COURTHOUSE SHADOWS

Environmental Due Diligence

PREPARED FOR:

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AMENDED
JANUARY 31, 2019

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1 INTRODUCTION

Turrell, Hall & Associates, Inc. (THA) has conducted a preliminary site evaluation on several parcels located at 3290 Tamiami Trail East, Naples. The parcel folio numbers are 28750000028, 28750000523, 28750000769, and 30480040100. The properties are approximately 18.74 acres combined and located in Sections 11 and 14, Township 50 South, Range 25 East, in Collier County.

The purpose of the Due Diligence Report is to review existing environmental conditions relating to the properties and to identify issues that may impact the development potential of the site. Specifically, the field work and research conducted was;

- To map and identify existing vegetative communities on the property.
- To estimate the extent of state and federal jurisdictional wetlands.
- To research the presence or absence of state and federal listed species.
- To assess the environmental permitting requirements for construction of residential development.

This assessment did not research or consider zoning, deed restrictions, easements, or other encumbrances that might be present and could affect the development of the property. This assessment also did not include a Phase I Environmental Site Assessment which can identify potential or existing environmental contamination liabilities. This assessment was limited to the wetland and wildlife environmental factors only and is presented solely to assist with the planning process.

2 SITE DESCRIPTION

The project site is comprised of four parcels, three of which have been cleared and impacted by past and current commercial development and the fourth parcel including the canal and drainage easement at the south end of the site. The site has been developed since the early 1990's with the current buildings. For the purpose of this report, vegetative communities and other land uses are combined between the parcels.

It appears as though there were no wetland impacts associated with the development in the 1990's. No SFWMD ERP permit could be located for the project. The majority of the soils within the site are mapped as Immokalee Fine Sand with a small area of Basinger Fine Sand in the southeast corner of the site. Basinger Fine Sand is a hydric soil, but Immokalee Fine Sand is not.

Vegetative communities are remnant only with the majority of the vegetation present consisting of various planted landscaping components. The perimeter of the site contains moderately heavy exotic vegetation including Brazilian pepper along most of the west and south perimeter and scattered Australian pines, Java plum, and phragmites in the southwest border of the site.

There is a mangrove fringe separating the development from Haldeman creek which consists predominately of red mangroves and Brazilian pepper. There is also a drainage easement associated with Haldeman Creek Running along the south boundary of the project site. See attached FLUCFCS map for location within the site of the different habitats.

2.1 FLUCFCS Codes

The Florida Land Use, Cover, and Forms Classification System (FLUCFCS) manual was used to classify all of the vegetative communities occurring within the site boundaries. The attached FLUCFCS exhibit shows the subject property, its vegetative cover, and depicts the approximate limits of the wetland and upland areas. A general description is provided below in Table 1 along with any site-specific nuances that may be relevant to the assessment.

Table 1: FLUCFS Codes found on-site

FLUCFCS Code	Description	Acres	Jurisdictional Wetlands
141	Retail sales and services	16.07	No
190	Open Lands in Urban Setting	0.54	No
510	Streams and Waterways (Haldeman Creek)	1.08	Yes
612E2	Mangrove Swamp (Fringe)	1.05	Yes
	Total	**18.74**	

2.2 Vegetation Associations

The mangrove fringe habitat along the south boundary is the only natural native habitat remaining on the property. Vegetative communities in Florida designated as Mangrove Swamp typically occur in such a way that red, white, or black mangroves dominate the canopy and

midstory while very little vegetation is present in the ground cover. This site is situated along the man-made portion of Haldeman Creek and is dominated by red mangroves. This site habitat is becoming slightly overgrown with exotics and has a very limited understory. A list of commonly observed plant species within this community can be found below in Table 2.

Table 2: Commonly observed species found within the Mangrove Fringe Community

Common Name	Scientific Name	Stratum	Dominant
Red mangrove	*Rhizophora mangle*	C, M	Yes
Brazilian pepper	*Schinus terebinthifolia*	C	No
Cabbage palm	*Sabal palmetto*	M	No
Leather fern	*Acrostichum danaeifolium*	G	No
Muscadine	*Vitis rotundifolia*	V	No

C = canopy stratum, M = midstory stratum, G = ground stratum, V = woody vine stratum

The remainder of the vegetation outside of the mangrove fringe is all planted vegetation serving as buffer or landscape material throughout the development. A list of commonly observed plant species within this community can be found below in Table 3.

