Visions Golf, Walden Lake Golf & Country Club

Ecological Assessment

Plant City, Florida

December 2013

Cardno ENTRIX

Shaping the Future

Document Information

Prepared for	Visions Golf
Project Name	Visions Golf, Walden Lake Golf & Country Club
Project Number	E213023700-121313
Project Manager	Timothy Neldner
Date	December 2013

Prepared for

Visions Golf

Steve Mercer

2001 Clubhouse Drive

Plant City, FL 33566

Prepared by

Megan Nistler

Assistant Staff Scientist

Timothy L. Neldner, PWS

Tampa Ecological Office Leader / Senior Consultant

Cardno ENTRIX
3905 Crescent Park Drive, Riverview, FL 33578
Tel 813 664 4500 Fax 813 664 0440 Toll-free 800 368 7511
www.cardnoentrix.com

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1 Introduction

Cardno ENTRIX was retained by Visions Golf to perform an ecological assessment on an approximately 136.5-acre site within the Walden Lakes Golf and Country Club, located in Plant City, FL. The surveyed area is south of Sydney Road, between Clubhouse Drive and W Timberlane Drive, in Hillsborough County, Florida (Figure 1. Location Map; Figure 2. Quad Map). The purpose of this assessment is to identify potential constraints to development of the parcel, specifically constraints due to wetlands and listed species of wildlife.

Wetland and upland habitat assessments were conducted by Cardno ENTRIX staff on December 11, 2013. All portions of the property were visually surveyed either with meandering vehicular transects or pedestrian transects. A standard listed species survey was also conducted on the entire site to determine the likely occurrence and relative abundance of species considered Endangered, Threatened or of Special Concern by the Florida Fish and Wildlife Conservation Commission (FWC) under chapter 68A-27.002-004 F.A.C., or as Endangered or Threatened by the United States Fish and Wildlife Service (USFWS) under 50 CFR 17.

2 Soils

The NRCS Soils Map (Figure 3. NRCS Soils Map) shows several soil types consisting primarily of fine sand characteristics. The dominant soil types within and surrounding Laurel Lake are Basinger, Holopaw, and Samsula, depressional soils (±36.98 ac). These soils are classified as very deep, very poorly drained, and rapidly permeable. They are formed in sandy marine sediments and are found on low lying flats, depressions, and poorly defined drainage-ways. In brief, these soils are considered hydric (wetland) soils and correspond with the historic wetland area around Laurel Lake described below. Candler fine sand dominates the northern portion of the assessment area near the driving range and club house (±26.14 ac). The NRCS classifies the Candler series as very deep, excessively drained, rapidly permeable soils found in uplands and Flatwoods. Archbold fine sand, Smyrna fine sand, Zolfo fine sand, and Myakka fine sand have significant presence throughout the remainder of the assessment area. These are also considered upland soils.

3 Habitat Descriptions

The site contains a variety of land covers as shown in Figure 4 of which Golf Course (Code 182) is predominant. An aerial map is provided as Figure 5. The upland and wetland habitats are described below.

3.1 Uplands

The site is predominately golf course with a few small forested areas. The western section of the golf course, spanning down to Griffin Blvd, has not been maintained and is closed to golfers. The eastern section is still maintained and used by golfers at the time of this survey. The northern portion of the assessment area, between Sydney Road and Clubhouse Drive, is also maintained and used as a driving range. The herbaceous layer of the majority of the golf course is comprised of mixed grasses dominated by Bermuda grass (*Cynodon dactylon*), while carpet grass (*Axonopus* sp.) dominates the area near the historic forested wetland area described below. The western section of the assessment area that has not been maintained is becoming overgrown with Bermuda grass and weedy vegetation. There are several

small clusters of planted cypress (*Taxodium* sp.) scattered throughout the surveyed area. Additionally, several small canopied clusters dominated by long leaf pine (*Pinus palustris*) and laurel oak (*Quercus laurifolia*) were observed.

