; 2007.
4. Aerial imagery - ArcGIS Online; Bing Maps Aerial; Microsoft Corporation and its data suppliers, 2010



PROJECT PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY LAKE AGNES TO GIFFORD 230kV JOINT TRANSMISSION LINE PROJECT			
TITLE PREFERRED CORRIDOR ALIGNMENT			
PROJECT No. 073-89532		SCALE AS SHOWN	REV. 1
DESIGN	JWT	08/22/2007	
GIS	JDG	06/06/2012	
CHECK	KLH	06/06/2012	
REVIEW	RAZ	06/06/2012	
1.1-3 (REVISED)			



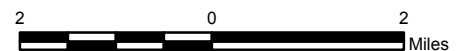


LEGEND

- Existing substation
- Service territory
- Existing 230 kV
- County boundaries
- Railroads
- Major roads
- Preferred Corridor
- Five mile buffer

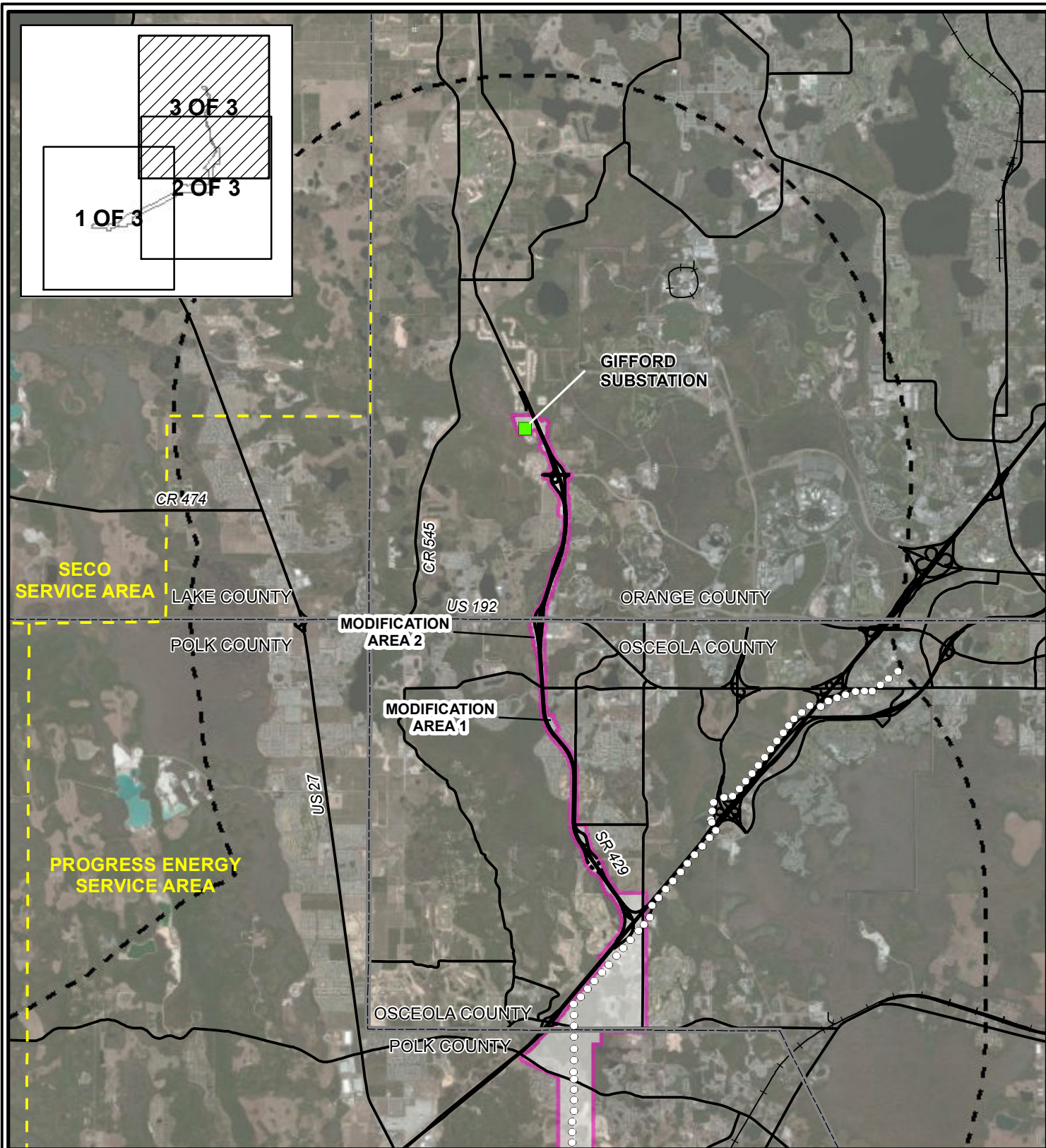
REFERENCE

1. Major roads - Florida Department of Transportation, 4/2006.
2. County boundaries - US Census Bureau, 2000.
3. Electrical service area information - TECO, PEF, Lakeland Electric, SECO, and OUC; 2007.
4. Aerial imagery - ArcGIS Online; Bing Maps Aerial; Microsoft Corporation and its data suppliers, 2010



PROJECT PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY LAKE AGNES TO GIFFORD 230kV JOINT TRANSMISSION LINE PROJECT			
TITLE PREFERRED CORRIDOR LOCATION AND EXISTING TRANSMISSION LINES GREATER THAN 115kV WITHIN 5 MILES OF THE CORRIDOR			
PROJECT No. 073-89532		SCALE AS SHOWN	REV. 1
DESIGN	JWT	08/22/2007	1.2-1 2 OF 3 (REVISED)
GIS	JDG	06/06/2012	
CHECK	KLH	06/06/2012	
REVIEW	RAZ	06/06/2012	



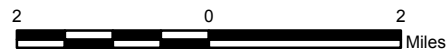


LEGEND

- Existing substation
- Service territory
- Existing 230 kV
- County boundaries
- +— Railroads
- Major roads
- Preferred Corridor
- Five mile buffer

REFERENCE

1. Major roads - Florida Department of Transportation, 4/2006.
2. County boundaries - US Census Bureau, 2000.
3. Electrical service area information - TECO, PEF, Lakeland Electric, SECO, and OUC; 2007.
4. Aerial imagery - ArcGIS Online; Bing Maps Aerial; Microsoft Corporation and its data suppliers, 2010



PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
LAKE AGNES TO GIFFORD
230kV JOINT TRANSMISSION LINE PROJECT

TITLE
**PREFERRED CORRIDOR LOCATION AND
EXISTING TRANSMISSION LINES GREATER
THAN 115kV WITHIN 5 MILES OF THE CORRIDOR**



PROJECT No. 073-89532		SCALE AS SHOWN	REV. 1
DESIGN	JWT	08/22/2007	
GIS	JDG	06/06/2012	
CHECK	KLH	06/06/2012	
REVIEW	RAZ	06/06/2012	

1.2-1
3 OF 3
(REVISED)

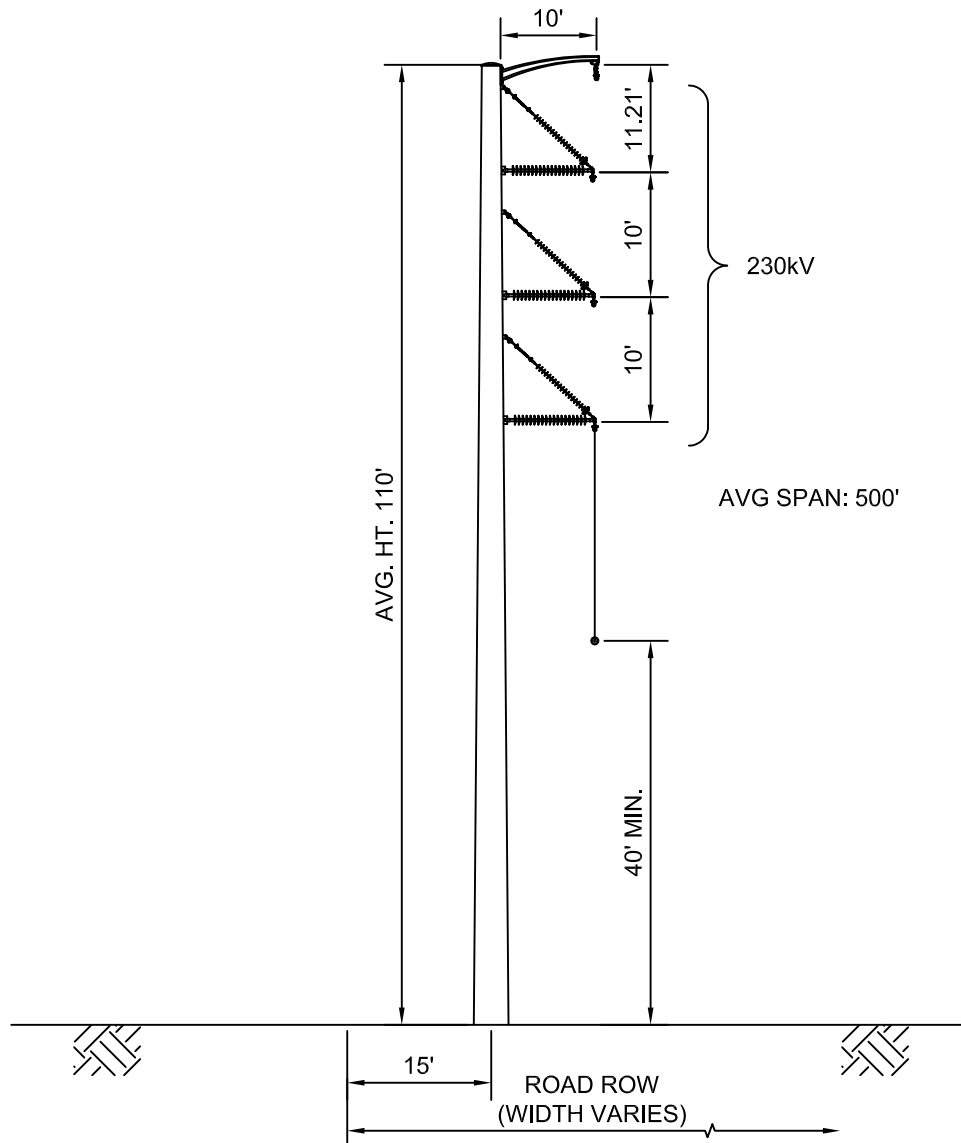
structure configurations anticipated for use on the transmission line are shown in Figure 1.3-1 through Figure 1.3-4. The tangent structures can be either directly embedded or installed on drilled pier foundations, with angle and dead-end structures requiring a drilled pier foundation. Structures other than those shown may be required to accommodate specific features such as streams, major road intersections and highway crossings, other transmission lines, or other site-specific engineering considerations.

The conductor is anticipated to be a ~~two~~ single conductor ~~bundle-954 2627~~ Aluminum Conductor Steel Support/Trapezoidal Wire (ACSS/TW) ~~“Cardinal.” “Santee”~~. The maximum normal and emergency conductor operating temperature will be 180°C for normal operation and 200°C for emergency operation conditions. The typical conductor configuration, insulators, and hardware are shown in Figure 1.3-5. The conductor profiles for the typical structure configurations are shown in Figure 1.3-6.

The conductors will be attached to the structures with braced line post or V-string insulators. The braced line post arrangement is a compressed construction design which minimizes the amount of ROW needed. The V-string insulator design allows longer span lengths due to the increased strength of this assembly over the standard braced line post arrangement. Advances in strength capability of the braced line post may allow it to be used in lieu of the V-string assembly and will be determined at the time of detailed design.

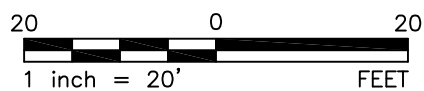
The typical span lengths between structures will range from approximately 500 ft to 700 ft for the braced line post structures and 700 ft to 1,000 ft for the V-string structures. The typical structure heights will range from approximately 85 ft to ~~175-185~~ ft depending upon site-specific conditions. The individual span lengths will be based on the topography of the specific route, the location of the existing structures, the width of the ROW, and other transmission engineering design parameters.

Although the vertical clearance of the transmission line will vary along the corridor, in all instances the transmission line will meet the requirements of the National Electric Safety Code (NESC) (Institute of Electrical and Electronics Engineering, Inc, approved April 2006) and will have a minimum clearance above the ground of 23 ft. Clearance will also provide for operational requirements of regulatory agencies.