Table 3: Commonly observed species found within the landscape and buffer portions of the site

Common Name	Scientific Name	Stratum	Location
Slash pine	*Pinus elliottii*	C	Southern perimeter berm
Live Oak	*Quercus virginiana*	C	Throughout site
Java Plum	*Syzygium cumini*	C, M	Southern Perimeter berm, outfall area
Cabbage palm	*Sabal palmetto*	C, M	Throughout site
Brazilian pepper	*Schinus terebinthifolia*	M, G	Western and southern perimeter
Coco plum	*Chysobalanus icaco*	M	Western perimeter
Muscadine	*Vitis rotundifolia*	V	Western and southern perimeter

C = canopy stratum, M = midstory stratum, G = ground stratum, V = woody vine stratum

There are two wet detention basins located on the western portion of the site. These basins are interconnected with each other and do maintain wetland vegetation. A list of observed plant species within the basins can be found below in Table 4.

Table 4: Commonly observed species found within the dry retention basins

Common Name	Scientific Name	Stratum	Location
Alligator flag	*Thalia geniculate*	G	North retention basin
Wedelia	*Sphagneticola trilobata*	G	Both retention basins
Maidencane	*Panicum hemitomon*	G	Both retention basins
Pickerelweed	*Pontedaria cordata*	G	Both retention basins
Spikerush	*Eleocharis cellulose*	G	South retention basin
False Buttonweed	*Spermacoce verticullata*	G	Both retention basins

C = canopy stratum, M = midstory stratum, G = ground stratum, V = woody vine stratum

2.3 Soils

According to the United States Department of Agriculture (USDA), there are 3 types of soil mapped within the project site. Immokalee Fine Sand, which is a non-hydric soil, is mapped through the majority of the property. A small triangle of the site in the southeast corner is

mapped Basinger Fine Sand, which is a hydric soil. The mangrove fringe and creek are at the south of the site are mapped as Durbin and Wulfert Mucks which is a hydric soil.

Soil plugs were taken in the open habitats of the site to determine if hydric soil characteristics are present. Within the open urban areas, the soils were disturbed and heavily compacted with rock and shell present. No hydric indicators were visible within these areas. The soils at the bottoms of the retention basins both had a shallow much layer indicative of hydric conditions which is to be expected as their design is to hold water.

See the attached soils map for the extent of the soil units across the property

2.4 Hydrologic Indicators

Hydrologic indicators were only observed on this site within the retention basins and drainage swale. Tidal lines were also observed along Haldeman creek in the mangrove fringe. Water lines and algal matting were both observed within the detention basins. It is clear that water does stand in the retention basins for extended periods of time. See photos in Section 3 for examples of hydrologic indicators.

3 PHOTOS

Photo 1: Trees and debris from open lands in northwest corner of the site

Photo 2: Non-hydric soil profile from open lands.

Photo 3: Depression with *Thalia* adjacent to outfall structure in north retention basin

Photo 4: Overgrown structure connection between north and south retention basins.

Photo 5: Outfall structure from parking areas into drainage swale.

Photo 6: Drainage swale between south retention basin and overflow structure.

Photo 7: Overflow structure at east end of drainage swale. Only functions at flood stage

Photo 8: Outfall pipe from overflow structure and splash wall at rip-rap outfall into creek.

Photo 9: Rip-rap outfall from project site into Haldeman Creek along south boundary.

Photo 10: Potential Gopher tortoise burrow next to overflow structure at east end of drainage swale.

4 WILDLIFE

Endangered Wildlife Species is defined as any species of fish or wildlife naturally occurring in Florida, whose prospects of survival are in jeopardy due to modification or loss of habitat; over-utilization for commercial, sporting, scientific or educational purposes; disease; predation; inadequacy of regulatory mechanisms; or other natural or manmade factors affecting its continued existence (FS 372.072).

Threatened species include any species of fish or wildlife naturally occurring in Florida which may not be in immediate danger of extinction, but which exists in such small populations as to become endangered if it is subjected to increased stress as a result of further modification of its environment.

