APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 4/18/2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:Jacksonville District; Walton Development / Panasoffkee Preserve; SAJ-2016-00290

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: FL County/parish/borough: Sumter City: Wildwood
Center coordinates of site (lat/long in degree decimal format): Lat. 28.886307° **Pick List**, Long. -82.123297° **Pick List**.
Universal Transverse Mercator:
Name of nearest waterbody: Lake Panasoffkee
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lake Panasoffkee
Name of watershed or Hydrologic Unit Code (HUC): Withlacoochee River subbasin (03100208), Lake Panasoffkee watershed (0310020807), and Little Jones Creek subwatershed (031002080706)

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: 4/16/2016
☒ Field Determination. Date(s): 3/1/2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** *"waters of the U.S."* within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply): [1]

☐ TNWs, including territorial seas
☐ Wetlands adjacent to TNWs
☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
☐ Non-RPWs that flow directly or indirectly into TNWs
☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
☐ Impoundments of jurisdictional waters
☐ Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: 84.81 acres.

c. Limits (boundaries) of jurisdiction based on: **1987 Delineation Manual**
Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):[3]

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: **Subject wetlands 1, 2, 3, 4 and 5 are 0.407, 0.135, 0.124, 0.032 and 2.75 acre in size, respectively. The subject wetlands are low quality depressional freshwater wetlands with surface hydrologic connection to jurisdictional wetland Tract B. The subject wetlands are approximately 3.7 miles from Lake Panasoffkee, a TNW. Additionally, there is no**

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

surface hydrologic connection from the subject wetlands to the unnamed RPW. The subject wetlands do not provide a substaintial nexus to interstate commerce.

.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: 25616 **acres**
Drainage area: 25616 **acres**
Average annual rainfall: 42 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☒ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **2-5** aerial (straight) miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A.

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW[5]: Water flows from Wetland named Tract B through a large culvert, under County Road 475 , through an unnamed relatively permanent water two wetlands abutting the TNW (Lake Panasoffkee).
Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: The RPW appears to have ditched prior to 1941.

Tributary properties with respect to top of bank (estimate):
Average width: 5 feet
Average depth: 3 feet
Average side slopes: **2:1.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☒ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☒ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Channel appears stable.
Presence of run/riffle/pool complexes. Explain: N/A.
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): 5 %

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **20 (or greater)**
Describe flow regime: The flow regime meets the criteria of at least 3 months of flow..
Other information on duration and volume: .

Surface flow is: **Discrete and confined**. Characteristics: .

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☒ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: the water appeared tannic.

---

[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

Identify specific pollutants, if known: The majority of pollutants are attributed to livestock grazing and run-off from adjacent roadways.

(iv) Biological Characteristics. Channel supports (check all that apply):

☐ Riparian corridor. Characteristics (type, average width): .
☐ Wetland fringe. Characteristics: .
☒ Habitat for:
☐ Federally Listed species. Explain findings: .
☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☒ Aquatic/wildlife diversity. Explain findings: The RPW provides habitat invertebrate and amphibian species and foraging opportunities for terrestrial species.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:
Properties:
Wetland size:84.81 acres
Wetland type. Explain: Freshwater marsh.
Wetland quality. Explain: The water quality is likely moderate due to live stock grazing is surrounding uplands.
Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:
Flow is: **Perennial flow**. Explain: .

Surface flow is**: Discrete and confined**
Characteristics: .

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:
☐ Directly abutting
☒ Not directly abutting
☒ Discrete wetland hydrologic connection. Explain: Wetland named Tract B is connected to the RPW by culvert under County Road 475.
☐ Ecological connection. Explain: .
☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW
Project wetlands are **Pick List** river miles from TNW.
Project waters are **2-5** aerial (straight) miles from TNW.
Flow is from: **Pick List.**
Estimate approximate location of wetland as within the **50 - 100-year** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: The freshwater wetlands appears to be of good quality.
Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian buffer. Characteristics (type, average width): .
☐ Vegetation type/percent cover. Explain: .
☒ Habitat for:
☒ Federally Listed species. Explain findings: The wetland provides suitable foraging habitat for the Wood stork and is within the core foraging area of a Wood stork colony.
☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☒ Aquatic/wildlife diversity. Explain findings:The wetland provides habitat invertebrate and amphibian species and foraging opportunities for terrestrial species.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **1**
Approximately (84.81) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Y	84.81		

Summarize overall biological, chemical and physical functions being performed: The subject wetland provides habitat for invertebrate and amphibian species, foraging for terrestrial species, nutrient sequestration, and flood water storage.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☒ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: **84.81** acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