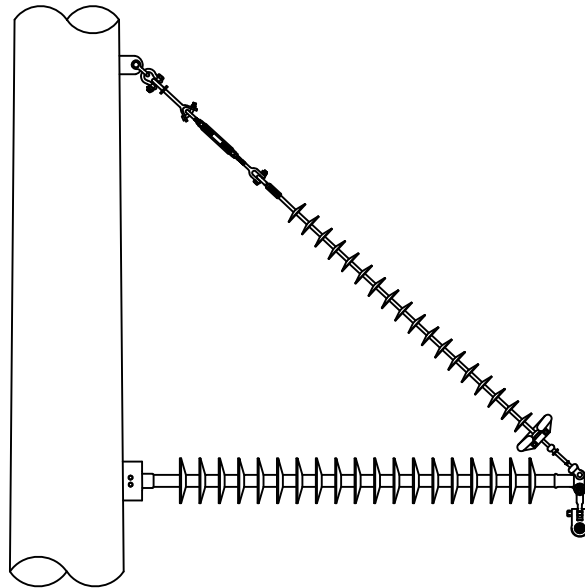
NOTE:

1. FOUNDATION TO BE EITHER DIRECT EMBEDDED POLE OR DRILLED PIER.



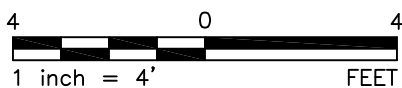
PROJECT					
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY					
LAKE AGNES - GIFFORD					
230kV JOINT TRANSMISSION LINE PROJECT					
TITLE					
TYPICAL TANGENT STRUCTURE ON ROAD RIGHT-OF-WAY					
 Golder Associates Jacksonville, Florida		PROJECT No.	073-89532	FILE No.	073-89532A1.3-3
		DESIGN	RLG	10/5/2007	SCALE AS SHOWN
		CADD	SAT	10/5/2007	REV. 0
		CHECK	KK	12/3/2007	
		REVIEW	MM	12/3/2007	
					1.3-3 REVISED

Drawing file: 073-89532A1 3-5.dwg Jun 08, 2012 - 12:05pm



NOTE:

1. TYPICAL INSULATOR ASSEMBLY SHOWN, OTHERS WILL BE REQUIRED BASED ON STRENGTH REQUIREMENTS.



PROJECT		PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY LAKE AGNES - GIFFORD 230kV JOINT TRANSMISSION LINE PROJECT			
TITLE		TYPICAL 230kV TANGENT INSULATOR ASSEMBLY			
 Golder Associates Jacksonville, Florida		PROJECT No. 073-89532		FILE No. 073-89532A1.3-5	
		DESIGN	RLG	10/5/2007	SCALE AS SHOWN
		CADD	SAT	10/5/2007	REV. 0
		CHECK	KK	12/3/2007	
		REVIEW	MM	12/3/2007	
		1.3-5 REVISED			

Existing roadways, access roads, and structure pads will be used for construction and maintenance access to the transmission line, wherever practicable. Where the new transmission line will be constructed within existing transmission ROW, improvements to the associated access roads and/or pads, will be made depending on the status of the existing conditions. Where adequate access roads or structure pads do not exist, new roads and pads will be constructed. These roads will be unpaved with a top elevation above expected seasonal high water and a typical road surface width of 16 ft. Figure 1.3-7 and 1.3-8 presents a plan and profile view of a typical access road and typical structure pad.

No new bridges are anticipated to be constructed for the Lake Agnes to Gifford transmission line project.

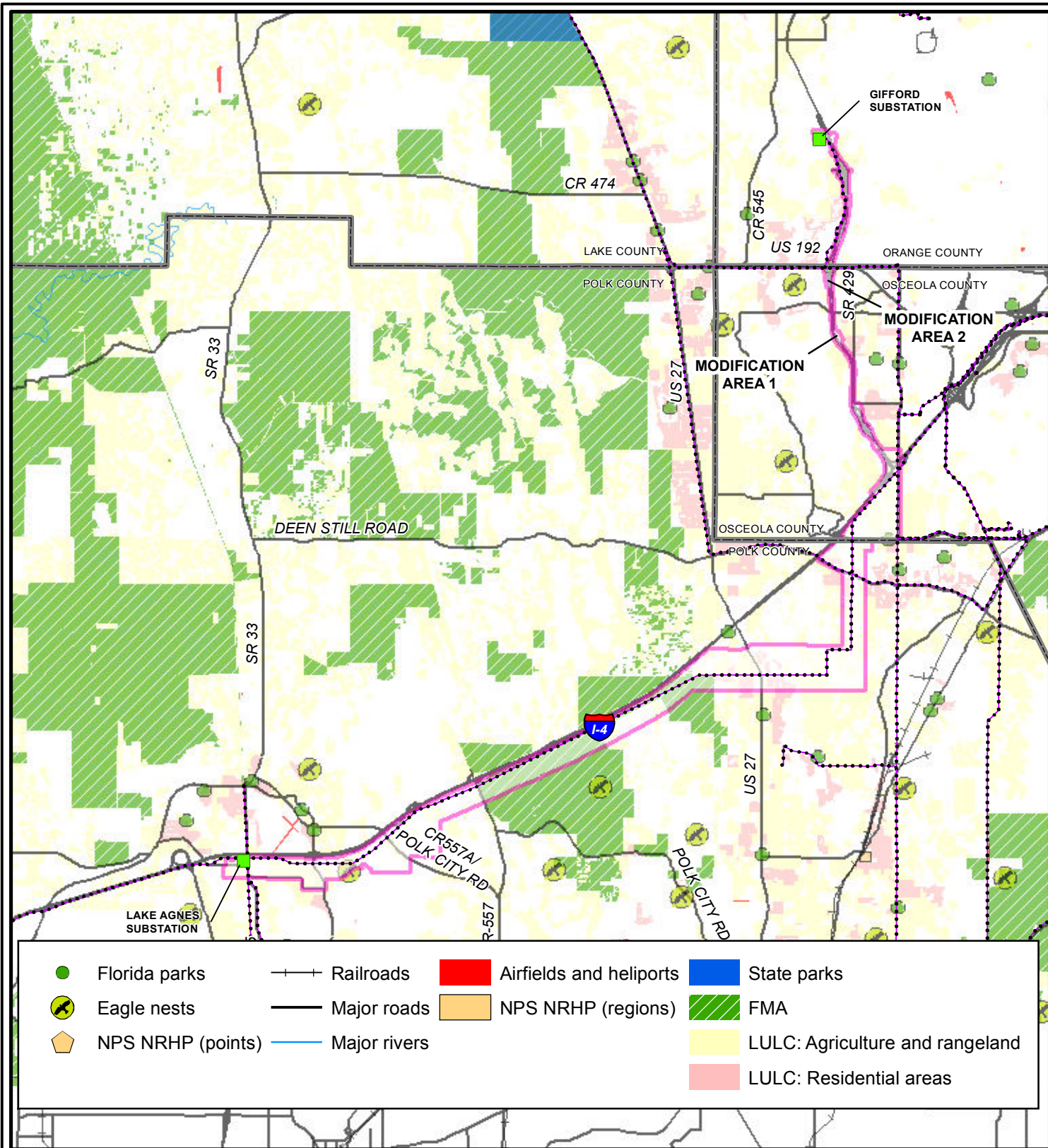
1.4 Proposed Intermediate Substations

~~No new intermediate substations are proposed for the Lake Agnes to Gifford transmission line project. The Intercession City substation located at the Intercession City Power Plant will service as the intermediate substation for the portion of the Lake Agnes to Gifford transmission line that is located within PEF's service territory.~~

1.5 Cost Projections

Cost projections for the transmission line are based on preliminary design data and estimated costs. The cost projections are based on comparable lines of similar voltage constructed in the region along with average real estate costs from Polk, Osceola, and Orange Counties. The actual costs for the transmission line will depend upon the final location of the ROW within the corridor, line length, structure configuration, the number and type of structures, mitigation costs, costs of ROW, and other site-specific conditions. The exact location, number, and types of structures needed will be determined following certification of the corridor and selection of the ROW.

The estimated per-mile cost for transmission line construction, including ROW acquisition, ROW clearing, access road construction, mitigation, and line installation, is approximately \$2.9 million per mile, or a total construction cost of approximately \$78.5 million.



- | | | | |
|---------------------|----------------|---------------------------|-----------------------------------|
| ● Florida parks | —+— Railroads | ■ Airfields and heliports | ■ State parks |
| ● Eagle nests | — Major roads | ■ NPS NRHP (regions) | ■ FMA |
| ● NPS NRHP (points) | — Major rivers | | ■ LULC: Agriculture and rangeland |
| | | | ■ LULC: Residential areas |

LEGEND

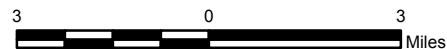
- | | |
|---------------------------------|----------------------|
| ■ Existing substation | ▭ County boundaries |
| --- Existing transmission lines | ▭ Preferred Corridor |

REFERENCE

1. Major roads - Florida Department Of Transportation; 4/2006.
2. County boundaries - US Census Bureau, 2000.
3. Regional screening data - Various federal and state agencies; 2007.

NOTES

1. NPS NRHP - National Park Service National Register of Historic Places
2. FMA - Florida Managed Areas
3. LULC - Land Use Land Cover
4. Existing transmission include lines greater than or equal to 69kV



PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
LAKE AGNES TO GIFFORD
230kV JOINT TRANSMISSION LINE PROJECT

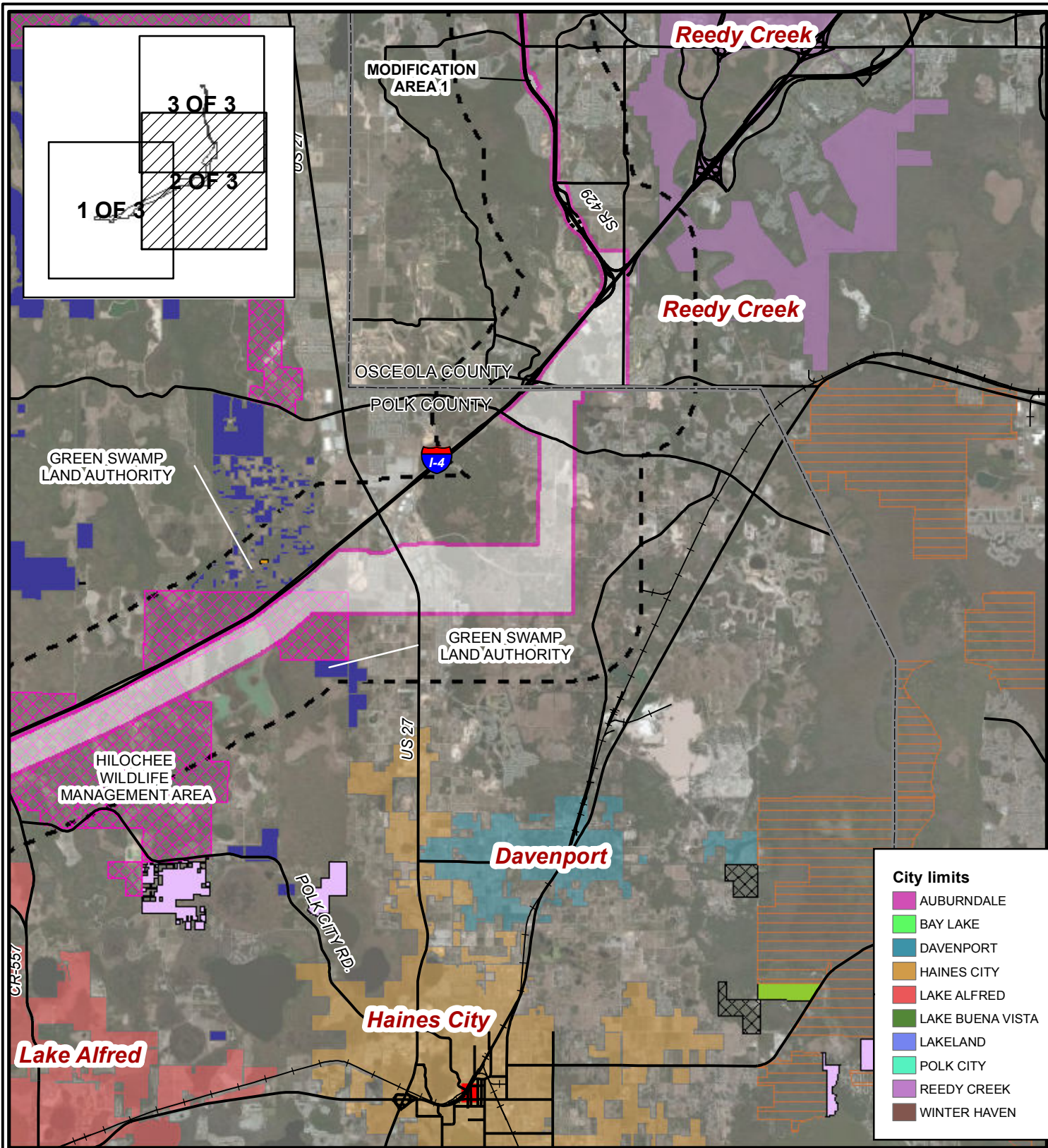
TITLE

REGIONAL SCREENING



PROJECT No. 073-89532		SCALE AS SHOWN	REV. 1
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GIS	JDG	03/21/2012	
CHECK	KLH	03/21/2012	
REVIEW	RAZ	03/21/2012	

2.1-2
(REVISED)



LEGEND

- Existing substation
- NPS NRHP (regions)
- County boundaries
- FDEP Lands
- + Railroads
- Major roads
- Preferred Corridor
- FL FWC Lands
- Polk County Lands

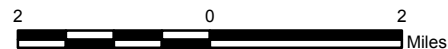
- SFWMD Lands
- SWFWMD Lands
- SJRWMD Lands
- US FWS Lands
- 1-mile buffer

REFERENCE

1. Major roads - Florida Department Of Transportation, 4/2006.
2. County boundaries - US Census Bureau, 2000.
3. Govt. Jurisdictions - Florida Managed Areas data via FGDL, 2007.
4. City limits - Polk County and Orange County, 2011
5. Aerial imagery - ArcGIS Online; Bing Maps Aerial; Microsoft Corporation and its data suppliers, 2010

NOTES

1. FWC - Fish and Wildlife Commission
2. OFW - Outstanding Florida Waters
3. FWS - Fish and Wildlife Service
4. NRHP - Nat. Register of Hist. Places