Species of Special Concern are animals that:

1) Have a significant vulnerability to habitat modification, environmental alteration, human disturbance, or human exploitation which, in the foreseeable future, may result in its becoming a threatened species unless appropriate protective or management techniques are initiated or maintained,
2) Data are limited or lacking,
3) May occupy such an unusually vital or essential ecological niche that should it decline significantly in numbers or distribution other species would be adversely affected to a significant degree,
4) Has not sufficiently recovered from a past population depletion.

Taking into account the location and condition of the property, and conversations with state and federal agency personnel, listed wildlife species that could potentially be found on or around the site include:

Common Name	**Scientific Name**	**Status**
Florida Bonneted Bat	*Eumops floridanus*	E
Little Blue Heron	*Egretta caerulea*	T
Tri-colored Heron	*Egretta tricolor*	T
Wood Stork	*Mycteria americana*	E
Osprey	*Pandion haliaetus*	SSC
Indigo Snake	*Drymarchon couperi*	T
Gopher Tortoise	*Gopherus polyphemus*	T

A full blown Threatened and Endangered Species survey was not done and should not be required due to the existing conditions of the property and existing surrounding developments. Initial investigations around the property did discover one potential gopher tortoise burrow located along the southern border of the project site in the old perimeter berm close to the stormwater overflow. The burrow is located at coordinates N 26 07.429, W 081 45.924. See Exhibit with burrow location and Photo 10 in Section 3 of this report. It appeared as though this was a relatively new burrow which did show signs of recent activity. If the proposed redevelopment

of the project impacts this area, a permit from the Florida Fish and Wildlife Conservation Commission (FWC) will be required to relocate the burrow.

During the site visits no other potential listed species presence was observed. It is assumed that wading birds could and do utilize the mangrove shoreline along Haldeman Creek for foraging activities. The proposed redevelopment is not expected to impact the mangrove shoreline and so would not impact this use.

5 JURISDICTIONAL WETLANDS

The definitions in 33CFR 328.3 state that "waters of the United States" include interstate "wetlands" which are defined as those areas "inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Based on Version 2.0 of the Atlantic and Gulf Coastal Plain Regional Supplement to the Corps of Engineers Wetland Delineation Manual, the only portions of the project site which meets the definition of a wetland are the two retention basins and the shoreline fringe along Haldeman Creek. The retention basins are man-made structures which were created out of historically upland habitat and which are an integral part of the surface water management system for the development. Permitting of the redevelopment will require review and authorization from the SFWMD.

We believe that the USACE will not assert jurisdiction over the stormwater retention areas due to the fact that they are man-made, they were constructed out of uplands for the stormwater management system, and they are isolated from direct connection to "Waters of the US" by the overflow structure. The USACE will assert jurisdiction over Haldeman Creek and the adjacent shoreline mangroves. A Nationwide Permit will likely be required from the Corps to repair or upgrade the outfall structure from the development into the Creek which currently appears to be in need of maintenance (See Photo 9 in Section 3 above).

See the attached FLUCFCS map for the approximate extent of the wetland areas.

6 PERMITTING

Based on the document research conducted to date, we could find no evidence of prior SFWMD or USACE permitting for the project. It is assumed that this project was permitted by Collier County back when the County had the delegation of authority to do so for smaller projects with no wetland impacts.

No USACE or SFWMD Environmental Resource Permits were found.

Environmental / Wetland

SFWMD (State review) - The redevelopment plan will impact the existing surface water management system and will require permitting for the proposed changes. The wetland impacts that would potentially require mitigation would be the relocation or improvement of the outfall from the development into the creek. We would anticipate any impacts associated with this to be very minor and could be mitigated through improvements to the remainder of the shoreline.

USACE (Federal review) – If the redevelopment does require relocation or improvements to the stormwater outfall into the creek, then a Nationwide permit from the Corps will be required for modifications to the existing stormwater management system (Nationwide #43). There is no direct connection between the existing stormwater detention basins and the Creek. They are separated by the overflow structure. Therefore we do not believe that the Corps will assert jurisdiction over the retention basins and no USACE permitting will be required for the reconfiguration or elimination of the two retention basins.

FWS (Federal Listed Species review) – Since this is the redevelopment of an already developed property, no additional impacts to any listed species would occur. A preconstruction nesting survey may be required to insure that no wading bird or osprey nests are present in any trees that may be removed.