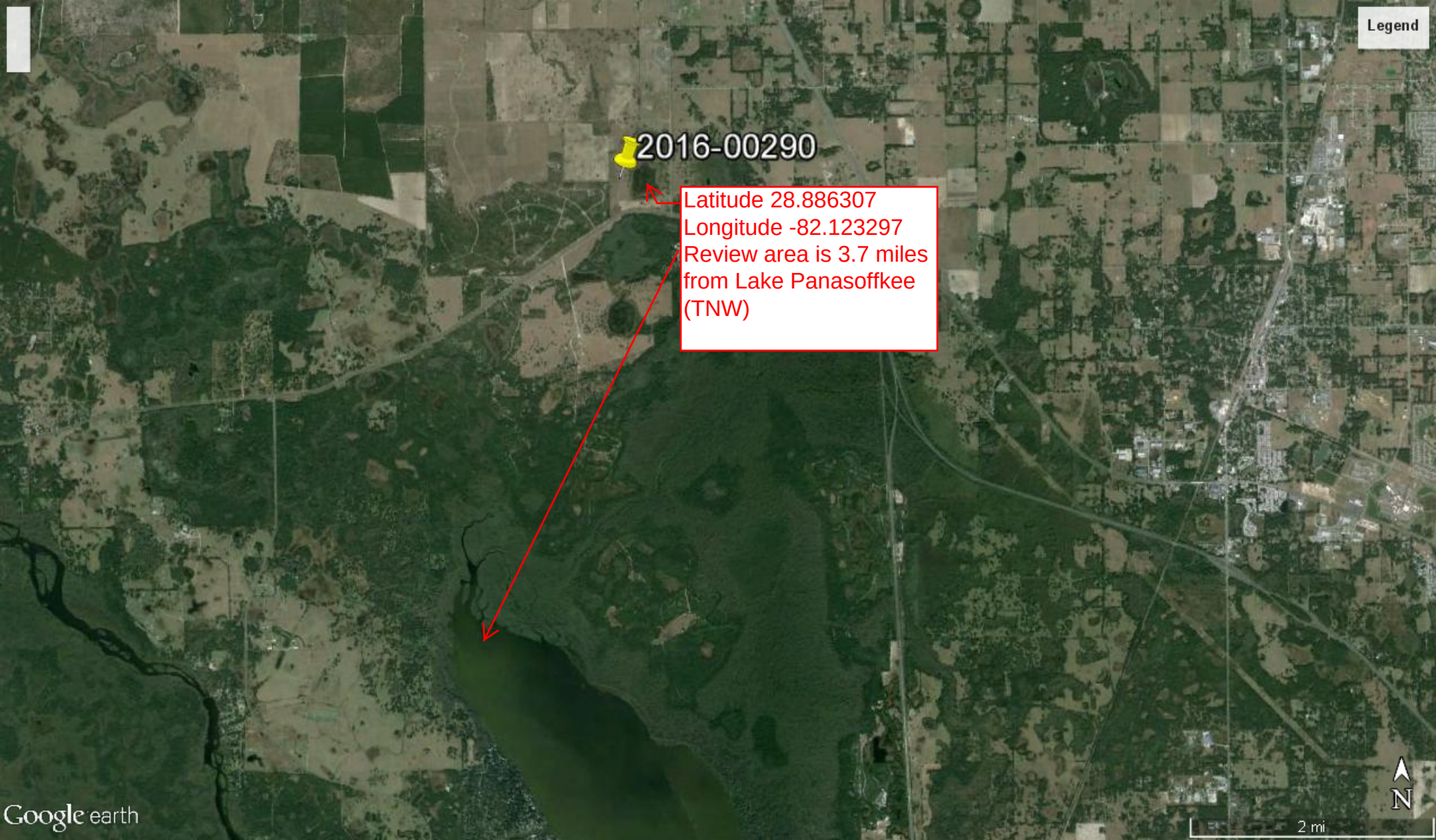
Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: 3.448 acres.

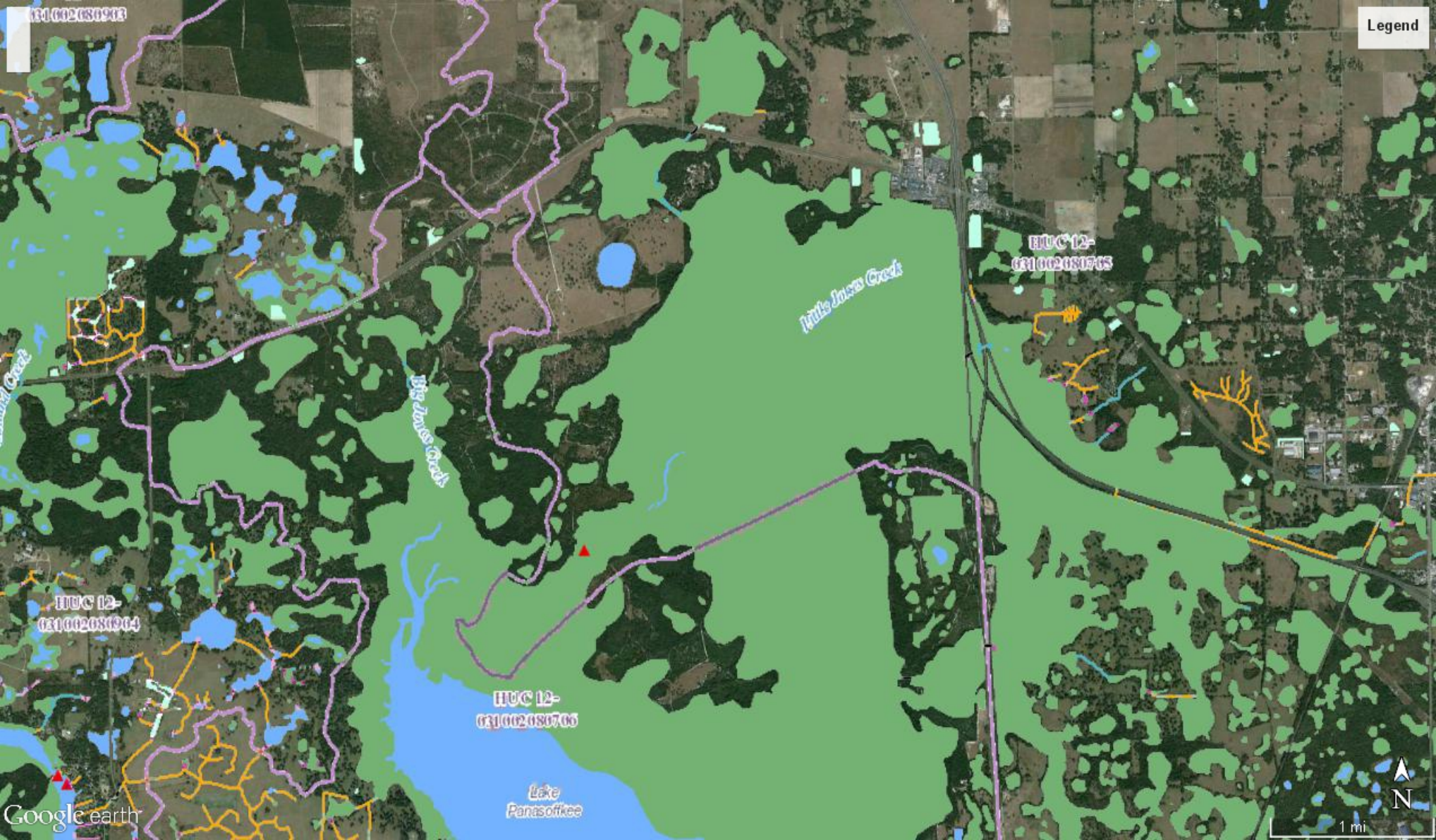
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