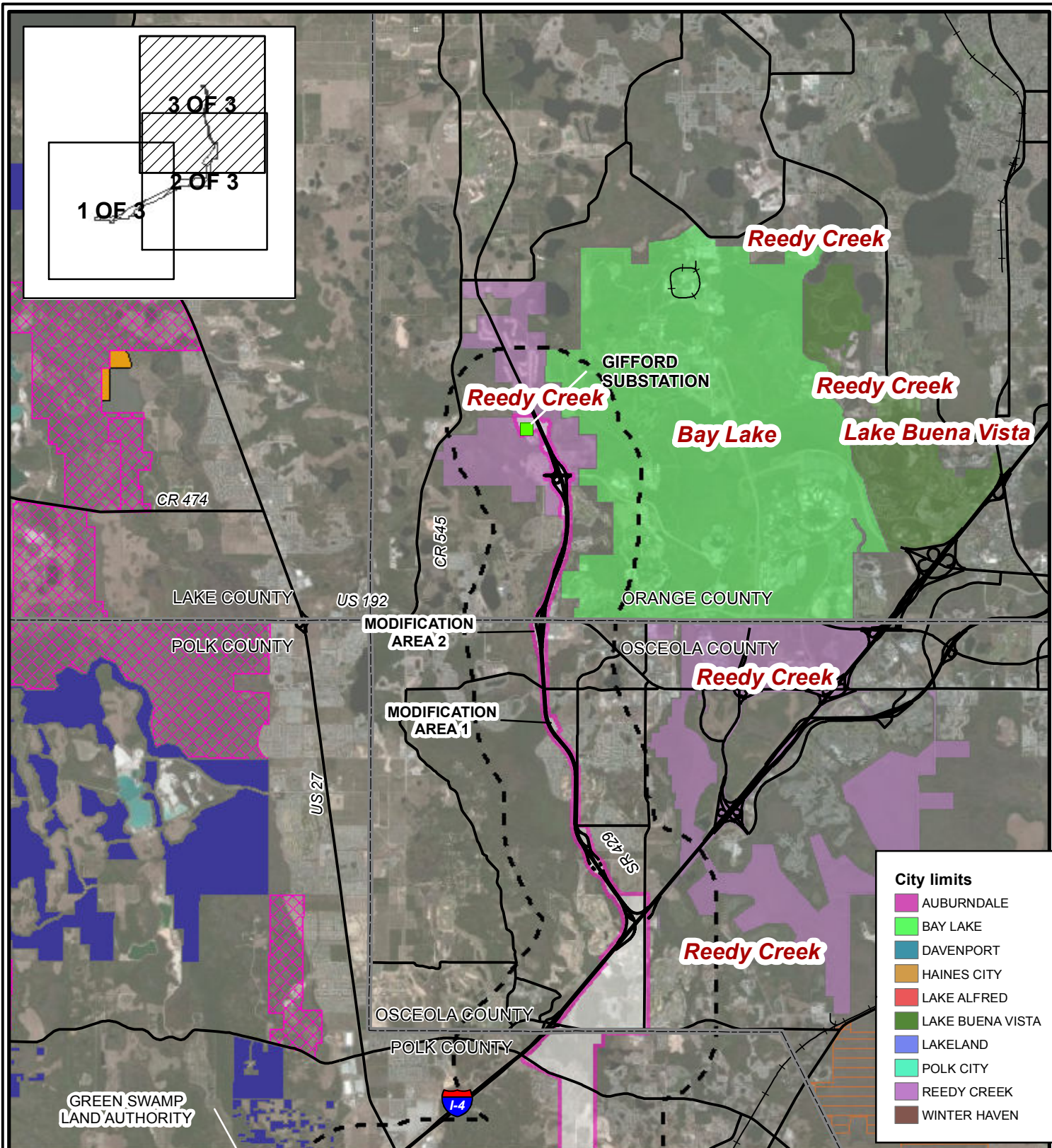
PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
LAKE AGNES TO GIFFORD
230kV JOINT TRANSMISSION LINE PROJECT

TITLE

GOVERNMENTAL JURISDICTIONS AND GOVERNMENTAL LAND HOLDINGS



DESIGN	JWT	08/22/2007	SCALE AS SHOWN	REV. 1
GIS	JDG	06/06/2012	2.2-1 2 OF 3 (REVISED)	
CHECK	KLH	06/06/2012		
REVIEW	RAZ	06/06/2012		



LEGEND

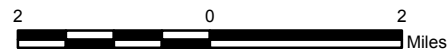
- | | | |
|---|--|--|
| ■ Existing substation | ■ NPS NRHP (regions) | SFWMD Lands |
| County boundaries | ■ FDEP Lands | SWFWMD Lands |
| — Railroads | FL FWC Lands | ■ SJRWMD Lands |
| — Major roads | ■ Polk County Lands | ■ US FWS Lands |
| Preferred Corridor | | 1-mile buffer |

REFERENCE

1. Major roads - Florida Department Of Transportation, 4/2006.
2. County boundaries - US Census Bureau, 2000.
3. Govt. Jurisdictions - Florida Managed Areas data via FGDL, 2007.
4. City limits - Polk County and Orange County, 2011
5. Aerial imagery - ArcGIS Online; Bing Maps Aerial; Microsoft Corporation and its data suppliers, 2010

NOTES

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2. OFW - Outstanding Florida Waters
3. FWS - Fish and Wildlife Service
4. NRHP - Nat. Register of Hist. Places



PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
LAKE AGNES TO GIFFORD
230kV JOINT TRANSMISSION LINE PROJECT

TITLE

GOVERNMENTAL JURISDICTIONS AND GOVERNMENTAL LAND HOLDINGS



PROJECT No. 073-89532			SCALE AS SHOWN	REV. 1
DESIGN	JWT	08/22/2007	2.2-1 3 OF 3 (REVISED)	
GIS	JDG	06/06/2012		
CHECK	KLH	06/06/2012		
REVIEW	RAZ	06/06/2012		

- Commercial Enclave (CE_x);
- Leisure/Recreation (L/R_x);
- Residential Low (RL-1_x, RL-2_x, RL-3_x, and RL-4_x);
- Residential Medium (RM_x);
- Residential High (RH_x);
- Community Activity Center (CAC_x);
- Neighborhood Activity Center (NAC_x);
- Tourism Commercial Center (TCC_x);
- Recreation and Open Space (ROS_x);
- Employment Center (CE_x);
- Regional Activity Center (RAC_x); and
- Institutional -2/Professional Institutional (INST-2_x).

In addition, within Polk County the preferred corridor traverses the following Special Overlay Districts/ Areas:

- Green Swamp Protection Area of Critical Concern (CORE);
- Selected Area Plans (SAP); and
- Rural Special Protection Area (SPA).

And one Development Area:

- Urban Growth Area.

In Osceola County, the preferred corridor traverses the following future land use categories:

- Commercial;
- Tourist Commercial;
- Conservation;
- Rural/Agricultural;
- Medium Density Residential;
- Low Density Residential; and
- Institutional.

Typical residential uses include single-family detached housing, mobile homes, and manufactured homes.

Residential (Medium and Low Density) – The Residential future land use categories are predominantly within the urbanizing areas. The maximum densities allowed in the low and medium density residential subcategories are five and ten dwelling units per acre, respectively. With a maximum of 18 units per acre, there is a broad range of residential types which may be developed within this category. However, the ability for any piece of property to obtain density rests primarily with the availability of facilities and services.

Institutional – The Institutional future land use category permits such uses as public schools, public lands, utility locations, and civic buildings. These types of uses must meet criteria requirements that include: signage, conditional use permits for ancillary uses, and determination of compatibility with the surrounding areas for these ancillary uses.

Tourist Commercial – The Tourist Commercial future land use category is for intense tourist-related housing, commercial and recreational land uses and may include retail and office activity, theme parks, lodging facilities, themed restaurants and other ancillary uses to support the tourism industry.

Orange County

Commercial – The Commercial future land use designation is intended for various degrees of commercial and office development uses. These uses need readily accessible arterial and collector road network. Existing commercial uses are due to the tourist demand as well as local residents.

Conservation – The Conservation future land use designation is intended to serve as a conceptual indicator of conservation and wetland areas. The precise delineation of these areas will be determined through site-specific studies and field determinations which assess the extent of wetland vegetation. Areas are identified as Class I, Class II, or Class III conservation areas.

The preferred corridor traverses through the Horizons West specialized land use area.

Horizons West – This development district has been designed to address the need to overcome the problems associated with sprawl; create a better job/housing balance; create a land use pattern that will reduce reliance on the automobile by allowing a greater variety of land use closer to work and home; and, replace piecemeal planning with a long range vision that uses the village as the building block to allow the transition of this portion of the county from rural to urban through a specific

Based on information presented to the DHR on the preferred corridor, the DHR has indicated that significant cultural resources are recorded in the project area and some areas of the preferred corridor have not been investigated by an archaeological or historic professional within the past 10 to 15 years. Therefore, DHR has requested that a Phase I cultural resource survey is conducted in order to assess the cultural resources that may be present within the preferred corridor. A Phase I cultural resource survey will be conducted in accordance with Chapter 1A-46, F.A.C.

The Phase I cultural resources survey will be conducted after the transmission line ROW has been selected following the certification of the corridor, prior to any land clearing. The survey will be submitted to DHR for review and the applicants will consult with DHR on appropriate action(s) to avoid, minimize or mitigate adverse impacts, if any, to any identified cultural resources listed, or eligible for listing in the NRHP as identified by the survey.

2.3 Bio-Physical Environment of the Corridor Area

2.3.1 Land Use/Vegetation

Existing land use and land cover along the preferred corridor and an area extending ½ mile from each edge of the preferred corridor are described in the following subsections. The land use and land cover maps were developed through interpretation of aerial photographs at a scale of 1:24,000, Water Management District (WMD) data, and field reconnaissance. The presentation of the aerial photographs, maps of the land use/land cover and vegetation types are presented in Attachment 2-4 of Appendix B. The land use and land cover along the entire length of the preferred corridor are depicted using the FLUCFCS Level II and III data (FDOT, 1999). Land use/land cover data was obtained from the St. Johns River Water Management District (SJRWMD), the Southwest Florida Water Management District (SWFWMD) (both dated 2004), and the South Florida Water Management District (dated 1999), and updated following field reconnaissance conducted in June, July, ~~and~~ August 2007, and November 2011.

2.3.1.1 *Land Use*

The approximately 27.5-mile preferred corridor begins at the Lake Agnes substation heading east-northeast within, adjacent to, or in proximity of the existing OUC transmission lien ROW, generally paralleling I-4 east to U.S. 27. Along this portion of the preferred corridor, the corridor

predominantly traverses areas of improved pastures, pine flatwoods, citrus groves, lake swamps of Lake Mattie, freshwater marshes, cypress, and mixed forested wetlands of the Green Swamp wetland system, scattered low density residential areas, and a high density residential area near U.S. 27. Just to the east of U.S. 27, the corridor continues within, adjacent to, or in proximity of the OUC transmission line ROW through residential areas and improved pasture. The corridor crosses Horse Creek, a small, wet ditch that flows south through pastureland and eventually into Lake Marion, approximately 8 miles south of the preferred corridor.

Further east of U.S. 27, the corridor traverses freshwater marshes and forested wetlands, turns north and crosses Loughman Road (CR 54), Old Lake Wilson Road, and Interstate 4 and continues north along SR 429. The preferred corridor continues north co-locating with SR 429 ROW through pine forests, forested wetlands, residential subdivisions, citrus groves, disturbed lands, golf courses, and industrial property north to the planned Gifford substation.

2.3.1.2 Vegetation

Dominant vegetative communities commonly observed along the preferred corridor include improved pastures (FLUCFCS 211), shrub and brushland (FLUCFCS 320), pine flatwoods (FLUCFCS 411), hardwood-coniferous mixed forests (FLUCFCS 434), ditches (FLUCFCS 511), reservoirs (FLUCFCS 530), cypress (FLUCFCS 621), wetland forested mixed (FLUCFCS 630), ~~and~~ freshwater marshes (FLUCFCS 641), open land (FLUCFCS 190), and hydric pine flatwoods (FLUCFCS 625). Each vegetative community is described in more detail in the following subsections. Acreages of each of the vegetative communities are provided in Table 2.3-1. Dominant plant species observed in each community are listed in Table 2.3-2.

Improved Pastures (FLUCFCS 211)

Improved pasture is land typically utilized for cattle grazing which has been cleared, tilled, and reseeded with specific grass types and improved with brush control and fertilizers. Dominant vegetative species observed include grasses such as bahiagrass (*Paspalum notatum*) and barnyard grass (*Echinochloa crusgalli*), shrubs such as saw palmetto (*Serenoa repens*) and wax myrtle (*Myrica cerifera*), and occasional trees such as water oak (*Quercus nigra*), slash pine (*Pinus elliottii*), and live oak (*Quercus virginiana*). Approximately 2,000 acres of improved pastures were identified within the preferred corridor.