Docks

No mention was made as to whether or not docks would be a part of the redevelopment. Since the project is on Haldeman Creek, docks should be an allowed use. Water depths and the width of the waterway would limit the number and types of vessels that could moor. And docks or water access would require additional permitting with the SFWMD and the Corps.

Collier County

The County requires preservation of existing native habitat within a PUD to meet the Land Development Code. If the zoning on these parcels is changed to residential, it is anticipated that the County will require preservation of a portion of the existing native habitat. Since this would be a residential or mixed-use development within the Coastal High-Hazard area a minimum of 25% of the existing native habitat will need to be preserved. It is not known if the County will include the native landscape buffer along the southern boundary within native habitat calculations or exactly where the Drainage Easement for Haldeman Creek is in relationship to the vegetation but assuming a worst-case scenario, a minimum of 25% of the shoreline and buffer would need to be preserved to meet the native vegetation retention requirements.

7 CONCLUSION

Based on the preliminary site assessment and document research conducted, we believe that wetland permitting will be limited to the relocation or improvements to the stormwater outfall structure from the development into the Creek. If docks are proposed, then additional state and federal permitting will be required for the docks.

A gopher tortoise relocation permit may be required if the burrow observed remains active and the proposed redevelopment impacts the area within 25 feet of where the burrow is located.

Redevelopment will likely require native habitat preservation for the County which would result in a conservation easement over at least 25% of the shoreline mangroves (assuming that they are not within the existing drainage easement).

Based on current USACE review timeframes, between 4 and 8 months should be allowed for the federal permitting effort for the Nationwide permit (if required). State permitting should be accomplished concurrently with the federal permitting.

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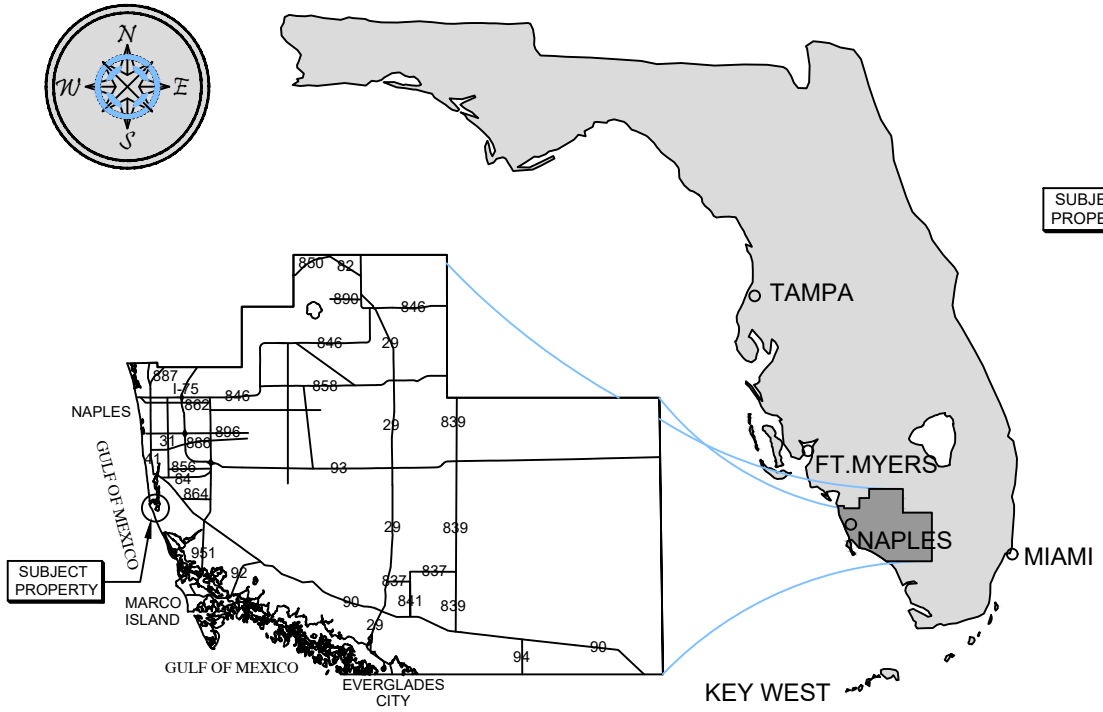
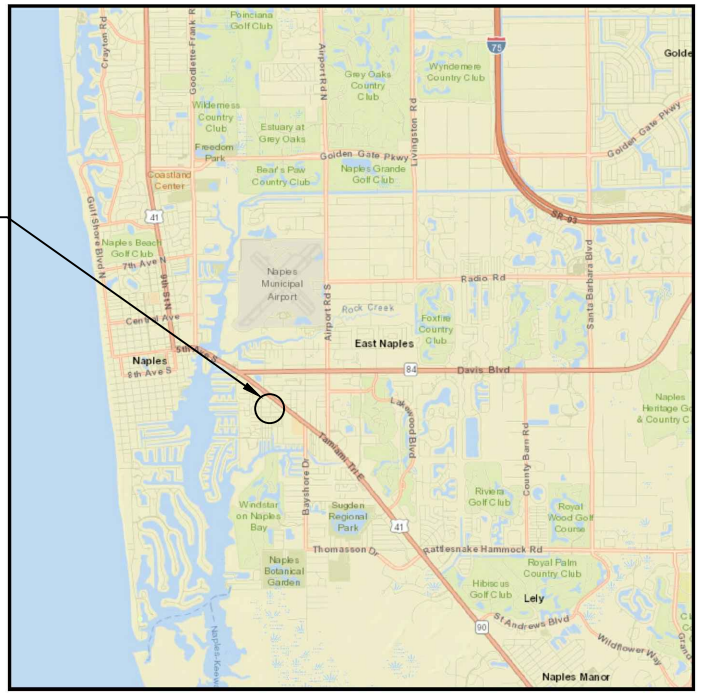
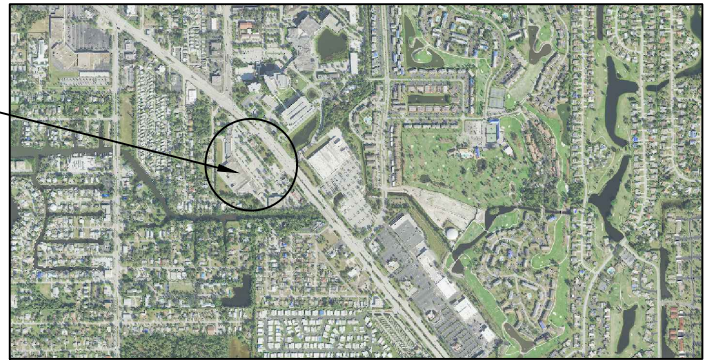
STATE OF FLORIDA