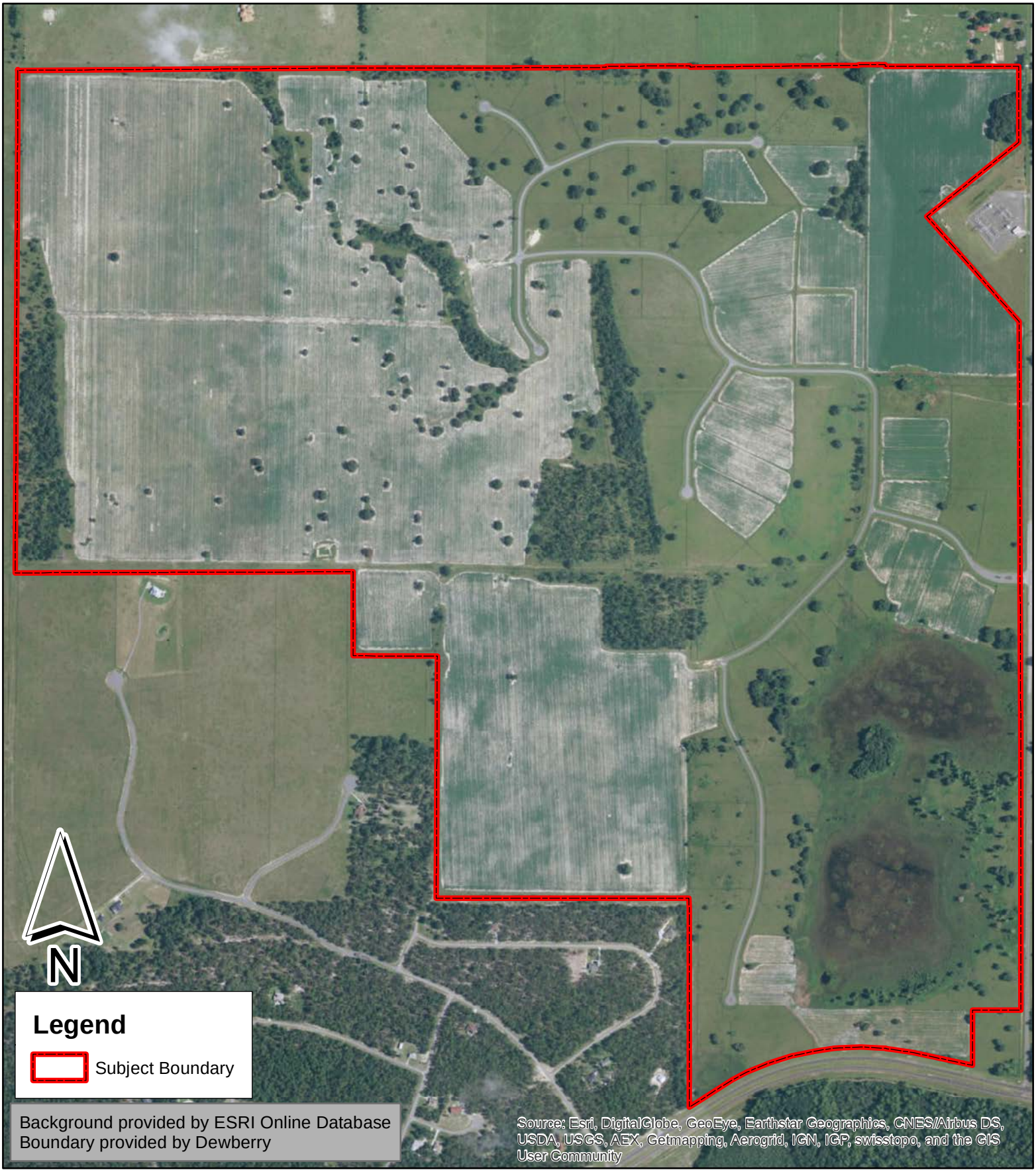
SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☒ U.S. Geological Survey Hydrologic Atlas: .
☒ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name: .
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):Google Earth 4/18/2016.
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .


Legend
2016-00290
Latitude 28.886307
Longitude -82.123297
Review area is 3.7 miles from Lake Panasoffkee (TNW)
Google earth
N
2 mi


031002080903
Legend
HUC 12-
031002080705
Little Jones Creek
Big Jones Creek
HUC 12-
031002080804
HUC 12-
031002080706
Lake
Panasoffkee
Google earth
N
1 mi