3.2 Wetlands

Potential jurisdictional wetland and other surface water areas are located on the property (Figure 6. Potential Jurisdictional Wetlands and Other Surface Waters Map). All ponds consisted of open water with an herbaceous fringe dominated by cattail (*Typha sp.*), bushy bluestem (*Andropogon glomeratus*), Peruvian primrose (*Ludwigia peruviana*), and dog fennel (*Eupatorium capillifolium*). Laurel Lake has a forested island in the middle of the lake which was not accessible by foot. Distant observations of this forested area included a dense canopy of what appears to be mixed oak, pines, bays, and maples. The historical wetland map from 1957 (Figure 7. Historical Wetlands Map) shows that a large portion of land (±43.40 ac) surrounding Laurel Lake was primarily a forested wetland. A small emergent wetland (±2.89 ac) is also depicted on the historical wetlands map in the vicinity of the largest pond located in the southwest section of the assessment area. The vegetation and soils of the historical wetland sites have been extremely altered over the years by the construction of the golf course and the multiple man-made ponds. Cardno ENTRIX requested a project files search by the Environmental Protection Commission of Hillsborough County (EPC) for any prior assessments conducted on the property. No results were found in the search, however, observations of the historical wetland sites by Cardno ENTRIX show potential jurisdictional wetlands and other surface waters that may be in accordance with Chapter 62-340, F.A.C. The current wetlands and surface waters that overlap the historic wetland footprint may be claimed as jurisdictional / regulated areas by the EPC, the Southwest Florida Water Management District (SWFWMD), and the US Army Corps of Engineers (COE). Proposed impacts to these jurisdictional wetlands and other surface waters may require permits from these agencies and appropriate mitigation efforts. An online search of the SWFWMD Water Management Information System found that the project site is within the permit area of a valid Water Use Permit (No. 20 003685.006). This permit allows an average daily usage of 38,100 gallons.

4 Listed Species

General wildlife observations consisted of black vulture (*Coragyps atratus*), great blue heron (*Ardea Herodias*), red-bellied woodpecker (*Melanerpes carolinus*), American coot (*Fulica americana*), and the painted turtle (*Chrysemys picta*). No listed species were observed, but evidence of use by gopher tortoises (*Gopherus polyphemus*) was observed on the property at the north end of the driving range near the railroad tracks. Burrows were found, but appear inactive based on the presence of leaf litter and debris at the entrances. A Florida sandhill crane (*Grus Canadensis*) call was also heard to the east of the assessment area, but no individuals were observed. It is likely that cranes utilize the golf course as forage areas.

Based on the database search of the USFWS and the FWC online resources, a listed species map was produced (Figure 8. Listed Species). The closest bald eagle (*Haliaeetus leucocephalus*) nesting location is approximately 1 mile southeast of the club house. The nest was visited by Cardno ENTRIX staff on December 11, 2013 and observed to be potentially active. The nest was last surveyed in 2010 by FWC at which time it was an active nest. The project is also located within the core foraging area of wood stork colonies.

5 Results and Recommendations

No existing permits could be located that address the existing ponds and wetlands on the project site with regard to valid jurisdictional determinations or wetland delineations. This means that the wetland regulatory agencies (EPC, SWFWMD, COE) may likely require new jurisdictional determinations and wetland delineations during the review of any proposed rezoning, replatting, and / or construction permit applications. With regard to the EPC, they may request a formal wetland delineation be performed during the rezoning process, or they may simply inform the applicant of the need for a formal wetland delineation prior to submission of construction applications. Without evidence of a previous wetland delineation approval or other permits / approvals that address the impacts to the historic wetlands, impacts to the existing ponds and wetlands within the golf course (e.g. the island within Lake Laurel) must likely be delineated, permitted and mitigated during the application review process by the Hillsborough County / EPC, the SWFWMD and the COE. Although a mitigation assessment was not part of this Scope of Services and mitigation requirements of the regulatory agencies are only stipulated through the formal permitting processes, it appears the site will likely have sufficient area available for mitigation of unavoidable wetland impacts.

Although no individual tortoises were observed at the time of this survey, it is recommended that a 100% gopher tortoise survey be conducted immediately prior to initiating the construction permitting process. If tortoises are present, a relocation permit would need to be obtained from FWC.