TABLE 2.3-1 (REVISED) ACREAGE OF DOMINANT VEGETATIVE COMMUNITIES WITHIN THE PREFERRED CORRIDOR

FLUCFCS Code	FLUCFCS Description	Acreage
211	Improved Pastures	1,963
641	Freshwater Marshes	<u>1,616</u>
630	Wetland Forested Mixed	1,314
411	Pine Flatwoods	281
320	Shrub and Brushland	280
621	Cypress	177
530	Reservoirs	102
434	Hardwood-Coniferous Mixed	102
511	Ditches	*
<u>190</u>	<u>Open Land</u>	<u>18</u>
<u>625</u>	<u>Hydric Pine Flatwoods</u>	<u>5</u>
TOTAL		<u>5,858</u>

Notes:

* Acreages of ditches were not available in land use data and were not estimated during the field investigations; these areas will be delineated during subsequent ROW surveys

LAKE AGNES TO GIFFORD – A JOINT 230 KV TRANSMISSION LINE PROJECT

TABLE 2.3-2 (REVISED). PLANT SPECIES ASSOCIATED WITH THE DOMINANT VEGETATIVE COMMUNITIES OF THE PREFERRED CORRIDOR

Common Name	<u>Open Land</u> <u>FLUCFCS</u> <u>199</u>	Improved Pastures FLUCFCS 211	Shrub and Brushland FLUCFCS 320	Pine Flatwoods FLUCFCS 411	Hardwood- Coniferous Mixed FLUCFCS 434	Ditches FLUCFCS 511	Reservoirs FLUCFCS 530	Cypress FLUCFCS 621	<u>Hydric</u> <u>Pine</u> <u>Flatwoods</u> <u>FLUCFCS</u> <u>625</u>	Wetland Forested Mixed FLUCFCS 630	Freshwater Marshes FLUCFCS 641
Trees											
<i>Acer rubrum</i>	Red maple									X	
<i>Carpinus caroliniana</i>	<u>American hornbeam</u>										
<i>Celtis laevigata</i>	<u>Hackberry</u>										
<i>Crataegus spp.</i>	Hawthorn				X						
<i>Praxinus caroliniana</i>	<u>Pop ash</u>										
<i>Gordonia lasianthus</i>	Loblolly bay			X				X			
<i>Ilex cassine</i>	Dahoon holly										
<i>Itea virginica</i>	<u>Virginia willow</u>										
<i>Liquidambar styraciflua</i>	<u>Sweetgum</u>										
<i>Magnolia virginiana</i>	Sweetbay			X				X	<u>X</u>	X	
<i>Nyssa sylvatica var. biflora</i>	<u>Blackgum</u>										
<i>Persea palustris</i>	Swamp bay										
<i>Pinus elliptica</i>	Slash pine	X	X	X	X			X	<u>X</u>	X	
<i>Pinus palustris</i>	Longleaf pine				X						
<i>Pinus serotina</i>	<u>Pond pine</u>								<u>X</u>		
<i>Pinus taeda</i>	Loblolly pine			X							
<i>Prunus serotina</i>	Black cherry			X	X						
<i>Quercus geminata</i>	Sand live oak			X	X						
<i>Quercus laevis</i>	Turkey oak				X						
<i>Quercus laurifolia</i>	Laurel oak			X							
<i>Quercus nigra</i>	Water oak	X	X	X		X				X	
<i>Quercus virginiana</i>	Live oak	<u>X</u>	X	X	X						
<i>Rhus glabra</i>	Smooth sumac										
<i>Sabal palmetto</i>	Cabbage palm			X							
<i>Taxodium distichum</i>	Bald cypress						X	X		X	
<i>Ulmus americana</i>	<u>American elm</u>										
Shrubs and Vines											
<i>Baccharis halimifolia</i>	Groundsel tree			X						X	
<i>Callicarpa americana</i>	American beautyberry			X							
<i>Cephalanthus occidentalis</i>	Common buttonbush					X	X	X			X
<i>Cyrilla racemiflora</i>	<u>Titi</u>										
<i>Ilex glabra</i>	Gallberry		X	X					<u>X</u>		
<i>Ludwigia peruviana</i>	Peruvian primrosewillow					X	X	X		X	X
<i>Lyonia lucida</i>	<u>Petterbush</u>								<u>X</u>		
<i>Myrica cerifera</i>	Wax myrtle	X		X				X	<u>X</u>	X	
<i>Parthenocissus quinquefolia</i>	Virginia creeper			X							
<i>Passiflora spp.</i>	Passionflower			X							
<i>Rhus copallinum</i>	Winged sumac		X	X						X	
<i>Rubus argutus</i>	Sawtooth blackberry										
<i>Salix caroliniana</i>	Coastal plain willow					X		X		X	X
<i>Sambucus canadensis</i>	Elderberry					X		X			
<i>Schinus terebinthifolius</i>	Brazilian pepper			X		X					
<i>Serenca repens</i>	Saw palmetto	X	X	X	X				<u>X</u>		
<i>Smilax spp.</i>	Greenbrier									X	
<i>Toxicodendron radicans</i>	<u>Poison ivy</u>										
<i>Vitis rotundifolia</i>	Muscadine			X						X	
<i>Vitis spp.</i>	Grape		X			X					
<i>Yucca aloifolia</i>	Spanish bayonet				X						

LAKE AGNES TO GIFFORD – A JOINT 230 KV TRANSMISSION LINE PROJECT

TABLE 2.3-2 (REVISED). PLANT SPECIES ASSOCIATED WITH THE DOMINANT VEGETATIVE COMMUNITIES OF THE PREFERRED CORRIDOR

Common Name	<u>Open Land</u> <u>FLUCFCS</u> <u>190</u>	Improved Pastures FLUCFCS 211	Shrub and Brushland FLUCFCS 320	Pine Flatwoods FLUCFCS 411	Hardwood- Coniferous Mixed FLUCFCS 434	Ditches FLUCFCS 511	Reservoirs FLUCFCS 530	Cypress FLUCFCS 621	<u>Hydrk</u> <u>Pine</u> <u>Flatwoods</u> <u>FLUCFCS</u> <u>625</u>	Wetland Forested Mixed FLUCFCS 630	Freshwater Marshes FLUCFCS 641
Herbaceous Species											
<i>Alternanthera philoxeroides</i>								X			X
<i>Ambrosia artemisiifolia</i>			X								
<i>Andropogon glomeratus</i>						X					
<i>Andropogon virginicus</i>	X										
<i>Aristida stricta</i>					X				X		
<i>Bacopa caroliniana</i>											X
<i>Bidens</i> spp.				X							
<i>Boehmeria cylindrica</i>											X
<i>Centella asiatica</i>								X			
<i>Commelina</i> spp.					X						
<i>Cynodon dactylon</i>	X										
<i>Cyperus ligularis</i>											
<i>Cyperus</i> spp.				X							X
<i>Echinochloa crusgalli</i>		X									
<i>Eichhornia crassipes</i>											
<i>Eupatorium capillifolium</i>	X					X	X				X
<i>Hydrocotyle</i> spp.											X
<i>Hypericum</i> spp.											
<i>Juncus effusus</i>											X
<i>Lachnocaulon</i> spp.									X		
<i>Lantana camara</i>				X							X
<i>Ludwigia octovalvis</i>											
<i>Melirris repens</i>	X										
<i>Osmunda cinnamomea</i>								X			
<i>Osmunda regalis</i>											
<i>Panicum hemitomon</i>						X	X	X			X
<i>Panicum repens</i>											
<i>Paspalum notatum</i>	X	X									
<i>Phytolacca americana</i>	X						X				
<i>Pluchea</i> spp.											
<i>Polygonum hydropiperoides</i>							X	X			X
<i>Pontederia chordata</i>											X
<i>Rhexia</i> spp.									X		
<i>Sagittaria graminea</i>								X			
<i>Sagittaria lancifolia</i>							X	X			X
<i>Saururus cernuus</i>											
<i>Spartina</i> spp.											X
<i>Stillingia sylvatica</i>					X						
<i>Thelypteris palustris</i>								X			X
<i>Tylandtia</i> spp.								X			
<i>Urena lobata</i>				X						X	
<i>Woodwardia areolata</i>											
<i>Woodwardia virginica</i>								X		X	X
<i>Xyris</i> spp.								X	X	X	X

maple, sweetbay, slash pine, water oak, and bald cypress. Shrub, understory, and vine species include Peruvian primrose willow, groundsel tree, winged sumac, wax myrtle, coastal plain willow, caesarweed, Virginia chain fern, and greenbrier (*Smilax spp.*) and muscadine. Approximately 1,300 acres of mixed wetland forests were identified within the preferred corridor.

Freshwater Marshes (FLUCFCS 641)

Several areas of freshwater marsh are located along the preferred corridor. Freshwater marshes are dominated by shrub and herbaceous species, including common buttonbush, Peruvian primrose willow, coastal plain willow, alligator weed, dogfennel, maidencane, marsh fern, Virginia chain fern, swamp smartweed, bulltongue arrowhead, soft rush (*Juncus effusus*), Mexican primrose willow (*Ludwigia octovalvis*), marsh pennywort (*Hydrocotyle spp.*), pickerelweed (*Pontederia cordata*), lemon bacopa (*Bacopa caroliniana*), false nettle (*Boehmeria cylindrica*), sedges (*Cyperus spp.*), and cordgrass (*Spartina spp.*). Approximately 1,600 acres of freshwater marshes were identified within the preferred corridor.

Open Land (FLUCFCS 190)

Open land typically includes undeveloped land within urban areas and inactive land with street patterns (without structures) but no indication of intended use. Vegetation consisted primarily of Bahiagrass (*Paspalum notatum*), Bermuda grass (*Cynodon dactylon*), natal grass (*Melinis repens*), broomsedge bluestem (*Andropogon virginicus*), dog fennel (*Eupatorium capillifolium*), and American pokeweed (*Phytolacca americana*), with a few live oak trees (*Quercus virginiana*). Approximately 31 acres of open land were identified in the preferred corridor.

Hydric Pine Flatwoods (FLUCFCS 625)

Hydric pine flatwoods are typically forested areas with a sparse to moderate canopy of trees such as slash pine, pond pine (*Pinus serotina*), and sweetbay with an understory of wiregrass (*Aristida spp.*) and other grasses, forbs, and possibly sparse saw palmetto. Approximately 7 acres of hydric pine flatwoods were identified in the preferred corridor.

2.3.2 Affected Water and Wetlands

Several wetland systems are located along the preferred corridor, including drainage ditches, cypress domes, mixed forested wetlands, and freshwater marshes, portions of which are associated with the Green Swamp wetland system. See Section 2.3.1.2 for a description of these wetland habitats. Impacts to wetlands within the preferred corridor will be avoided or minimized during detailed routing, engineering, design and location of the transmission line structure pads and access roads. The majority of freshwater marshes and ditches may likely be spanned by the transmission lines, thereby avoiding impact. Areas of forested wetlands will be avoided where practicable. However, removal of canopy species from the ROW will be required where the transmission line traverses forested wetlands. The preferred corridor and its associated access roads are not anticipated to significantly impact drainage patterns of the Green Swamp and surrounding wetlands, since the preferred corridor is generally located within, adjacent to, or in proximity of existing transmission line ROW, roadways, and urban areas with historically impacted natural drainage.

2.3.3 Ecology

2.3.3.1 *Species-Environmental Relationships*

Terrestrial and Wetland Ecosystems - Fauna

Wildlife habitat in much of the area of the preferred corridor has been altered significantly from its natural state for citrus groves, pastureland, roadways, and residential use. However, several wildlife species do utilize the area within and adjacent to the preferred corridor for foraging and cover. Wildlife observations include direct visual observation, calls, tracks, scat, burrows, or other signs. Wildlife observations recorded during site reconnaissance activities were conducted in June, July and August 2007, and November 2011, and wildlife likely to be present within habitats of the preferred corridor are summarized in Table 2.3-3. Generally, wildlife observed were those species typical of central Florida, such as white-tailed deer (*Odocoileus virginianus*), feral pig (*Sus scrofa*), nine-banded armadillo (*Dasypus novemcinctus*), gray squirrel (*Sciurus carolinensis*), eastern cottontail (*Sylvilagus floridanus*), and various bird and reptile species such as wild turkey (*Meleagris gallopavo*), black vulture (*Coragyps atratus*), osprey (*Pandion haliaetus*), bobwhite quail (*Colinus virginianus*), red-tailed hawk (*Buteo jamaicensis*), Northern mockingbird (*Mimus polyglottis*), red-shouldered hawk (*Buteo lineatus*), killdeer (*Charadrius vociferous*), mourning dove (*Zenadia macroura*), barred owl (*Strix varia*), rufous-sided towhee (*Pipilo erythrophthalmus*), leopard frog (*Rana sphenoccephala*), water moccasin (*Agkistrodon piscivorus*), ~~and~~ black racer (*Coluber constrictor*), and gopher tortoise (*Gopherus polyphemus*).

Open Land (FLUCFCS 190)

Open lands are unnatural communities consisting of primarily of bahiagrass (*Paspalum notatum*), and ruderal vegetation that is frequently maintained which provides little cover or foraging habitat for species of wildlife that are not habitat generalists. Wildlife species typically observed in open lands include the gopher tortoise (*Gopherus polyphemus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), bobwhite quail (*Colinus virginianus*), black vulture (*Coragyps atratus*), American crow (*Corvus brachyrhynchos*), American kestrel (*Falco sparverius*), bald eagle (*Haliaeetus leucocephalus*), white-tailed deer (*Odocoileus virginianus*), and eastern cottontail (*Sylvilagus floridanus*).

Improved Pastures (FLUCFCS 211)

Improved pastures are unnatural communities providing little cover or foraging habitat for species of wildlife that are not habitat generalists. Wildlife species observed in the improved pastures include the Cuban tree frog (*Osteopilus septentrionalis*), six-lined race runner (*Cnemidophorus sexlineatus*), eastern fence lizard (*Sceloporus undulatus hyacinthinus*), Florida scrub lizard (*Sceloporus woodi*), red-shouldered hawk, American kestrel (*Falco sparverius*), Florida sandhill crane (*Grus canadensis pratensis*), bald eagle (*Haliaeetus leucocephalus*), mourning dove, nine-banded armadillo, and white-tailed deer.

Shrub and Brushland (FLUCFCS 320)

Species observed in the shrub and brushland/mixed rangeland areas include the red-shouldered hawk, swallow-tailed kite (*Elanoides forficatus*), and white-tailed deer.