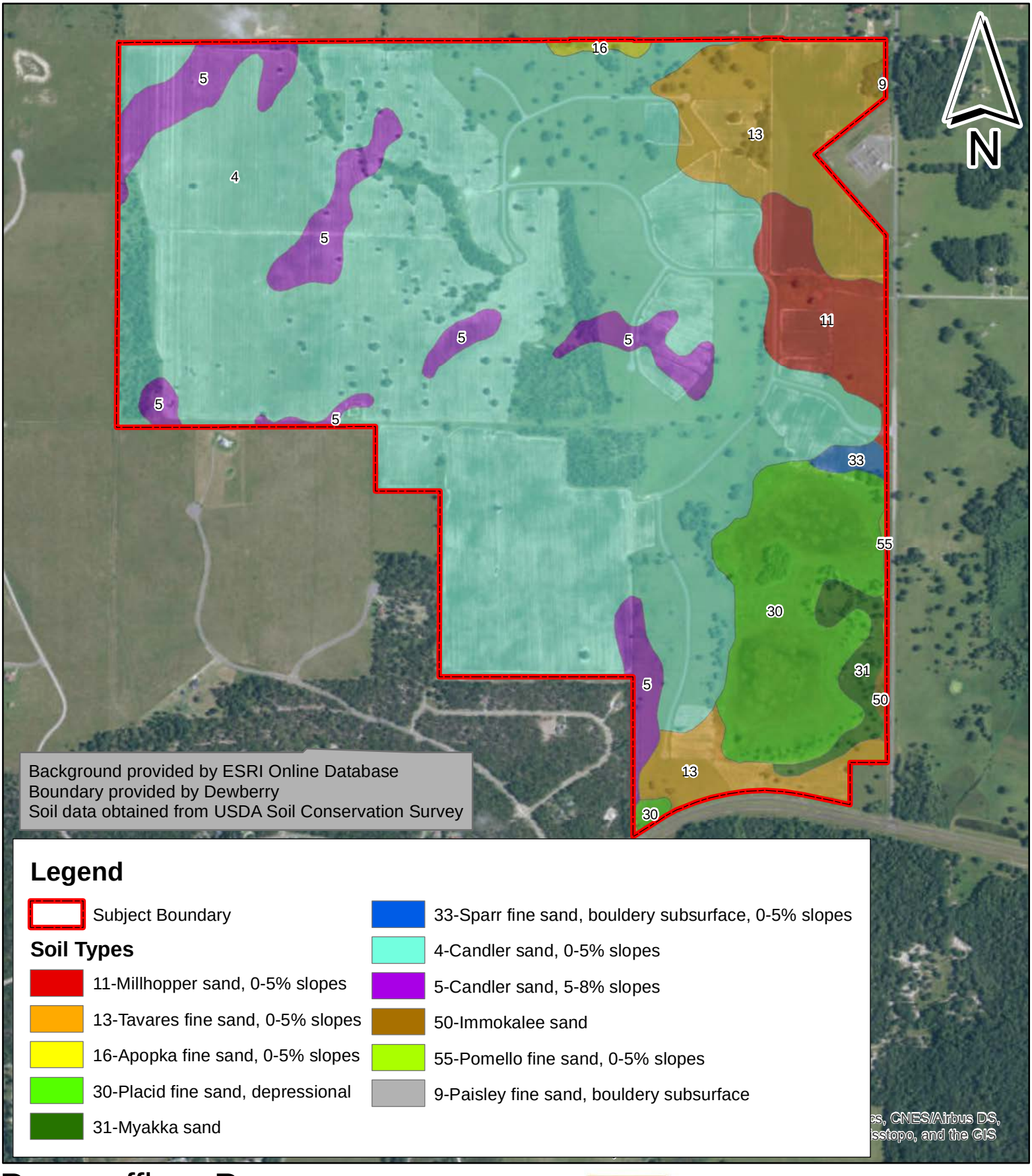


Panasoffkee Preserve

Ecological Assessment
Figure 1- Aerial Map
Location in Sections 29, 30, and 32, T18S, R22E
Sumter County, Florida

0 500 1,000 2,000 Feet

Modica & Associates, Inc.
Environmental Planning, Design & Permitting
302 Mohawk Road
Clermont, FL 34715
Phone: (352) 394-2000
Fax: (352) 394-1159
Email: Environmental@Modica.cc
www.ModicaAndAssociates.com

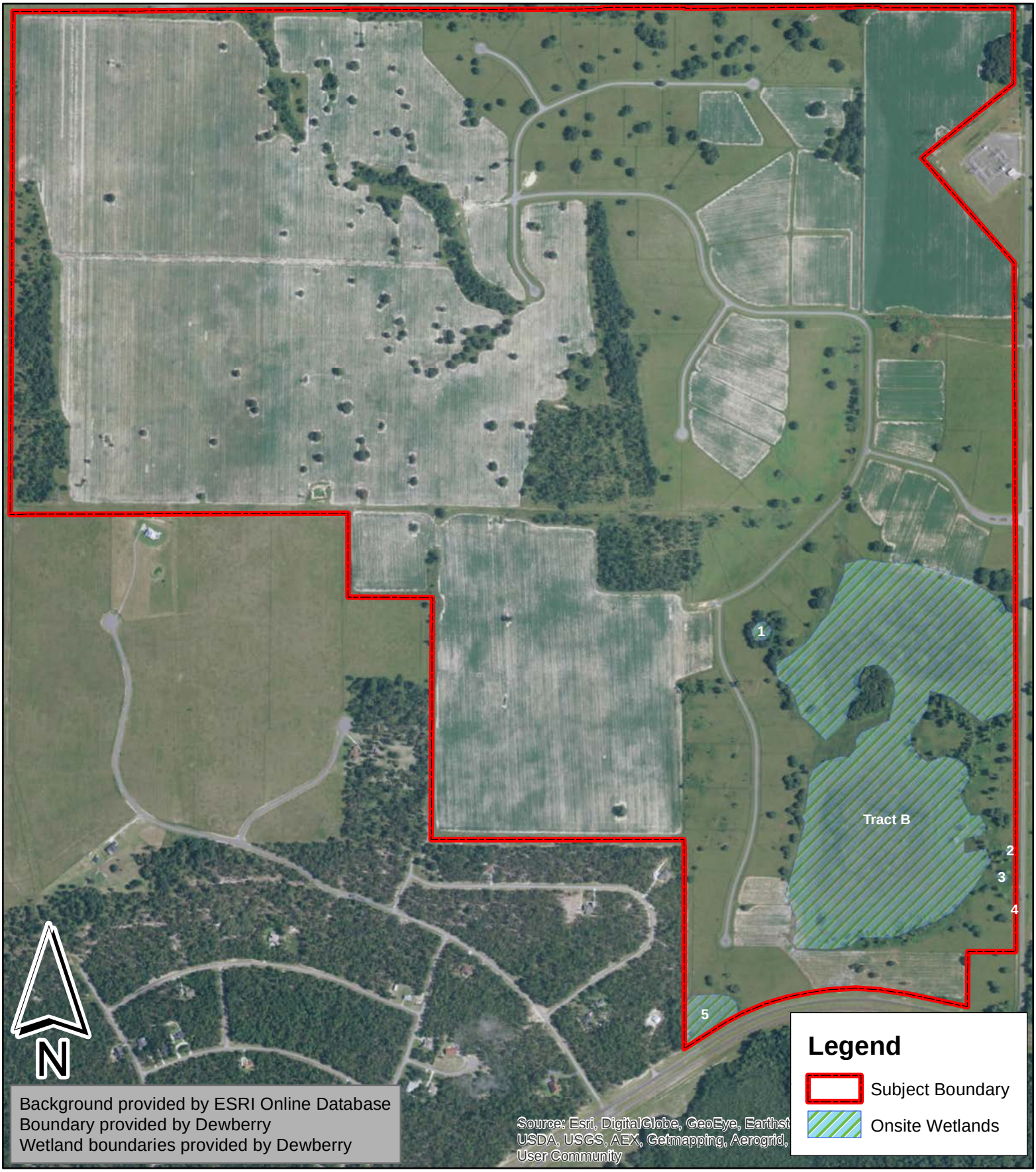


Panasoffkee Preserve

Ecological Assessment
Figure 2- Soils Map
Location in Sections 29, 30, and 32, T18S, R22E
Sumter County, Florida

0 650 1,300 2,600 Feet

Modica & Associates, Inc.
Environmental Planning, Design & Permitting
302 Mohawk Road
Clermont, FL 34715
Phone: (352) 394-2000
Fax: (352) 394-1159
Email: Environmental@Modica.cc
www.ModicaAndAssociates.com