The USFWS may require mitigation for wood stork foraging habitats within the project limits if shallow wetlands or littoral zones of existing ponds are impacted. Such mitigation typically overlaps within the shallow wetland / littoral habitats of new surface water management ponds required for stormwater treatment or floodplain mitigation.

A desktop review of the Florida Master Site File GIS Database showed no cultural resources located on the property.

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APPENDIX A

FIGURES

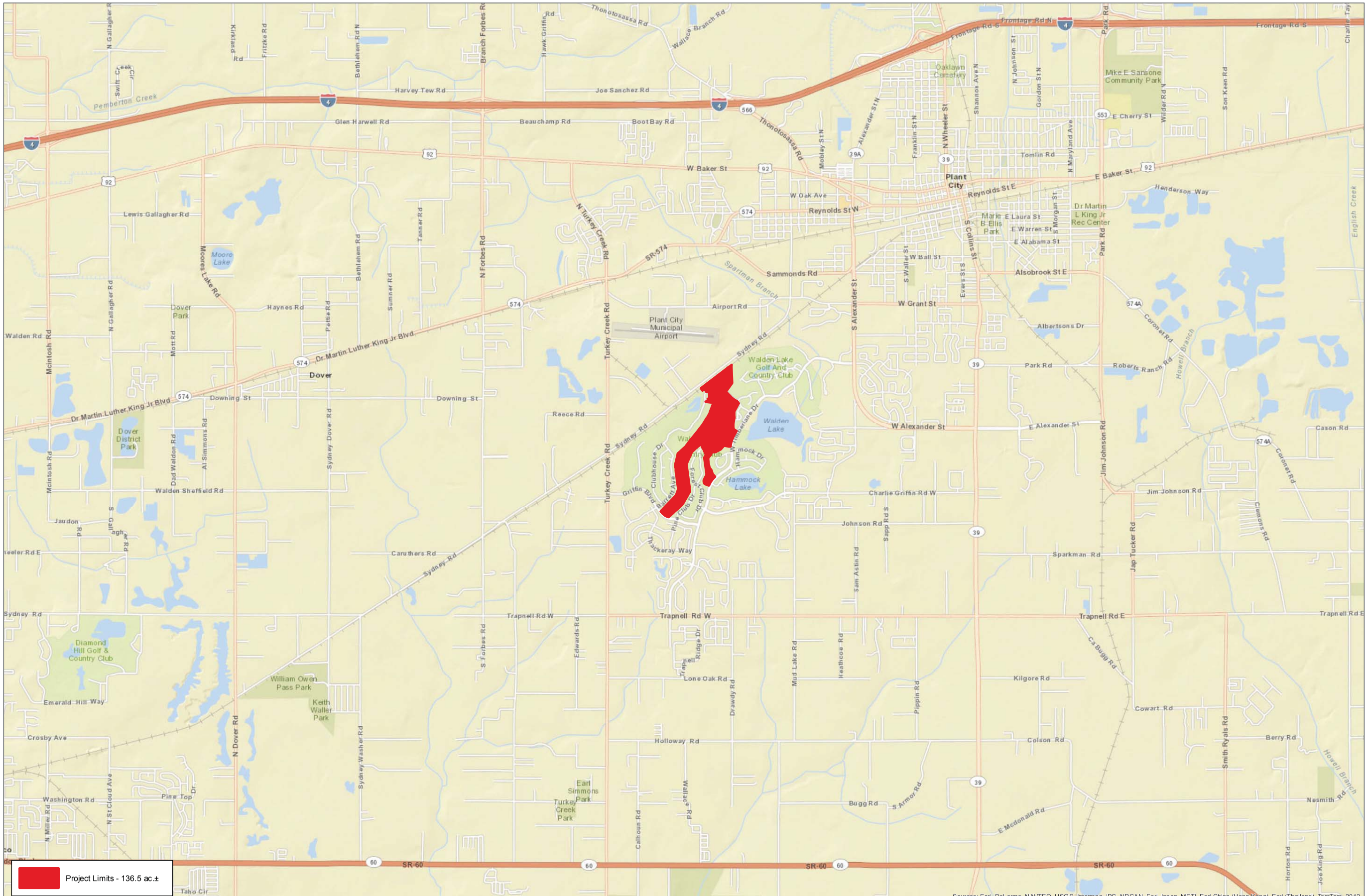

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Figure 1: Location Map

Walden Lake G+CC
Hillsborough County, Florida

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3905 Crescent Park Drive, Riverview, FL 33578 USA
Phone (+1) 813-664-4500 Fax (+1) 813-664-0440
www.cardnoentrix.com