LAKE AGNES TO GIFFORD – A JOINT 230 KV TRANSMISSION LINE PROJECT

TABLE 2.3-3 (REVISED). WILDLIFE SPECIES OBSERVED AND/OR THOSE LIKELY TO INHABIT VEGETATIVE COMMUNITIES WITHIN THE PREFERRED CORRIDOR

Scientific Name	Common Name	<u>Open Land</u> <u>FLUCFCS 199</u>	Improved Pasture FLUCFCS 211	Shrub and Brushland FLUCFCS 320	Pine Flatwoods FLUCFCS 411	Hardwood- Coniferous Mixed FLUCFCS 434	Ditches FLUCFCS 511	Reservoirs FLUCFCS 530	Cypress FLUCFCS 621	<u>Hydric Pine</u> <u>Flatwoods</u> <u>FLUCFCS 625</u>	Wetland Forested Mixed FLUCFCS 630	Freshwater Marshes FLUCFCS 641
Fish												
<i>Gambusia holbrooki</i>	Mosquito fish						X	X				
<i>Heterandria formosa</i>	Least killifish						X	X				
Amphibians												
<i>Acris gryllus</i>	<u>Southern cricket frog</u>									X		
<i>Osteopilus septentrionalis</i>	Cuban tree frog		X									X
<i>Rana sphenoccephala</i>	Leopard frog						X	X				X
Reptiles												
<i>Aplastodon piscivorus</i>	Water moccasin						X	X	X		X	X
<i>Alligator mississippiensis</i>	<u>Alligator</u>							X		X		
<i>Coluber constrictor</i>	<u>Southern</u> black racer			X	X	X				X		
<i>Cnemidophorus sexlineatus</i>	Six-lined race runner		X			X						
<i>Gopherus polyphemus</i>	Gopher tortoise	X	X		X	X						
<i>Sceloporus undulatus hyacinthinus</i>	Eastern fence lizard		X									
<i>Sceloporus woodi</i>	Florida scrub lizard		X									
Birds												
<i>Buteo jamaicensis</i>	Red-tailed hawk	X	X	X	X				X			X
<i>Buteo lineatus</i>	Red-shouldered hawk	X	X	X	X				X			X
<i>Cardinalis cardinalis</i>	Cardinal				X	X				X		
<i>Charadrius vociferus</i>	Killdeer			X								
<i>Colinus virginianus</i>	Bobwhite quail				X	X				X		
<i>Coragyps atratus</i>	Black vulture	X	X	X	X	X						
<i>Corvus brachyrhynchos</i>	American crow	X	X	X								X
<i>Cyanocitta cristata</i>	Blue jay				X	X				X	X	
<i>Dendroica palmarum</i>	Palm warbler				X							
<i>Eudocimus albus</i>	White ibis						X	X	X			X
<i>Egretta caerulea</i>	Little blue heron						X	X	X			X
<i>Egretta thula</i>	Snowy egret						X	X	X			X
<i>Egretta tricolor</i>	Tricolored heron						X	X	X			X
<i>Elanoides forficatus</i>	American swallow-tailed kite			X	X				X			
<i>Falco sparverius</i>	<u>Southeastern</u> American kestrel	X	X		X	X						
<i>Grus canadensis</i>	Florida sandhill crane	X	X									
<i>Haliaeetus leucocephalus</i>	Bald eagle	X	X					X	X			
<i>Meleagris gallopavo</i>	Wild turkey				X							
<i>Mimus polyglottos</i>	Northern mockingbird	X		X	X	X						
<i>Nycteria americana</i>	<u>Wood stork</u>						X	X	X			
<i>Pandion haliaetus</i>	Osprey							X	X			X
<i>Pipilo erythrophthalmus</i>	Rufous-sided towhee				X	X				X		
<i>Poliophtila caerulea</i>	Blue-gray gnatcatcher								X		X	
<i>Strix varia</i>	Barred owl				X	X			X		X	
<i>Vireo griseus</i>	White-eyed vireo				X					X	X	
<i>Zenaidura macroura</i>	Mourning dove	X	X									
Mammals												
<i>Dasypus novemcinctus</i>	Nine-banded armadillo	X	X		X							
<i>Didelphis virginia</i>	<u>Virginia opossum</u>	X		X	X	X			X	X		
<i>Lynx rufus</i>	<u>Bobcat</u>	X		X	X	X				X		
<i>Odocoileus virginianus</i>	White-tailed deer	X	X	X	X	X				X		
<i>Procyon lotor</i>	<u>Raccoon</u>	X		X	X	X			X	X	X	
<i>Sciurus carolinensis</i>	Gray squirrel				X				X			
<i>Sus scrofa</i>	Feral pig				X	X				X		
<i>Sylvilagus floridanus</i>	Eastern cottontail	X	X	X	X	X						X
<i>Sylvilagus palustris</i>	<u>Marsh rabbit</u>										X	X

Notes:

- Listed species. See Section 2.3.3.1 of report for discussion.

freshwater marsh areas along the preferred corridor include the Cuban tree frog, red-shouldered hawk, palm warbler, white ibis, little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), and snowy egret.

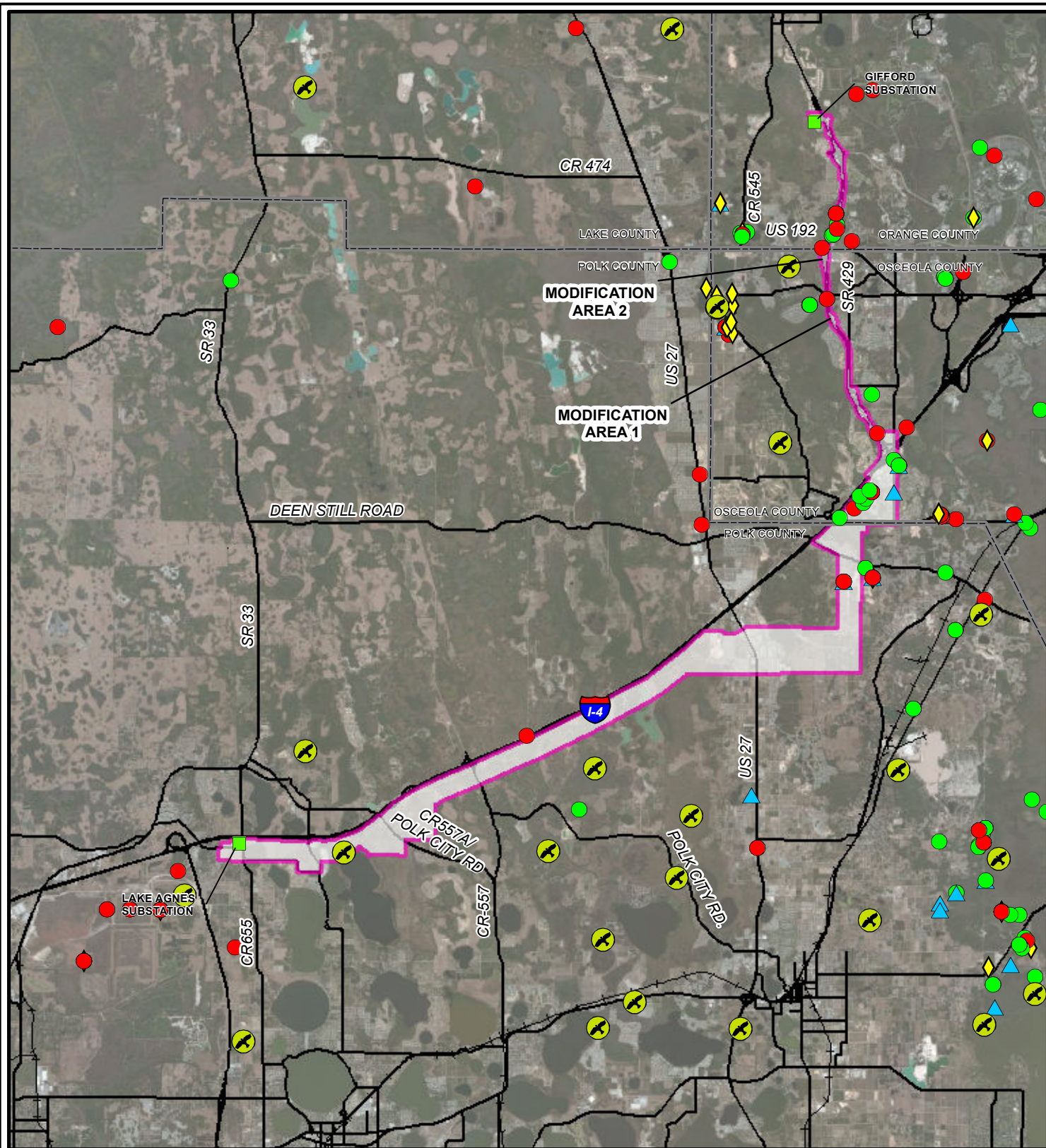
Listed Species – Flora and Fauna

Listed species refers to those plant and animal species that are designated by the FFWCC and/or the USFWS as threatened, endangered, or of special concern. Listed species were observed during field reconnaissance activities conducted July 17 and 18, 2007, and August 1, 2007, and November 2011. Additionally, several documented occurrences of listed species lie within the preferred corridor (FNAI, 2007 and 2010). Locations of those listed species observed by Golder and FNAI documented occurrences are depicted in Figure 2.3-1 and are discussed in the following text.

Flora

No listed plant species were observed along the preferred corridor during field reconnaissance activities. Additional listed species surveys will be conducted following selection of the ROW within the preferred corridor. According to FNAI data (2007 and 2010), several plant species have documented occurrences along the preferred corridor. Species name, protection status, and general location descriptions are provided below.

- Britton's beargrass (*Nolina brittoniana*)
 - Classified as endangered by the USFWS and FFWCC
 - Identified in areas of hardwood-coniferous mixed forests/improved pasture and in an area of an existing golf course
- Florida bonamia (*Bonamia grandiflora*)
 - Classified as threatened by the USFWS and endangered by the FFWCC
 - Identified along the preferred corridor near the Polk and Osceola County line within an area of hardwood-coniferous mixed forests/improved pasture
- Scrub buckwheat (*Eriogonum longifolium* var. *gnaphalifolium*)
 - Classified as threatened by the USFWS and endangered by the FFWCC
 - Identified in what is currently a high density residential area and a citrus grove

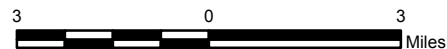


LEGEND

- Existing substation
- County boundaries
- Preferred Corridor
- Railroads
- Major roads
- Eagle nests
- T&E species (animal)
- T&E species (vegetation)
- Data sensitive element
- Not identified in database

REFERENCE

1. Major roads - Florida Department Of Transportation, 4/2006.
2. County boundaries - US Census Bureau, 2007.
3. Eagles nests and Threatened and Endangered (T&E) species - FNAI, 2010, FFWC, 2010.
4. Aerial imagery - ArcGIS Online; Bing Maps Aerial; Microsoft Corporation and its data suppliers, 2010



PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
LAKE AGNES TO GIFFORD
230kV JOINT TRANSMISSION LINE PROJECT

TITLE

FLORIDA AREAS NATURAL INVENTORY



PROJECT No. 073-89532			SCALE AS SHOWN	REV. 1
DESIGN	JWT	08/22/2007	2.3-1 (REVISED)	
GIS	JDG	06/06/2012		
CHECK	KLH	06/06/2012		
REVIEW	RAZ	06/06/2012		

Fauna

Seven listed species of birds and ~~one~~two reptile species were observed or are considered likely to occur along the preferred corridor. These include the white ibis, little blue heron, snowy egret, tricolored heron, wood stork, American kestrel, Florida sandhill crane, bald eagle, and gopher tortoise, described below.

White Ibis (Eudocimus albus)

The white ibis is a common wading bird classified as a species of special concern by the FFWCC. The white ibis is not listed federally by the USFWS. White ibis were observed foraging adjacent to cypress wetlands and freshwater marshes along the preferred corridor.

Little Blue Heron (Egretta caerulea)

The little blue heron is classified as a species of special concern by the FFWCC, but is not listed federally by the USFWS. Little blue herons forage in shallow freshwater, brackish, and saltwater habitats, such as lake fringes, marshes, swamps, and streams, and nest in mixed-species colonies in forested wetlands. Little blue herons were observed along the preferred corridor foraging in freshwater marsh habitats.

Snowy Egret (Egretta thula)

The snowy egret is listed as a species of special concern by the FFWCC. Snowy egrets were observed foraging within reservoirs, small lakes, and freshwater marshes along the preferred corridor, and are likely to also occasionally use ditches.

Tricolored Heron (Egretta tricolor)

The tricolored heron is classified as a species of special concern by the FFWCC, but is not listed federally by the USFWS. Tricolored herons were observed foraging within freshwater marshes along the McIntosh - Taft transmission line ROW along the preferred corridor.

Wood Stork (Mycteria americana)

The wood stork is listed as endangered by both the FFWCC and the USFWS. Wood storks forage within shallow hydroperiod freshwater marsh and wet prairie systems. Although none were observed during field reconnaissance, wood storks are likely to occasionally forage within wetlands along the preferred corridor.

American Kestrel (Falco sparverius)

The American kestrel is listed as threatened by the FFWCC. Kestrels were observed flying above the pasturelands and mixed pine and oak habitats along the preferred corridor.

Florida Sandhill Crane (Grus canadensis pratensis)

The Florida sandhill crane is classified as threatened by the FFWCC, but is not listed federally by the US FWS. The sandhill crane utilizes wet prairies, freshwater marshes, and pastures for foraging and also will frequent agricultural areas like feed lots and crop fields, golf courses, and open lawns, especially in winter and early spring. Sandhill cranes were observed along open pasture areas along the preferred corridor.