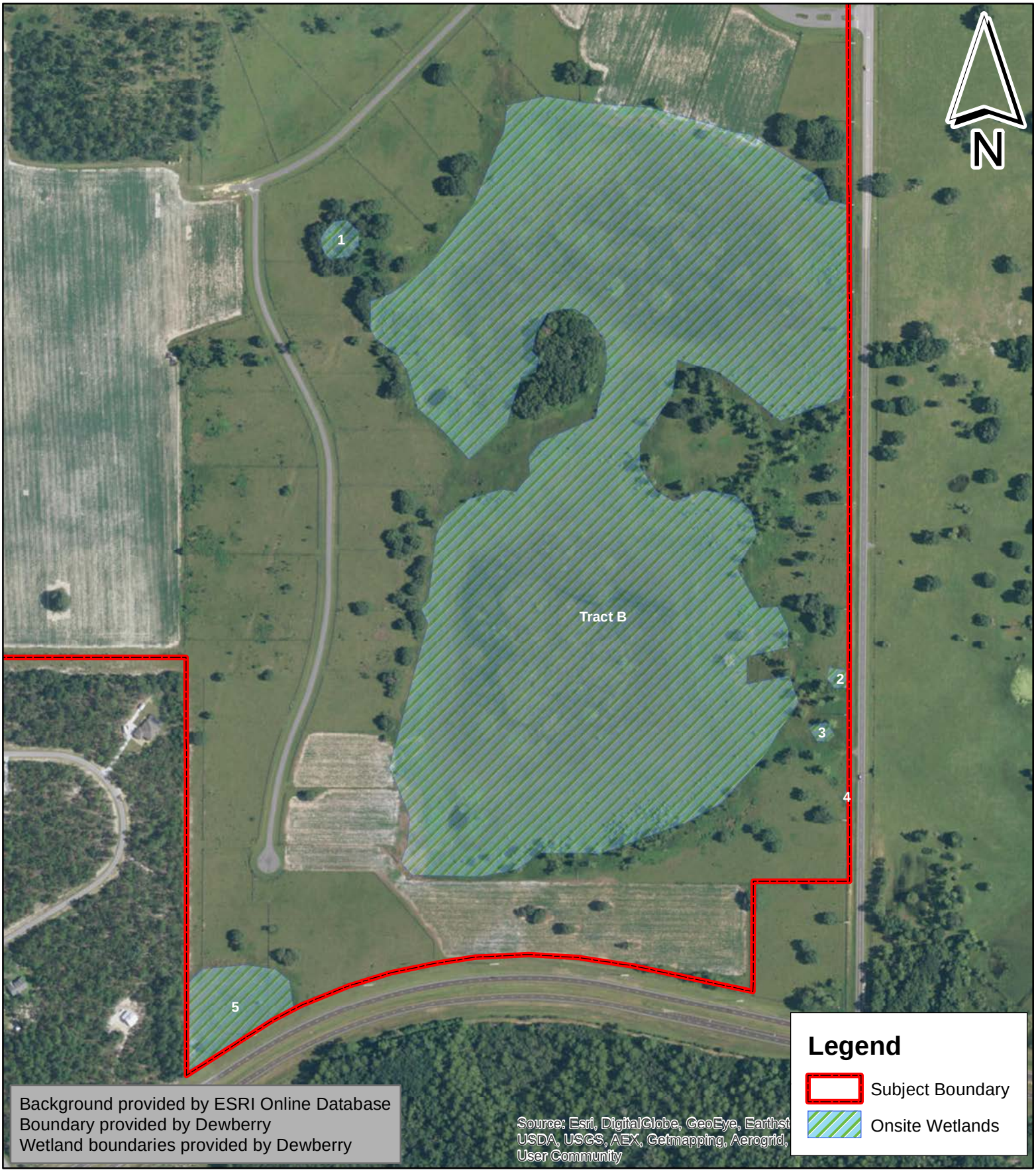


Panasoffkee Preserve

Ecological Assessment
Figure 3- Wetland Map
Location in Sections 29, 30, and 32, T18S, R22E
Sumter County, Florida

0 500 1,000 2,000 Feet

Modica & Associates, Inc.
Environmental Planning, Design & Permitting
302 Mohawk Road
Clermont, FL 34715
Phone: (352) 394-2000
Fax: (352) 394-1159
Email: Environmental@Modica.cc
www.ModicaAndAssociates.com