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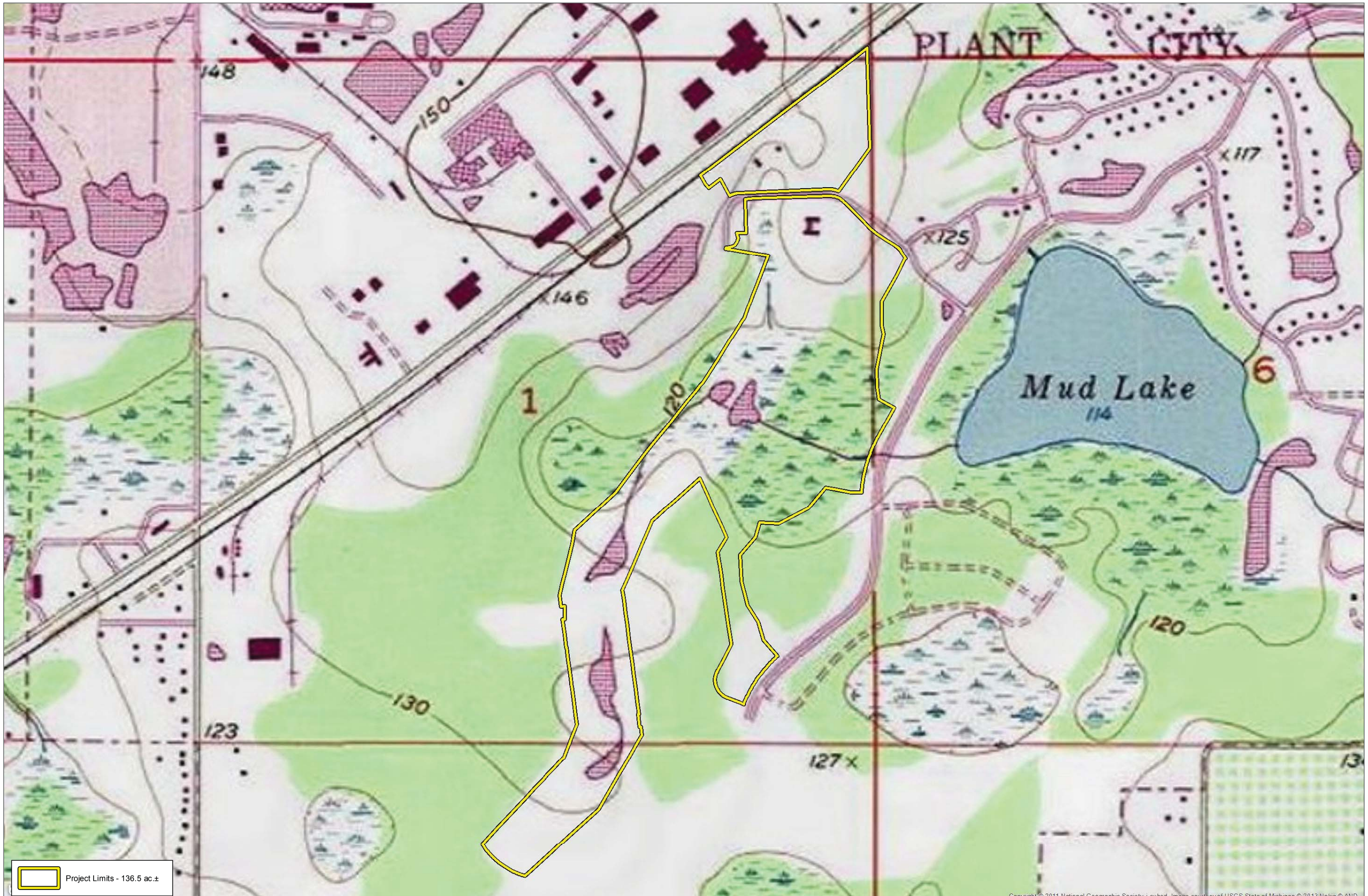