Bald Eagle (Haliaeetus leucocephalus)

The bald eagle was recently delisted by the USFWS, and is currently proposed for delisting within the state of Florida because of the increased number of bald eagles in Florida over the past few decades. Currently, the bald eagle is classified as threatened by the FFWCC. The bald eagle will not be delisted within Florida until the management plan is approved by FFWCC Commissioners. No eagle nests were observed along the preferred corridor, although several individuals were observed flying overhead in areas of improved pastures and one nest is located adjacent to Lake Mattie, south of the preferred corridor.

Alligator (Alligator mississippiensis)

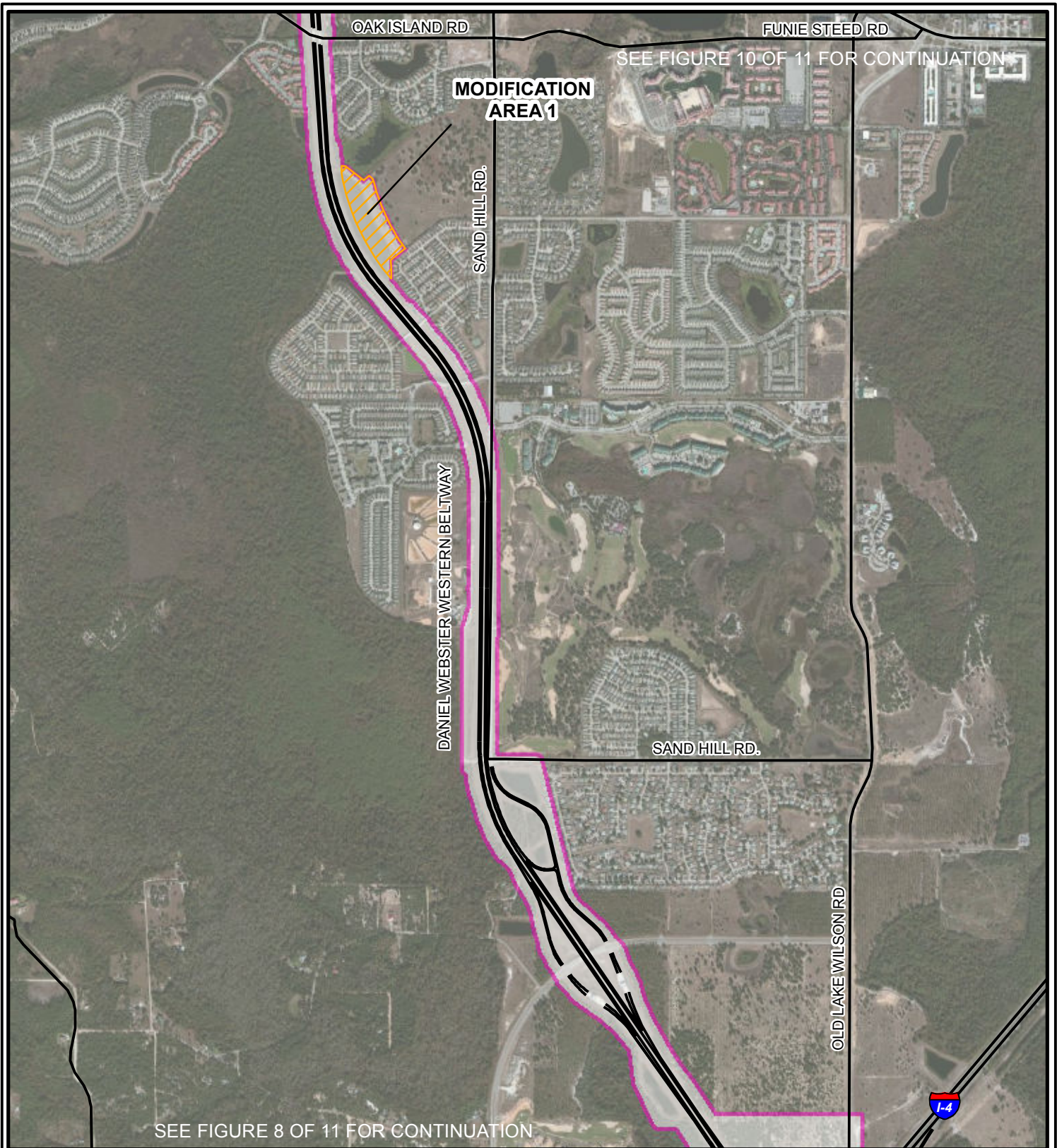
The alligator is listed by the USFWS and FFWCC as federally threatened due to similarity of appearance to the endangered American crocodile (Crocodylus acutus). Alligators are common in almost all permanent bodies of fresh water in Florida (FNAI 2010), including marshes, swamps, lakes, and rivers. There is a high probability that they are present within the preferred corridor.

Gopher Tortoise (Gopherus polyphemus)

Gopher tortoises are known to occur within the Hiloshee Wildlife Management Area in upland areas of improved pasture, open land, and are likely to occur within areas of upland hardwood-coniferous forests, pine flatwoods, shrub and brushland, and mixed rangeland. The gopher tortoise is classified by the FFWCC as threatened, but is not listed by the USFWS.

According to FNAI data (2007 and 2010), several reported occurrences of listed animal species occur along the preferred corridor. Species name, listed species status, and general location descriptions are provided below:

- **Bald eagle (*Haliaeetus leucocephalus*)**
 - Formerly classified as threatened by the USFWS and FFWCC, recently delisted by the USFWS and proposed for delisting by the FFWCC
 - A nest was located by FNAI south of the preferred corridor, adjacent to Lake Mattie

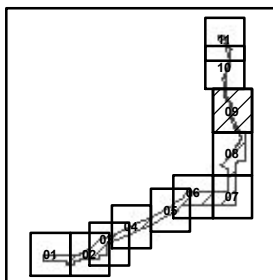


LEGEND

- Existing substation
- ▨ Modification Area
- ▬ Preferred Corridor
- ▬ Service territory
- County boundaries
- Railroads
- Major roads

REFERENCE

1. Major roads - Florida Department Of Transportation, 4/2006.
2. County boundaries - US Census Bureau, 2007.
3. Aerial imagery - ArcGIS Online; Bing Maps Aerial; Microsoft Corporation and its data suppliers, 2010



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PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
LAKE AGNES TO GIFFORD
230kV JOINT TRANSMISSION LINE PROJECT

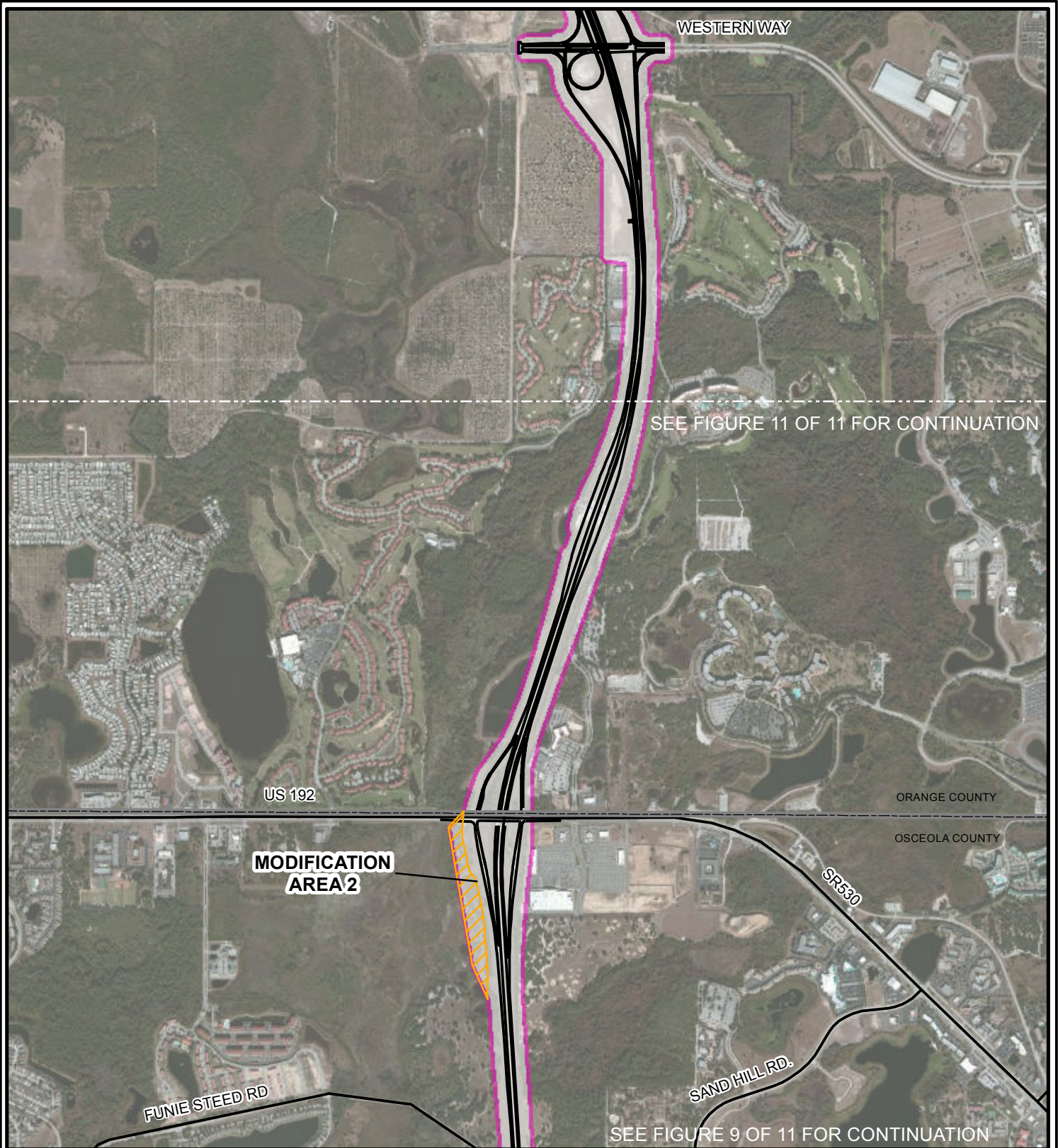
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AERIAL PHOTOGRAPH



PROJECT No. 073-89532	SCALE AS SHOWN	REV. 1
DESIGN	JWT	08/22/2007
GIS	JDG	06/06/2012
CHECK	KLH	06/06/2012
REVIEW	RAZ	06/06/2012

ATT 2-1
9 OF 11
(REVISED)

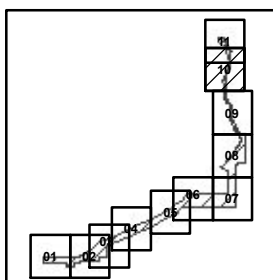


LEGEND

- Existing substation
- ▨ Modification Area
- ▬ Preferred Corridor
- ▬ Service territory
- County boundaries
- Railroads
- Major roads

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PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
LAKE AGNES TO GIFFORD
230kV JOINT TRANSMISSION LINE PROJECT

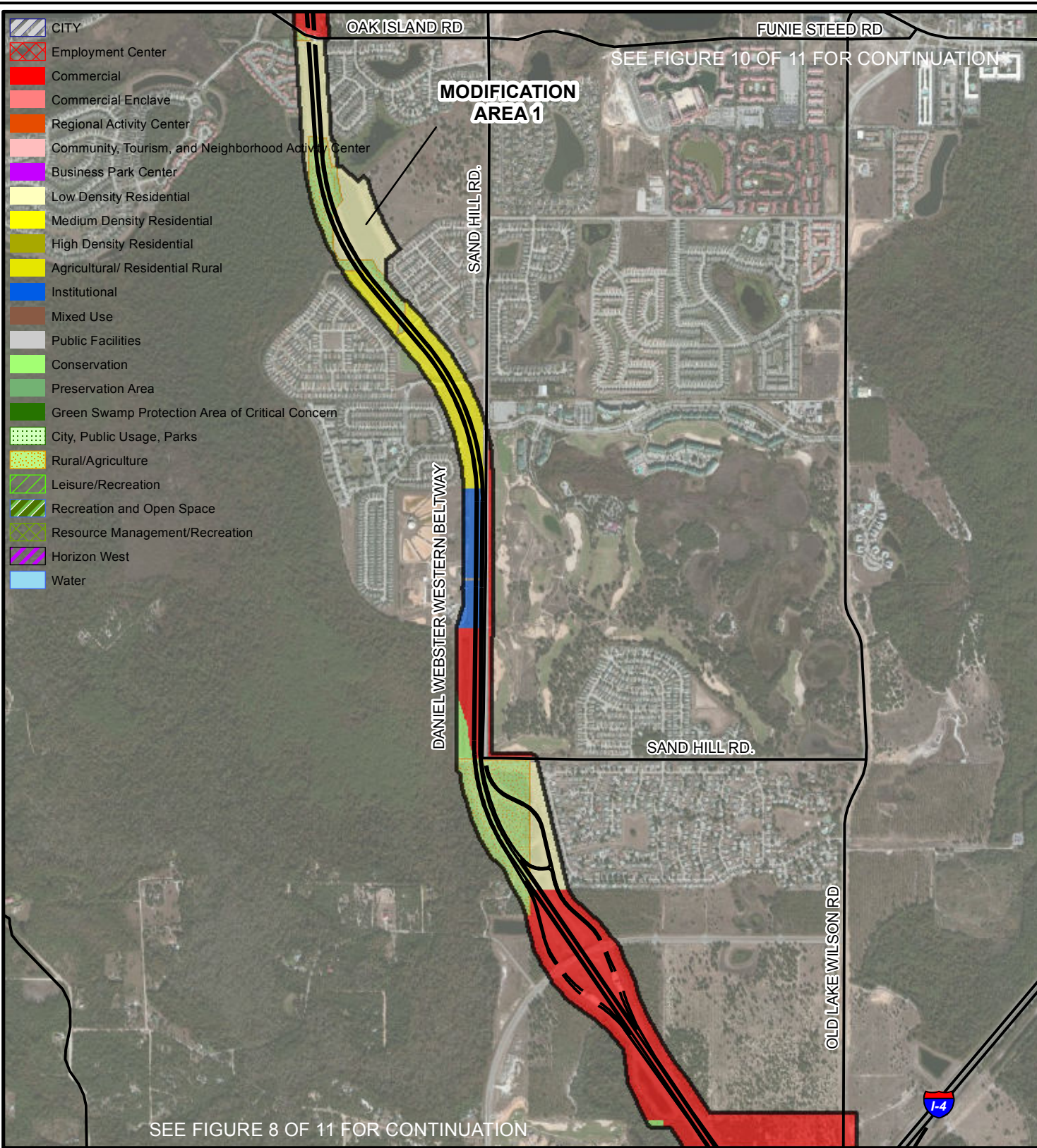
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AERIAL PHOTOGRAPH