COLLIER COUNTY



VICINITY MAP



COUNTY AERIAL

SITE ADDRESS:
<> 3290 TAMIAMI TR
NAPLES, FL 34112

NOTES:
<> THESE DRAWINGS ARE FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR CONSTRUCTION USE.

<> LATITUDE: N 26.124865
<> LONGITUDE: W 81.765841

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COURTHOUSE SHADOWS SHOPPING CENTER

LOCATION MAP

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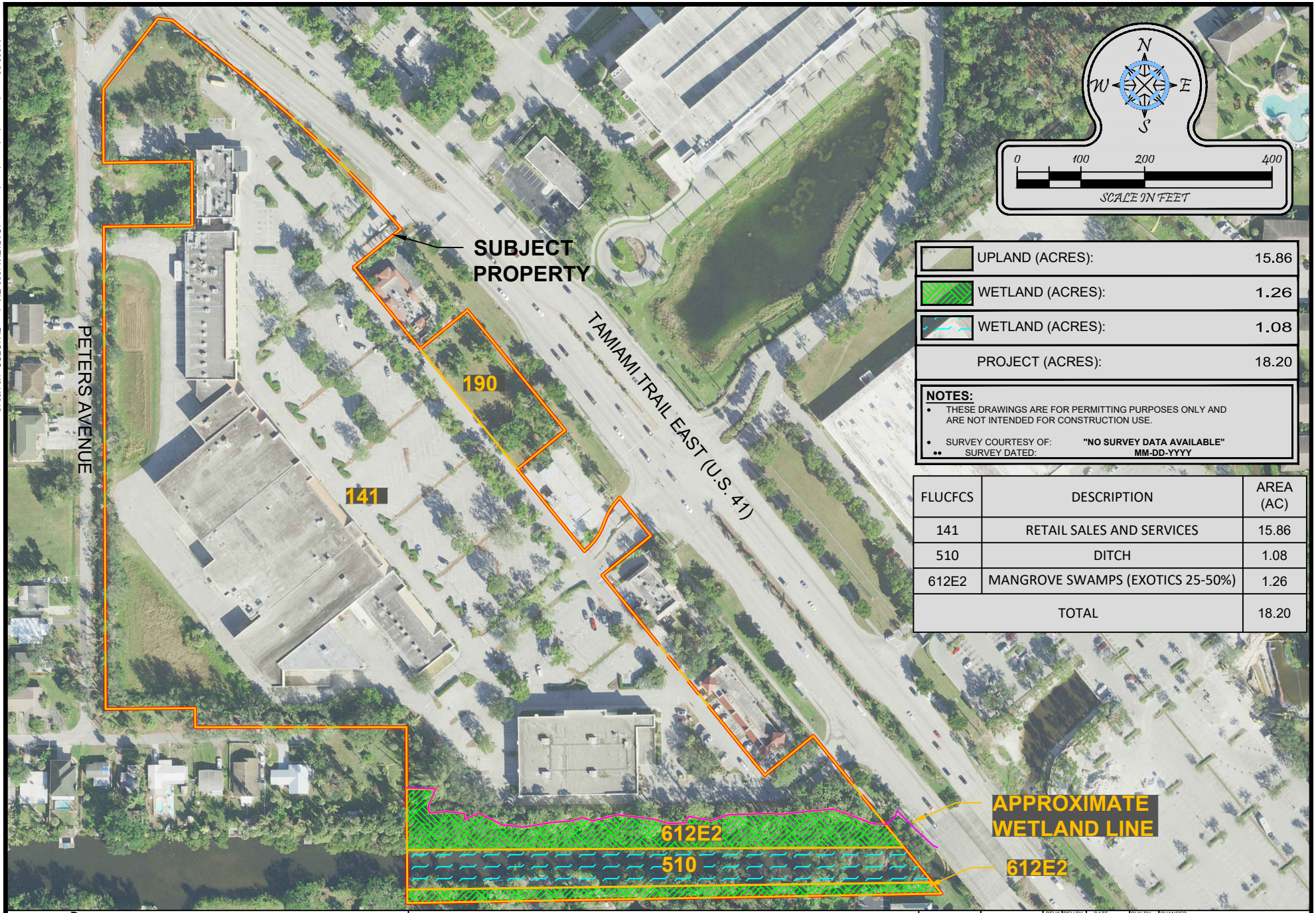
		REV#	REV BY:	DATE:	CHK BY:	CHANGED:
DESIGNED:	TH	1.	-	-	-	-
DRAWN BY:	RMJ	2.	-	-	-	-
CREATED:	01-31-19	3.	-	-	-	-
JOB NO.:	1898.00	4.	-	-	-	-
SHEET NO.:	01 OF 04	5.	-	-	-	-

SECTION- 11-14 TOWNSHIP- 50S RANGE- 25E

p:\1898.00-courthouse shadows shopping center\CAD\EIA\1898-EIA.dwg FLUCFCS 1/31/2019



UPLAND (ACRES):	15.86
WETLAND (ACRES):	1.26
WETLAND (ACRES):	1.08
PROJECT (ACRES):	18.20

NOTES:

- THESE DRAWINGS ARE FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR CONSTRUCTION USE.
- SURVEY COURTESY OF: **"NO SURVEY DATA AVAILABLE"**
  - SURVEY DATED: **MM-DD-YYYY**

FLUCFCS	DESCRIPTION	AREA (AC)
141	RETAIL SALES AND SERVICES	15.86
510	DITCH	1.08
612E2	MANGROVE SWAMPS (EXOTICS 25-50%)	1.26
TOTAL		18.20

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COURTHOUSE SHADOWS SHOPPING CENTER