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Figure 2: USGS Quad Map

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www.cardnoentrix.com

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Figure 3: 2010 NRCS Soils

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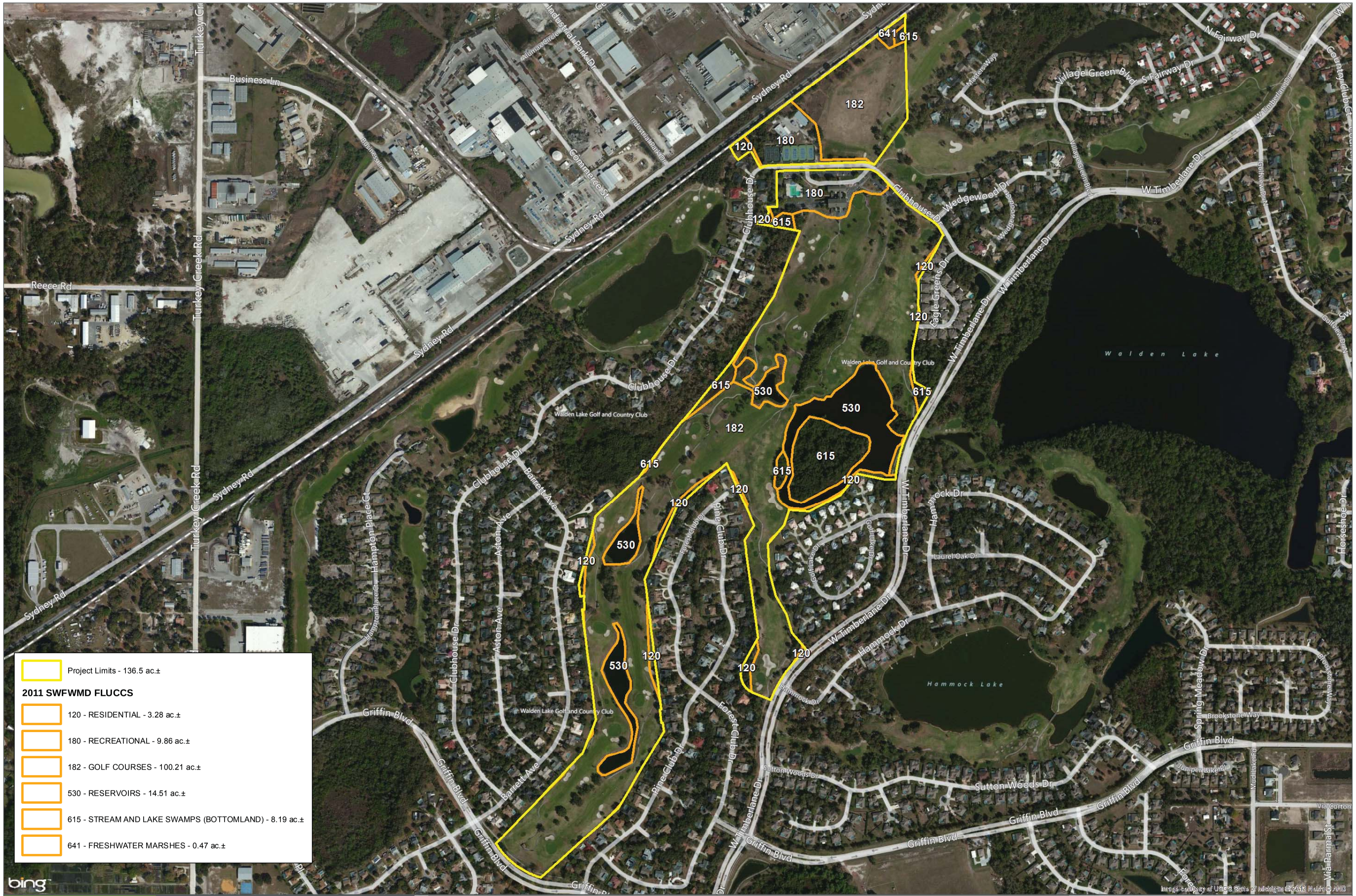