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GIS	JDG	06/06/2012
CHECK	KLH	06/06/2012
REVIEW	RAZ	06/06/2012

SCALE AS SHOWN	REV. 1
ATT 2-1	
10 OF 11	
(REVISED)	

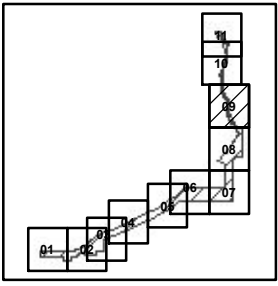


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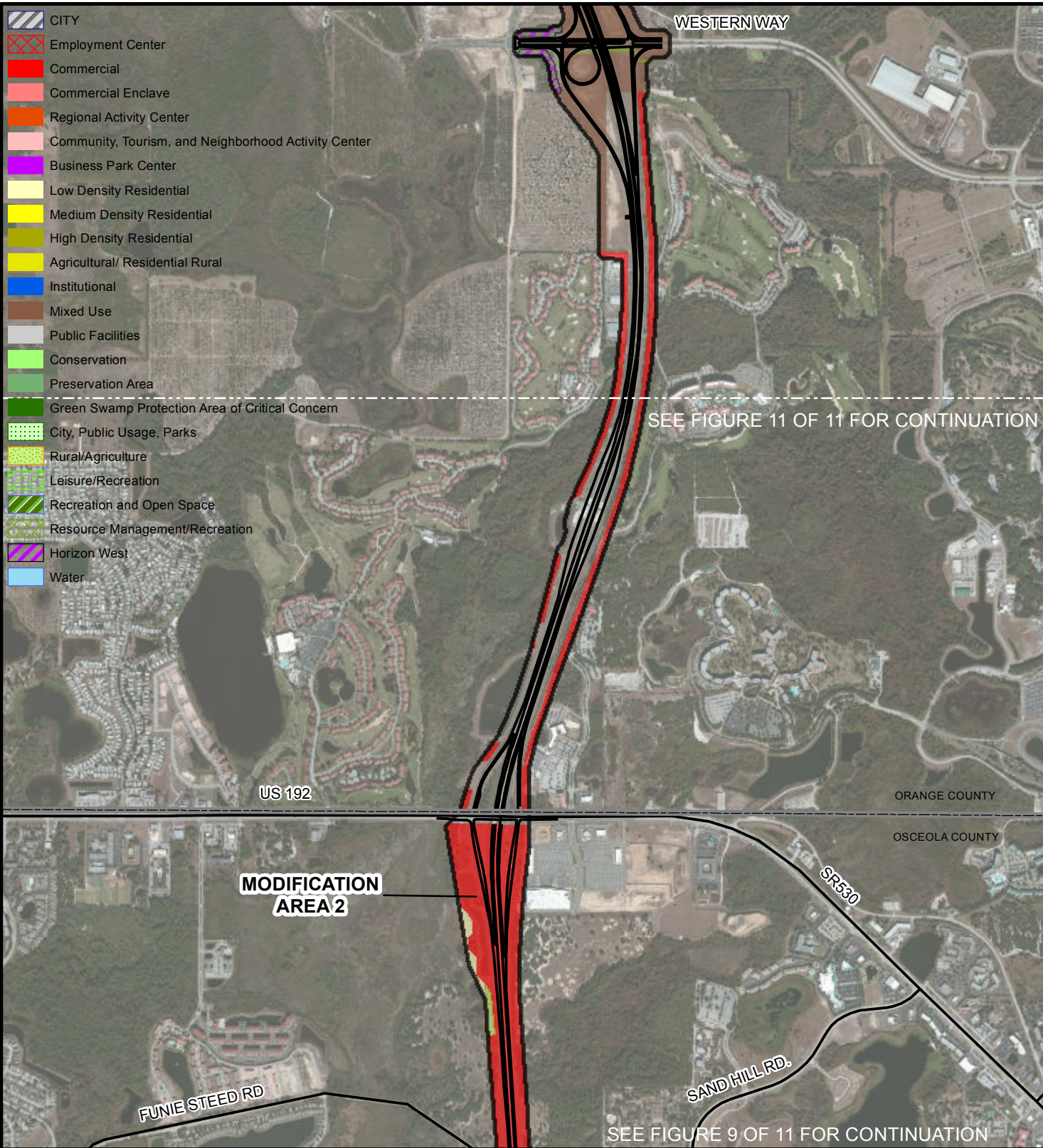
- Existing substation
- Service territory
- County boundaries
- Railroads
- Major roads
- Preferred Corridor

REFERENCE

1. Major roads - Florida Department Of Transportation 4/2006.
2. County boundaries - US Census Bureau, 2000.
3. Future land use - Osceola, and Orange Counties 2011; City of Auburndale 2007; Reedy Creek Improvement District 2007.
4. Aerial imagery - ArcGIS Online; Bing Maps Aerial; Microsoft Corporation and its data suppliers, 2010



PROJECT PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY LAKE AGNES TO GIFFORD 230kV JOINT TRANSMISSION LINE PROJECT			
TITLE FUTURE LAND USE			
 Tampa, Florida		PROJECT No. 073-89532 DESIGN: JWT 08/22/2007 GIS: JDG 06/06/2012 CHECK: KLH 06/06/2012 REVIEW: RAZ 06/06/2012	SCALE AS SHOWN REV. 1 ATT 2-2 9 OF 11 (REVISED)

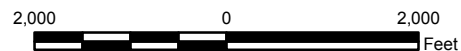
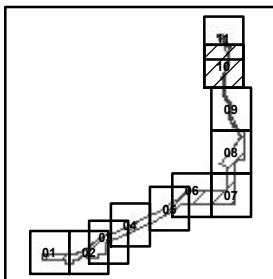


LEGEND

- Existing substation
- Service territory
- County boundaries
- Railroads
- Major roads
- Preferred Corridor

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- Major roads - Florida Department Of Transportation 4/2006.
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PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
LAKE AGNES TO GIFFORD
230kV JOINT TRANSMISSION LINE PROJECT

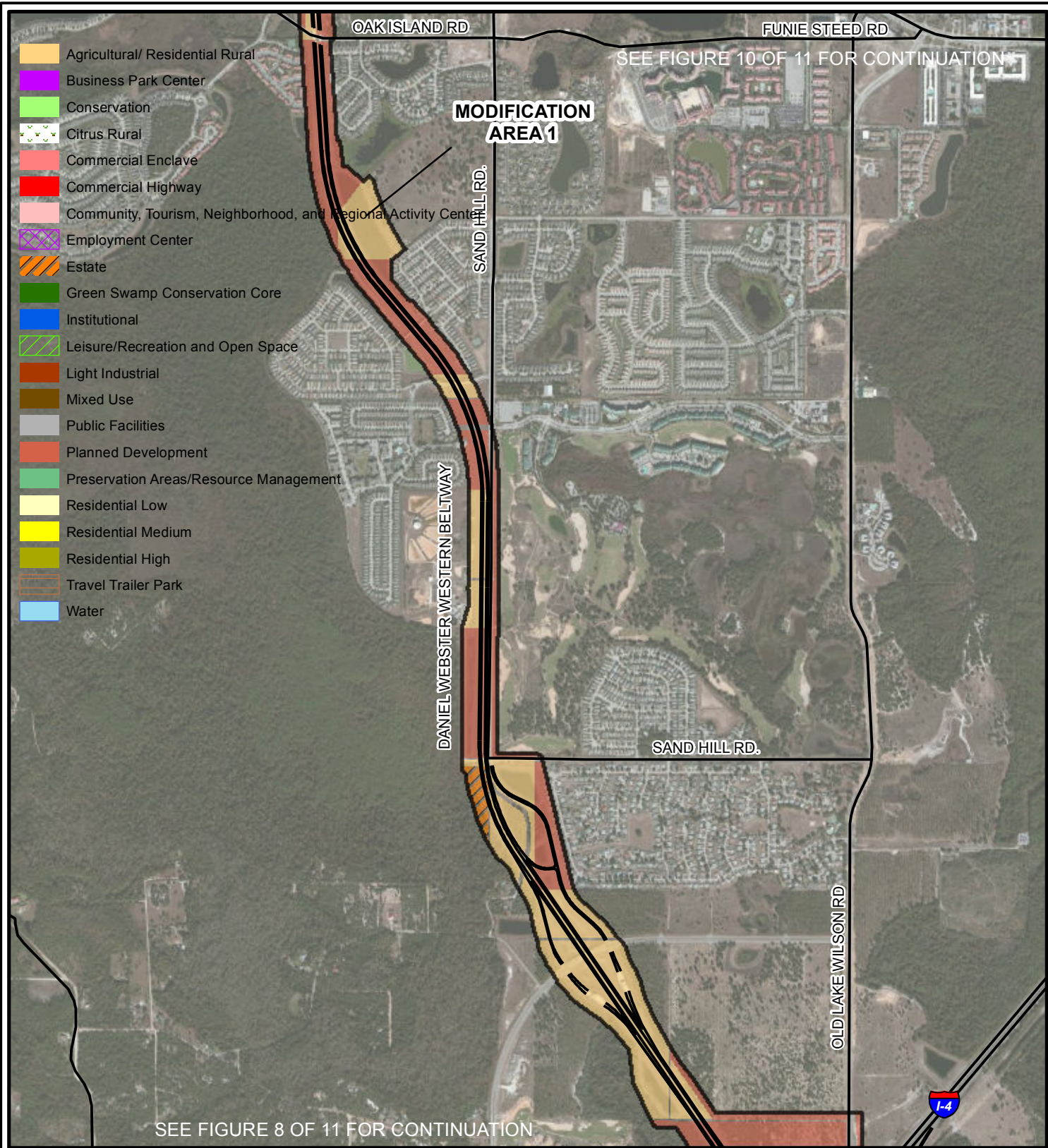
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FUTURE LAND USE



DESIGN	JWT	08/22/2007
GIS	JDG	06/06/2012
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REVIEW	RAZ	06/06/2012

SCALE AS SHOWN	REV. 1
ATT 2-2	10 OF 11
(REVISED)	

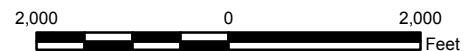
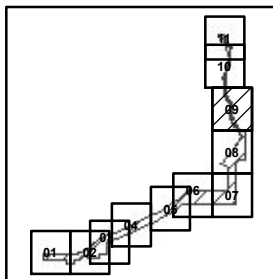


LEGEND

- Existing substation
- Service territory
- County boundaries
- Preferred Corridor
- Railroads
- Major roads

REFERENCE

1. Major roads - Florida Department Of Transportation, 4/2006.
2. County boundaries - US Census Bureau, 2000.
3. Zoning - Osceola, and Orange Counties 2011; City of Auburndale 2007; Reedy Creek Improvement District 2007.
4. Aerial imagery - ArcGIS Online; Bing Maps Aerial; Microsoft Corporation and its data suppliers, 2010



PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
 LAKE AGNES TO GIFFORD
 230kV JOINT TRANSMISSION LINE PROJECT

TITLE

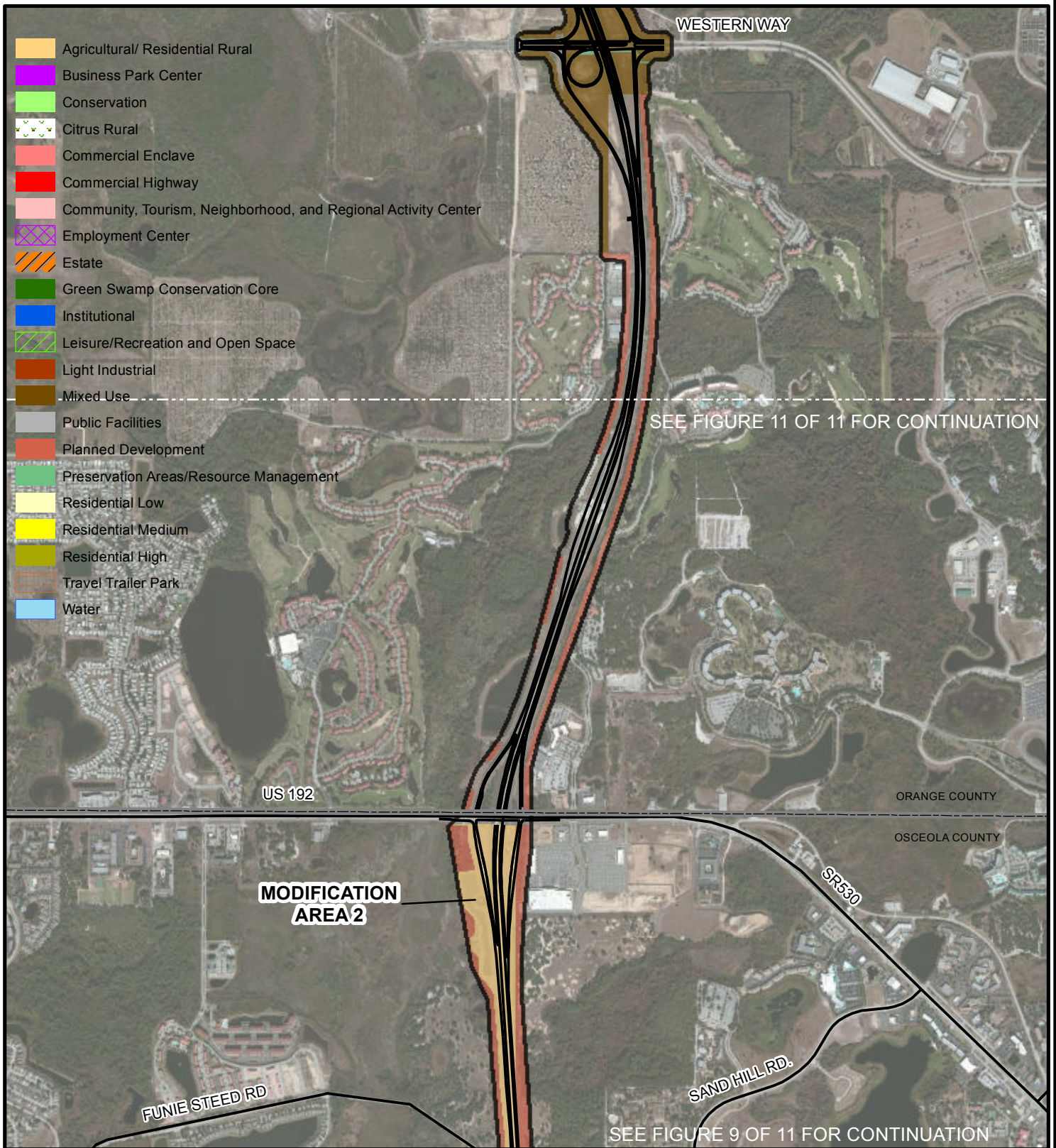
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PROJECT No. 073-89532	SCALE AS SHOWN	REV. 1
DESIGN	JWT	08/22/2007
GIS	JDG	06/06/2012
CHECK	KLH	06/06/2012
REVIEW	RAZ	06/06/2012

ATT 2-3
9 OF 11
 (REVISED)

- Agricultural/ Residential Rural
- Business Park Center
- Conservation
- Citrus Rural
- Commercial Enclave
- Commercial Highway
- Community, Tourism, Neighborhood, and Regional Activity Center
- Employment Center
- Estate
- Green Swamp Conservation Core
- Institutional
- Leisure/Recreation and Open Space
- Light Industrial
- Mixed Use
- Public Facilities
- Planned Development
- Preservation Areas/Resource Management
- Residential Low
- Residential Medium
- Residential High
- Travel Trailer Park
- Water

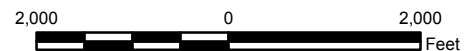
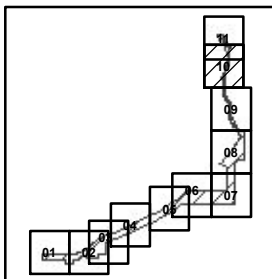


LEGEND

- Existing substation
- Service territory
- County boundaries
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 230KV JOINT TRANSMISSION LINE PROJECT

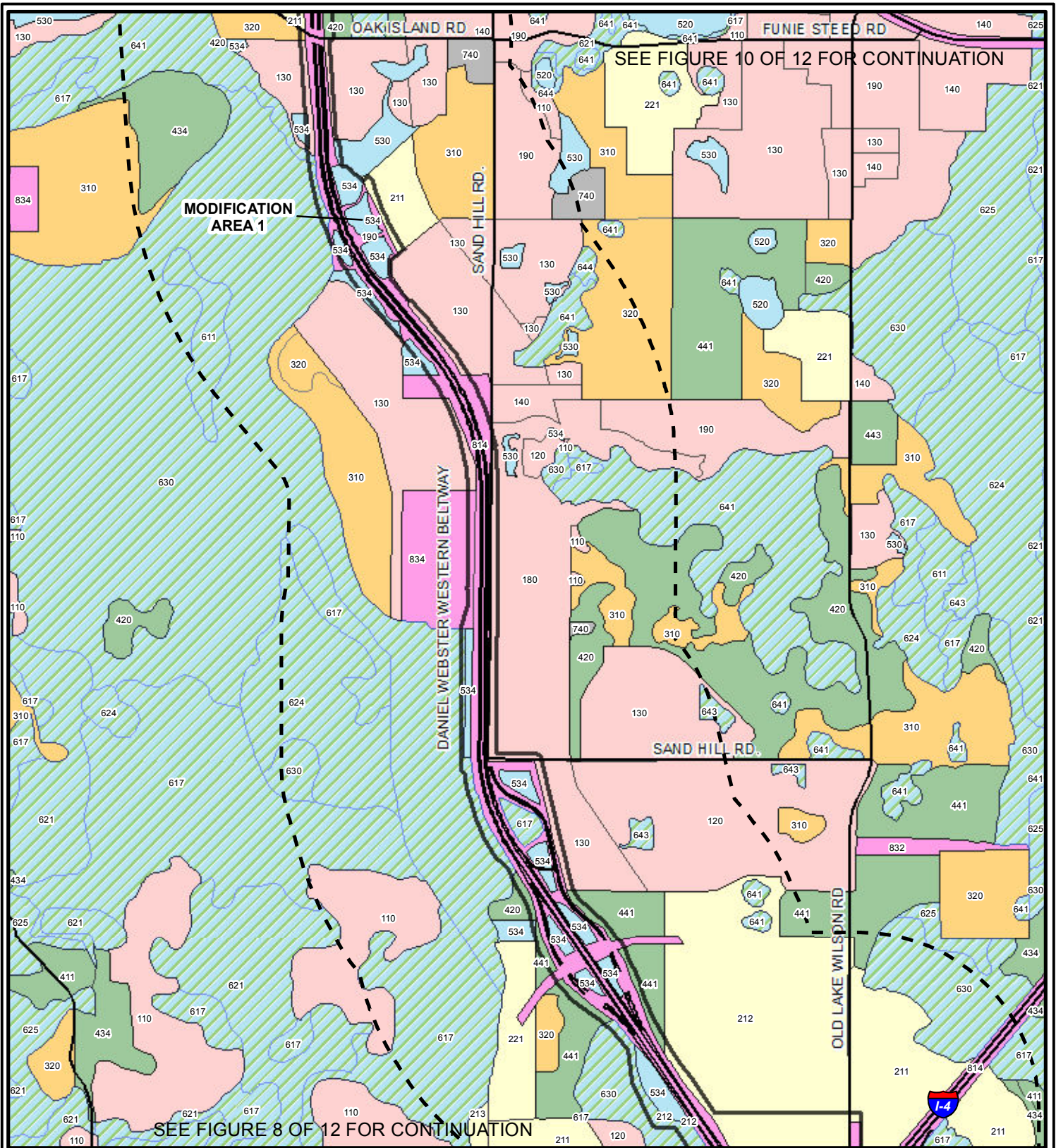
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ZONING



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GIS	JDG	06/06/2012
CHECK	KLH	06/06/2012
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SCALE AS SHOWN	REV. 1
ATT 2-3	
10 OF 11	
(REVISED)	



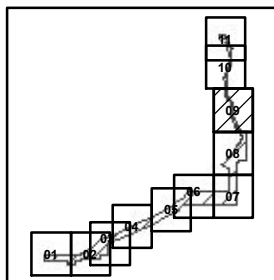
LEGEND

See Figure 12 for a detailed legend describing land use, cover and forms.

- Existing substation
- Railroads
- Preferred Corridor
- Major roads
- Service territory
- County boundaries
- Half mile buffer

REFERENCE

1. Major roads - Florida Department Of Transportation, 4/2006.
2. County boundaries - US Census Bureau, 2000.
3. Land use - SFWMD 1999/2004, SWFWMD 2004, SJRWMD 2004, (2007 update by Golder within corridor).



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PROJECT
PROGRESS ENERGY FLORIDA AND TAMPA ELECTRIC COMPANY
LAKE AGNES TO GIFFORD
230kV JOINT TRANSMISSION LINE PROJECT

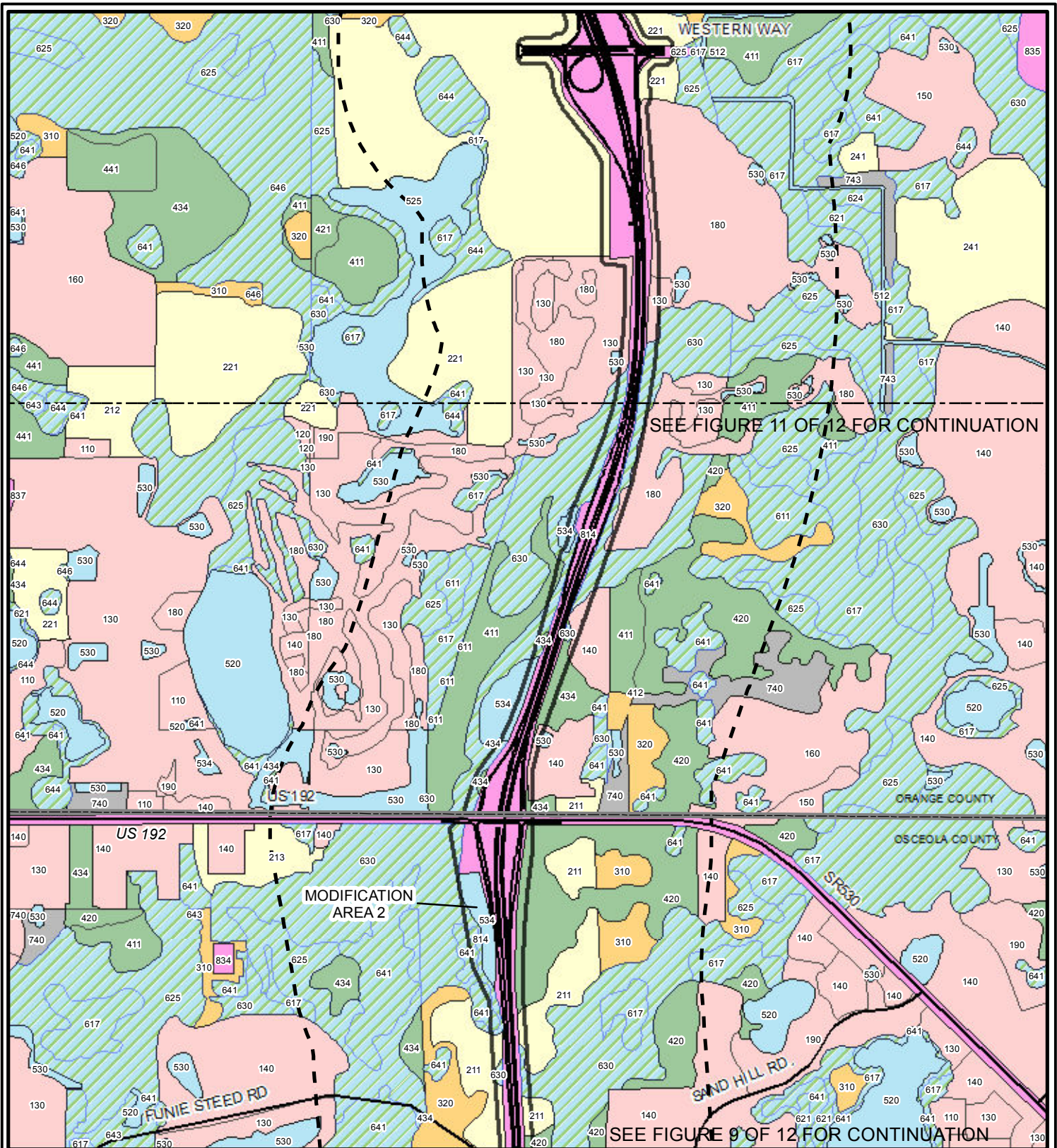
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EXISTING LAND USE/VEGETATION



DESIGN	JWT	08/22/2007
GIS	JDG	06/06/2012
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REVIEW	RAZ	06/06/2012

SCALE AS SHOWN	REV. 1
ATT 2-4 9 OF 11 (REVISED)	



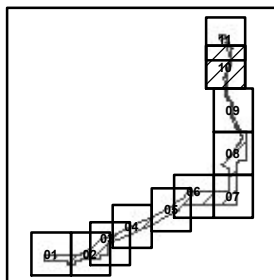
LEGEND

See Figure 12 for a detailed legend describing land use, cover and forms.

- Existing substation
- Railroads
- Preferred Corridor
- Major roads
- Service territory
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- Half mile buffer

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TITLE

EXISTING LAND USE/VEGETATION



PROJECT No. 073-89532
DESIGN JWG 08/22/2007
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REVIEW RAZ 06/06/2012

SCALE AS SHOWN
REV. 1
ATT 2-4
10 OF 11
(REVISED)