FLUCFCS MAP

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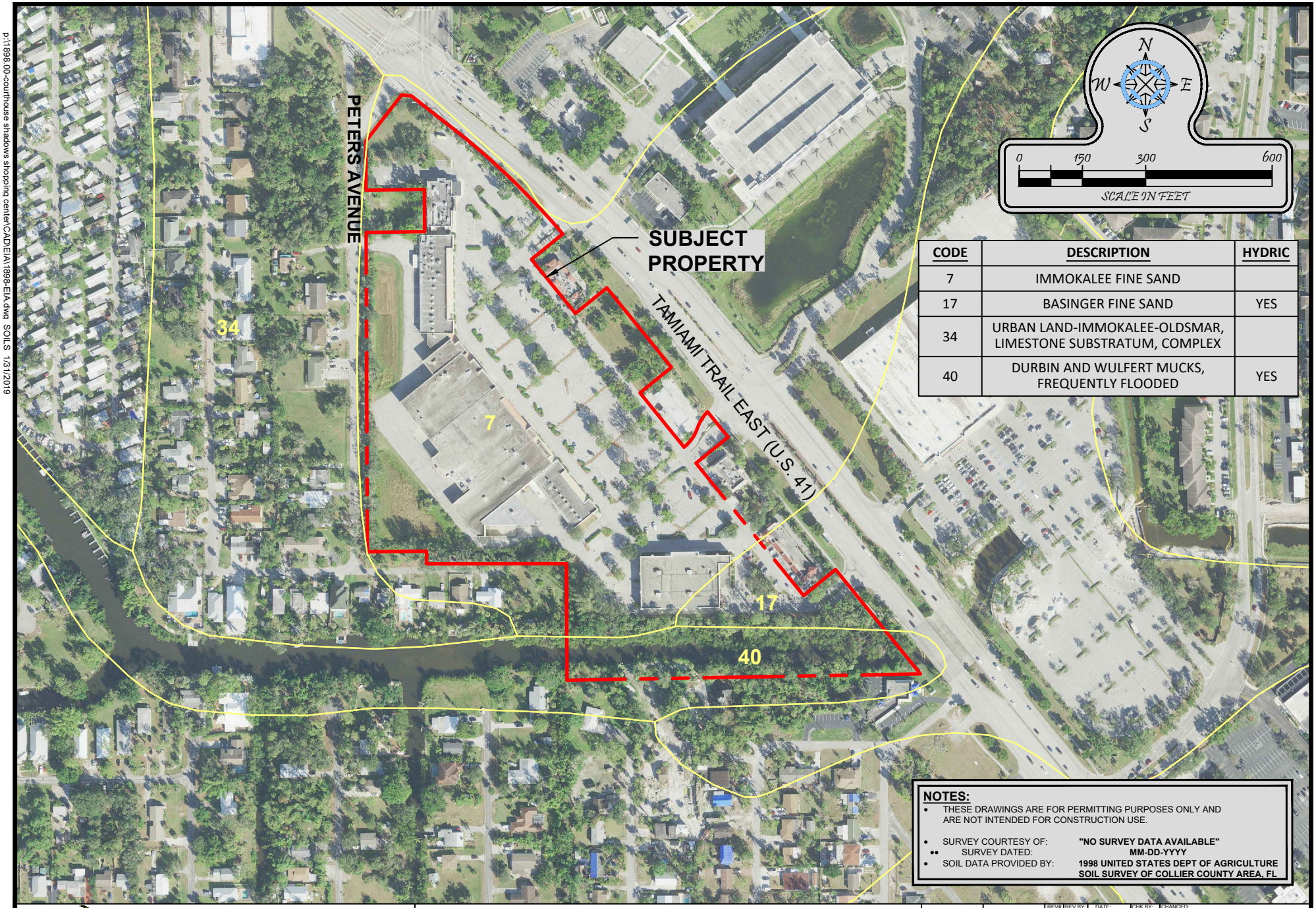
SECTION- 11-14 TOWNSHIP- 50S RANGE- 25E

p:\1898.00-courthouse shadows shopping center\CAD\EIA\1898-EIA.dwg SOILS 1/31/2019



CODE	DESCRIPTION	HYDRIC
7	IMMOKALEE FINE SAND	
17	BASINGER FINE SAND	YES
34	URBAN LAND-IMMOKALEE-OLDSMAR, LIMESTONE SUBSTRATUM, COMPLEX	
40	DURBIN AND WULFERT MUCKS, FREQUENTLY FLOODED	YES

NOTES:

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- SURVEY COURTESY OF: **"NO SURVEY DATA AVAILABLE"**
- SURVEY DATED: **MM-DD-YYYY**
- SOIL DATA PROVIDED BY: **1998 UNITED STATES DEPT OF AGRICULTURE SOIL SURVEY OF COLLIER COUNTY AREA, FL**