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Figure 4: 2011 SWFWMD Land Cover

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Figure 5: Aerial Map

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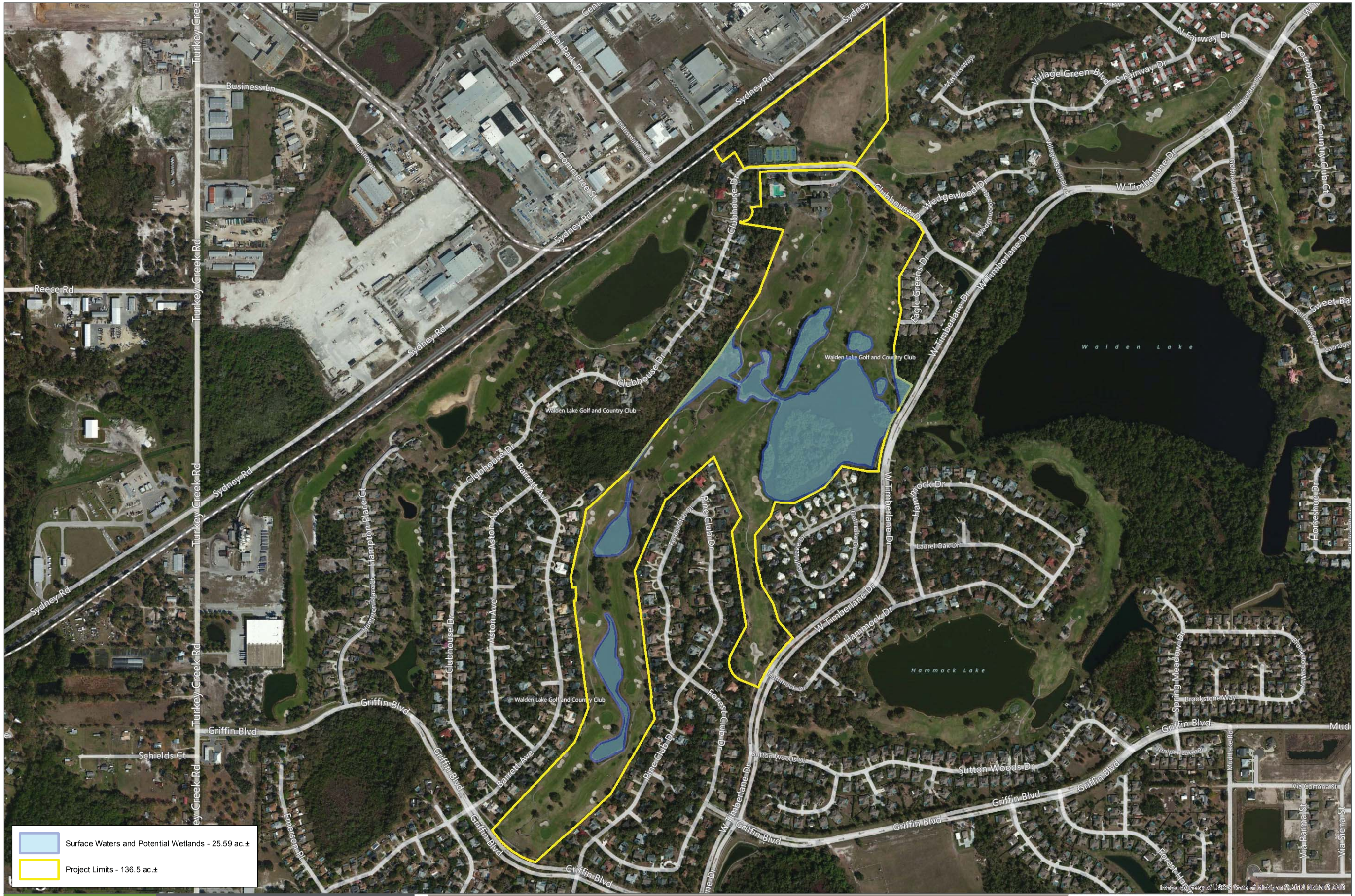