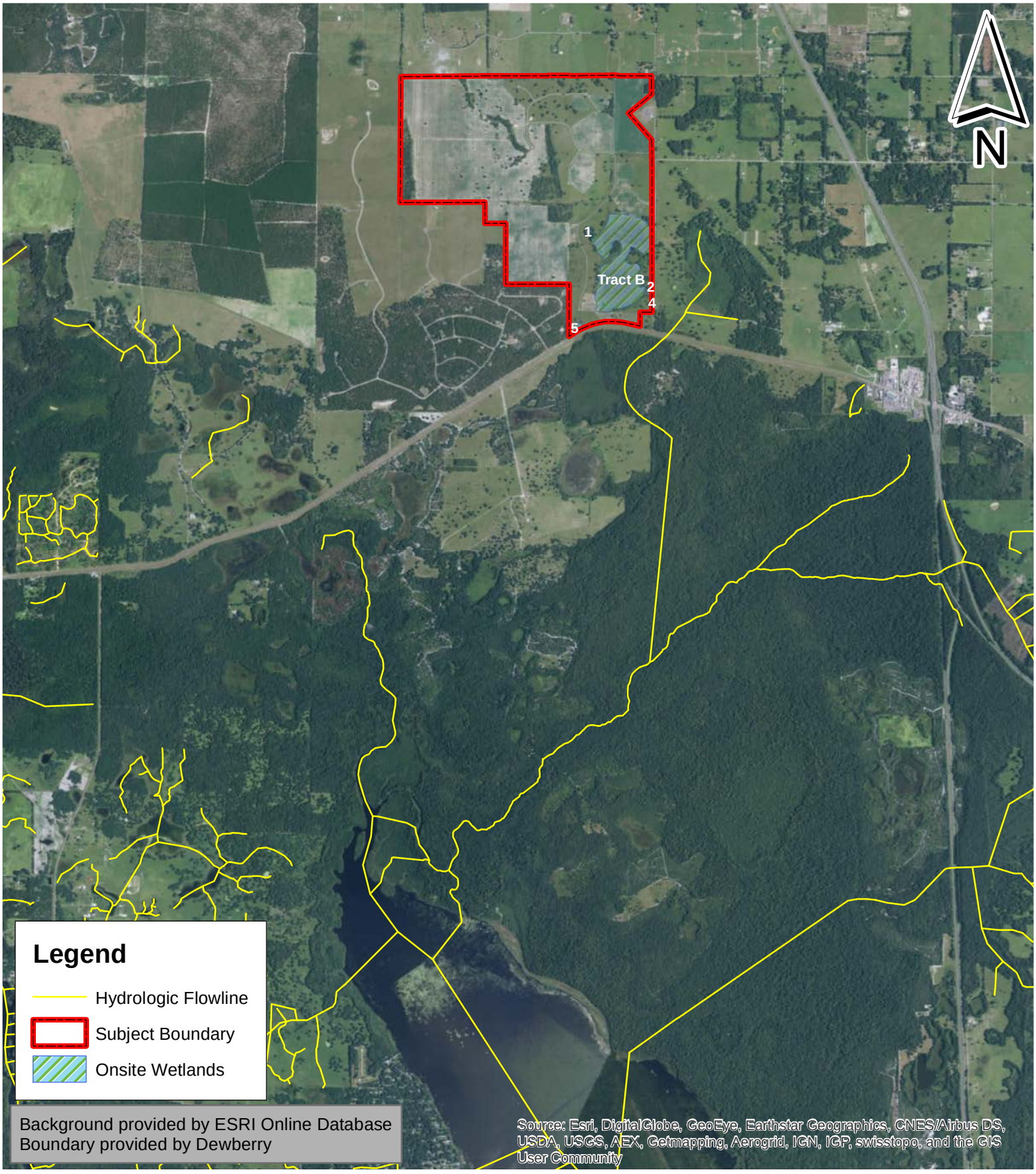


Panasoffkee Preserve

Ecological Assessment
Figure 4- Wetland Map (Zoomed)
Location in Sections 29, 30, and 32, T18S, R22E
Sumter County, Florida

0 250 500 1,000 Feet

Modica & Associates, Inc.
Environmental Planning, Design & Permitting
302 Mohawk Road
Clermont, FL 34715
Phone: (352) 394-2000
Fax: (352) 394-1159
Email: Environmental@Modica.cc
www.ModicaAndAssociates.com

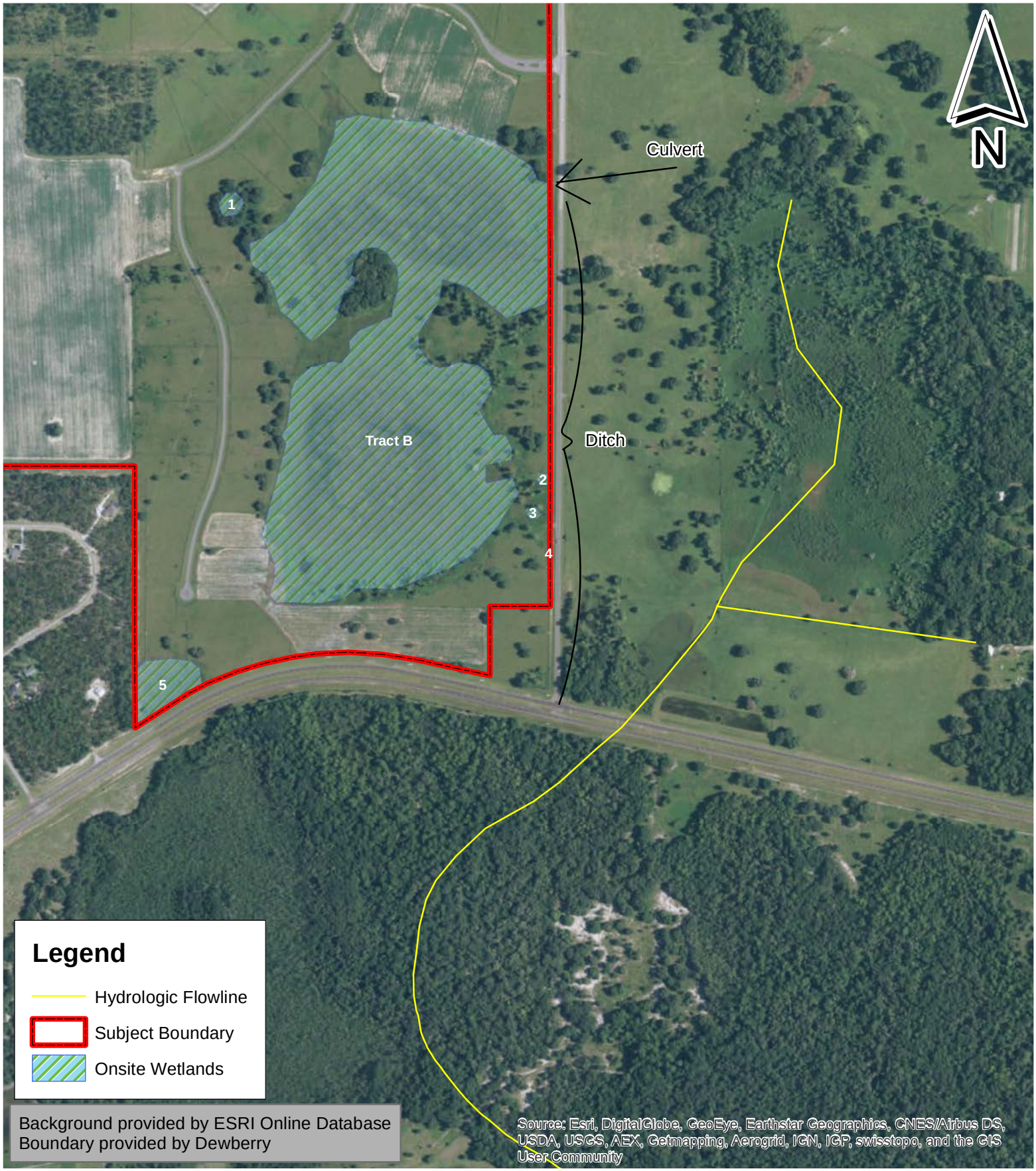


Panasoffkee Preserve

Ecological Assessment
Figure 5- Flowline Map
Location in Sections 29, 30, and 32, T18S, R22E
Sumter County, Florida

0 2,000 4,000 8,000 Feet

Modica & Associates, Inc.
Environmental Planning, Design & Permitting
302 Mohawk Road
Clermont, FL 34715
Phone: (352) 394-2000
Fax: (352) 394-1159
Email: Environmental@Modica.cc
www.ModicaAndAssociates.com