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COURTHOUSE SHADOWS SHOPPING CENTER

SOILS MAP

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SECTION- 11-14 TOWNSHIP- 50S RANGE- 25E

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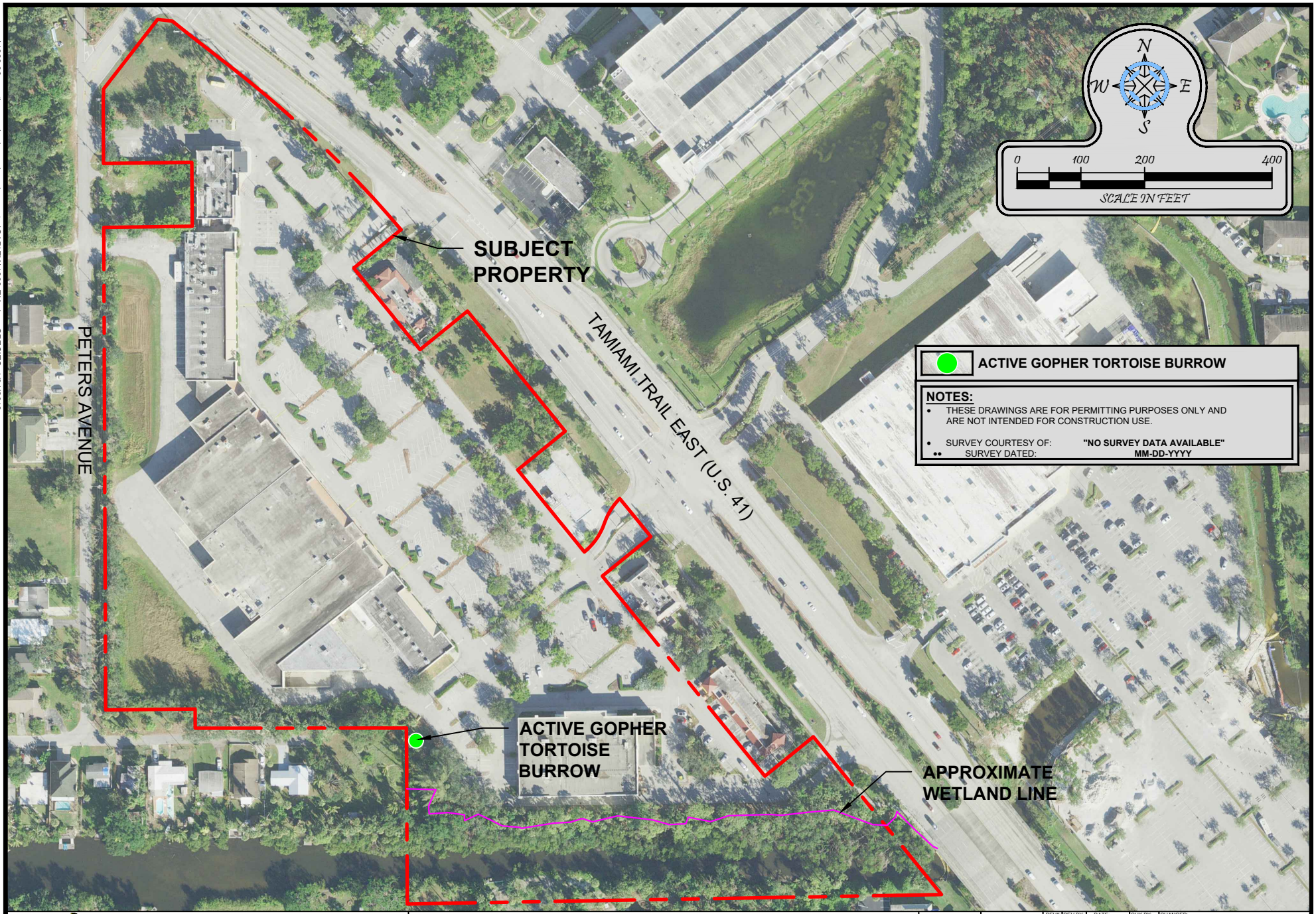

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LISTED SPECIES MAP

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