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Figure 6: Potential Wetlands & Other Surface Waters

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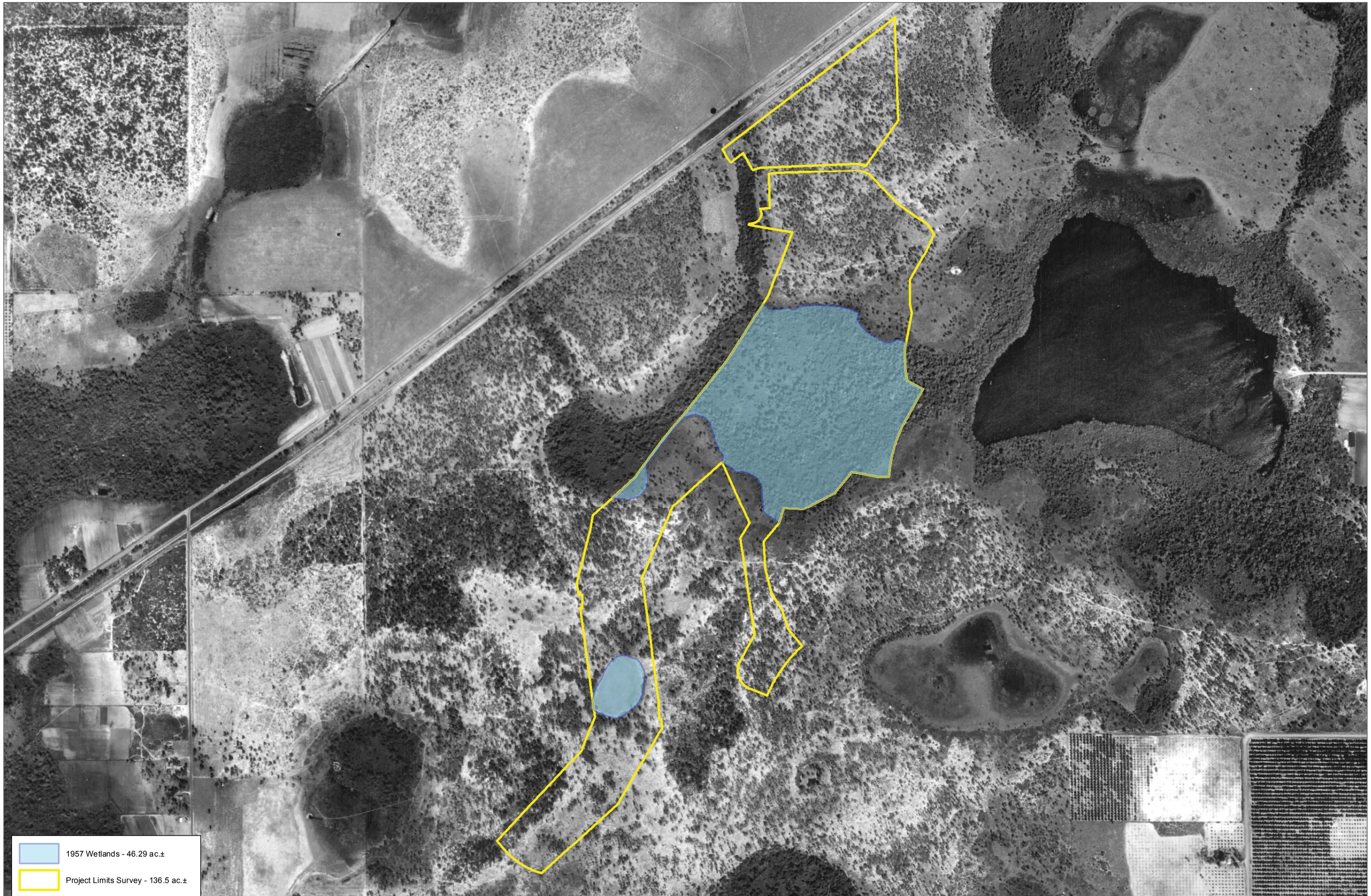