Panasoffkee Preserve

Ecological Assessment
Figure 6- Flowline Map (Zoomed)
Location in Sections 29, 30, and 32, T18S, R22E
Sumter County, Florida

0 500 1,000 2,000 Feet

Modica & Associates, Inc.
Environmental Planning, Design & Permitting
302 Mohawk Road
Clermont, FL 34715
Phone: (352) 394-2000
Fax: (352) 394-1159
Email: Environmental@Modica.cc
www.ModicaAndAssociates.com

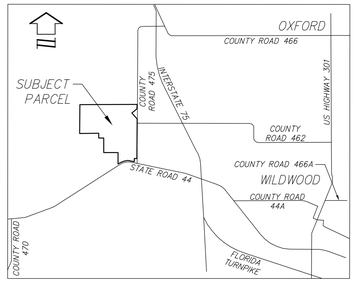
LEGEND AND ABBREVIATIONS:

±	MORE OR LESS
EL.	ELEVATION
LB	LICENSED BUSINESS
NO.	NUMBER
LS	LAND SURVEYOR
I.D.	IDENTIFICATION
ORB	OFFICIAL RECORDS BOOK
℄	CENTERLINE
R	RADIUS
L	ARC LENGTH
Δ	DELTA (CENTRAL ANGLE)
CH	CHORD LENGTH
CB	CHORD BEARING
POC	POINT ON CURVE
POL	POINT ON LINE
PCC	POINT OF COMPOUND CURVATURE
PRC	POINT OF REVERSE CURVATURE
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PI	POINT OF INTERSECTION
P.O.C.	POINT OF COMMENCEMENT
P.O.B.	POINT OF BEGINNING
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
SWFWMD	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
PB	PLAT BOOK
OR	OFFICIAL RECORDS BOOK
PG(S)	PAGE(S)
R/W	RIGHT OF WAY
ESMT	EASEMENT
SEC	SECTION
FND	FOUND
REC	RECOVERED
CCR	CERTIFIED CORNER RECORD
RLS	REGISTERED LAND SURVEYOR
CM	CONCRETE MONUMENT
IRC	IRON ROD AND CAP
IR	IRON ROD
IP	IRON PIPE
CLF	CHAIN LINK FENCE
⊟	FOUND CONCRETE MONUMENT AS NOTED
○	FOUND NAIL AS NOTED
◎	FOUND NAIL & DISK AS NOTED
◎	SET NAIL & DISK (LB 8011)
◉	FOUND IRON ROD & CAP AS NOTED
●	FOUND IRON ROD AS NOTED
◍	SET 5/8" IRON ROD & CAP (LB 8011)
✳	WETLAND FLAG
	LINE BREAK
×—×	FENCE LINE AS NOTED
	WETLAND BUFFER
	LOT 14

0 250 500 1000

1 INCH = 500 FEET

KEY MAP



VICINITY MAP: NOT TO SCALE

SURVEY NOTES:

1. THE SPECIFIC PURPOSE OF THIS SURVEY IS TO SHOW THE WETLAND LINE DELINEATED AND FLAGGED BY DEWBERRY ENGINEERS, INC. ENVIRONMENTAL TEAM AND FIELD LOCATED ON AUGUST 11, 2015 FOR PERMITTING WITH SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT TOGETHER WITH THE EXISTING WETLAND PRESERVATION AREAS PLATTED IN THE HIGHLANDS AT OAK HILL PHASE ONE RECORDED IN PLAT BOOK 9, PAGES 25–25E. THIS IS NOT A BOUNDARY SURVEY.
2. BEARINGS SHOWN HEREON ARE ASSUMED AND BASED ON THE NORTH LINE OF THE NORTHEAST 1/4 OF SECTION 30, TOWNSHIP 18 SOUTH, RANGE 22 EAST, AS BEING N89°33'16"E.
3. COORDINATES SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM WEST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) WITH 2011 ADJUSTMENT.
4. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM) PANEL NO. 12119C0044D AND 12119C0063D, SUMTER COUNTY, FLORIDA, EFFECTIVE DATE OF SEPTEMBER 27, 2013, THE PROPERTY DESCRIBED HEREON LIES WITHIN ZONE(S) "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AND ZONE "A" (NO BASE FLOOD ELEVATIONS DETERMINED).
5. BOUNDARY INFORMATION SHOWN HEREON IS FOR INFORMATIONAL PURPOSES ONLY AND IS FROM A PREVIOUS BOUNDARY SURVEY PROVIDED BY THE CLIENT FROM FARNER BARLEY AND ASSOCIATES, INC. UNDER JOB NUMBER 131273.0000, DATED JANUARY 20, 2014.

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THIS SURVEY MEETS THE APPLICABLE "STANDARDS OF PRACTICE" AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN RULE 5J17.050–.052, FLORIDA ADMINISTRATIVE CODE.

WILLIAM D. DONLEY — 09/14/15
WILLIAM D. DONLEY — DATE
FLORIDA LICENSED SURVEYOR & MAPPER NO. LS 5381

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SUMTER, STATE OF FLORIDA, AND IS DESCRIBED AS FOLLOWS:

ALL OF SECTION 29, TOWNSHIP 18 SOUTH, RANGE 22 EAST, LESS THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4; IN SECTION 30, TOWNSHIP 18 SOUTH, RANGE 22 EAST, THE NORTHEAST 1/4 THEREOF AND THE NORTH 1 /2 OF THE SOUTHEAST 1/4; IN SECTION 32, TOWNSHIP 18 SOUTH, RANGE 22 EAST, THAT PORTION OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 LYING NORTH OF STATE ROAD 44, THAT PORTION OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 LYING NORTH OF STATE ROAD 44, THE NORTHEAST 1/4 OF THE NORTHWEST 1/4, AND THE EAST 1 /2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4; EXCEPT RIGHTS OF WAY STATE ROADS NOS. 44 AND 475.

ALSO:

N 1 /2 OF NE 1/4 AND ALL THAT PART OF THE SE 1/4 OF THE NE 1/4 LYING NORTH OF STATE ROAD 44; ALL IN SECTION 32, TOWNSHIP 18 SOUTH, RANGE 22 EAST, LESS RIGHTS OF WAY OF STATE ROAD 44 AND STATE ROAD 475.