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Figure 7: Historic Wetlands (1957)

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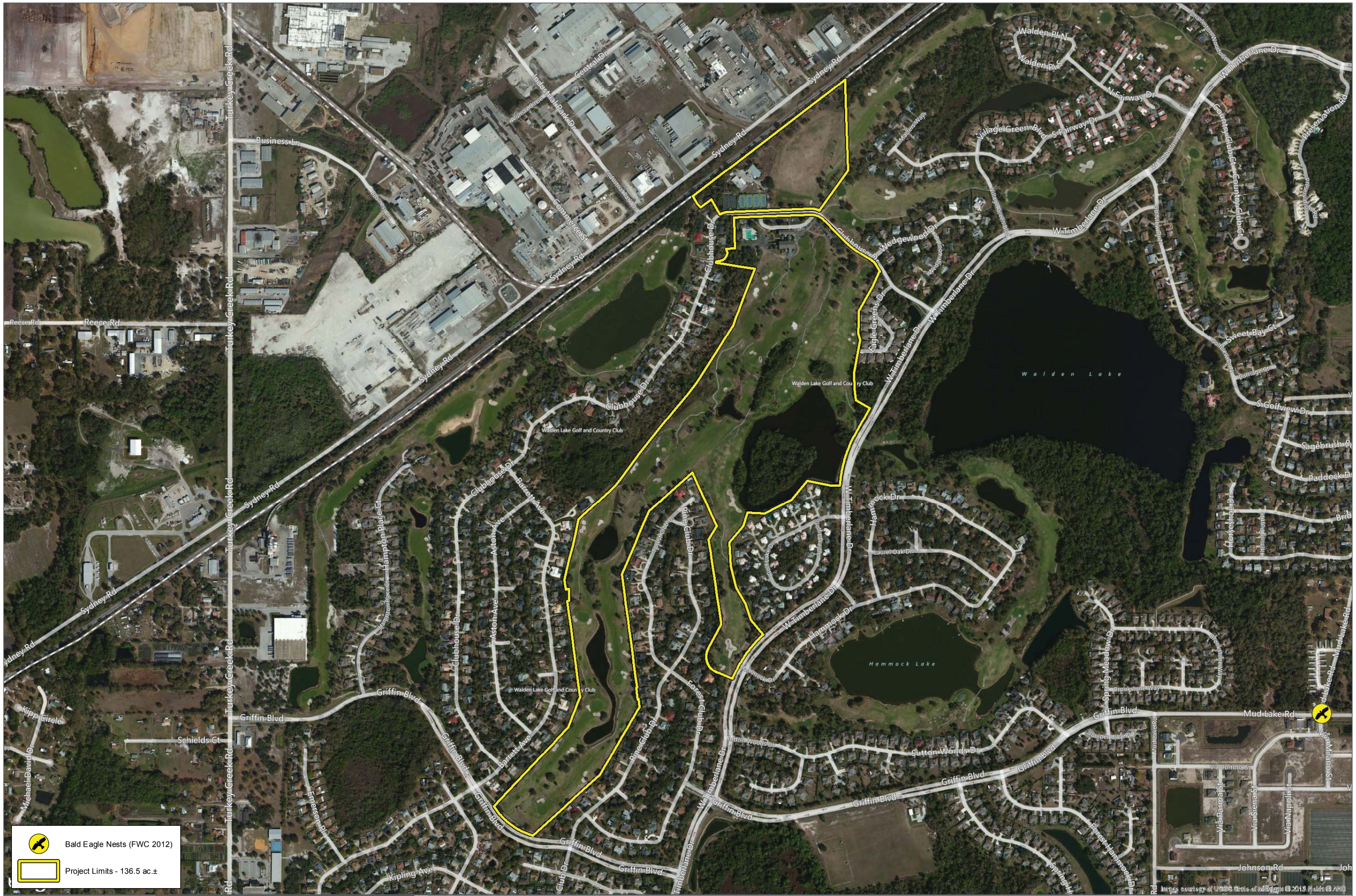

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Figure 8: Listed Species

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