LESS:

THAT PART OF THE NORTHEAST 1/4 OF SECTION 29, TOWNSHIP 18 SOUTH, RANGE 22 EAST, SUMTER COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: FROM THE SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 29, RUN NORTH 01°19'34" WEST ALONG THE EAST BOUNDARY OF THE AFORESAID NORTHEAST 1/4 A DISTANCE OF 578.72 FEET TO THE SOUTHERLY RIGHT-OF-WAY OF THE FLORIDA POWER CORPORATION CRYSTAL-RIVER CENTRAL FLORIDA TRANSMISSION LINE, THENCE NORTH 41°31'04" WEST ALONG SAID SOUTHERLY RIGHT-OF-WAY 79.14 FEET TO THE WEST RIGHT-OF-WAY OF C-475 AND HEREBY DESIGNATED AS THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL OF LAND. FROM SAID POINT OF BEGINNING CONTINUE NORTH 41°31'04" WEST ALONG THE AFORESAID SOUTHERLY RIGHT-OF-WAY 1,099.16 FEET, THENCE NORTH 50°52'12" EAST 927.47 FEET TO THE WEST RIGHT-OF-WAY OF C-475, THENCE SOUTH 0°22'17" EAST ALONG SAID WEST RIGHT-OF-WAY 1408.33 FEET TO THE POINT OF BEGINNING AND END OF THIS DESCRIPTION.

ALSO LESS:

PARCEL NO. 114

THAT PART OF:

THAT PORTION OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 LYING NORTH OF STATE ROAD 44, AND THAT PORTION OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 LYING NORTH OF STATE ROAD 44, SECTION 32, TOWNSHIP 18 SOUTH, RANGE 22 EAST, EXCEPT RIGHTS OF WAY STATE ROADS NOS. 44 AND 475.

AND

N 1 /2 OF NE 1/4 AND ALL THAT PART OF THE SE 1/4 OF THE NE 1/4 LYING NORTH OF SR 44; ALL IN SECTION 32, TOWNSHIP 18 SOUTH, RANGE 22 EAST; LESS RIGHTS OF WAY OF SR 44 AND SR 475.

BEING A PORTION OF LANDS AS DESCRIBED IN OFFICIAL RECORD BOOK 834, PAGE 802, PUBLIC RECORDS OF SUMTER COUNTY, FLORIDA.

LYING WITHIN THE FOLLOWING DESCRIBED BOUNDARIES:

COMMENCE AT THE NORTHEAST CORNER OF THE NORTHEAST 1/4 OF SECTION 32, TOWNSHIP 18 SOUTH, RANGE 22 EAST, SUMTER COUNTY, FLORIDA; THENCE ALONG THE EAST LINE OF SAID SECTION 32, SOUTH 00°01'06" WEST, 803.393 METERS (2635.80 FEET) TO THE NORTH LINE OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 32; THENCE CONTINUE ALONG SAID EAST LINE SOUTH 00°01'04" WEST 50.132 METERS (164.47 FEET) TO THE INTERSECTION OF THE CENTERLINE OF SURVEY OF STATE ROAD NO. 44 AND THE EAST LINE OF THE NORTHEAST 1/4 OF SOUTHEAST 1/4 OF SAID SECTION 32 AS SHOWN ON THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP F.P. NO. 2403731 (SECTION 18070) FOR THE POINT OF BEGINNING; THENCE NORTH 78°13'32" WEST, ALONG SAID CENTERLINE OF SURVEY, 360.598 METERS (1248.68 FEET) TO THE BEGINNING OF A CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 436.685 METERS (1432.69 FEET) AND A CHORD BEARING OF SOUTH 79°18'31" WEST; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 342.451 METERS (1123.52 FEET) THROUGH A CENTRAL ANGLE OF 44°55'54" TO THE END OF SAID CURVE; THENCE SOUTH 56°50'34" WEST 128.636 METERS (422.03 FEET) TO THE WEST LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 32, THENCE ALONG SAID WEST LINE NORTH 00°07'10" EAST, 29.140 METERS (95.60 FEET); THENCE NORTH 56°51'16" EAST 75.141 METERS (246.52 FEET) TO THE BEGINNING OF A CURVE CONCAVE SOUTHERLY HAVING A NORTH RADIUS OF 625.00 METERS (2050.52 FEET) AND A CHORD BEARING OF NORTH 59°40'55" EAST; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 61.691 METERS (202.40 FEET) THROUGH A CENTRAL ANGLE OF 05°39'19" TO THE NORTH LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 32 AND THE BEGINNING OF A CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 625.00 METERS (2050.52 FEET) AND A CHORD BEARING OF NORTH 76°13'51" EAST; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 299.351 METERS (982.12 FEET) THROUGH A CENTRAL ANGLE OF 27°26'33" TO THE EAST LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 32 AND THE BEGINNING OF A CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 625.000 METERS (2050.52 FEET) AND A CHORD BEARING OF SOUTH 84°08'12" EAST; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 128.960 METERS (423.10 FEET) THROUGH A CENTRAL ANGLE OF 11°49'20" TO THE END OF SAID CURVE; THENCE SOUTH 78°13'32" EAST 265.197 METERS (870.07 FEET) TO THE SOUTH LINE OF THE NORTHEAST 1/4 OF SAID SECTION 32; THENCE ALONG SAID SOUTH LINE NORTH 89°43'12" EAST 1.147 METERS (3.76 FEET)

LEGAL DESCRIPTION (CONTINUED):

TO THE EXISTING WESTERLY RIGHT OF WAY LINE OF COUNTY ROAD 475; THENCE ALONG SAID WESTERLY RIGHT OF WAY LINE SOUTH 00°01'06" WEST 0.245 METERS (0.80 FOOT); THENCE SOUTH 78°13'32" EAST 15.567 METERS (51.07 FEET) TO THE AFORESAID EAST LINE OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 32; THENCE ALONG SAID EAST LINE SOUTH 00°01'04" WEST 46.637 METERS (153.01 FEET) TO SAID CENTERLINE AND THE POINT OF BEGINNING.

LESS AND EXCEPT THE FOLLOWING RELEASED PARCEL:

TRACT A, THE HIGHLANDS AT OAKHILL, PHASE ONE, AS MORE PARTICULARLY DESCRIBED IN THE PARTIAL RELEASE OF MORTGAGE DATED AUGUST 12, 2008 AND RECORDED AUGUST 18, 2008 IN BOOK 1985, PAGE 540, PUBLIC RECORDS OF SUMTER COUNTY, FLORIDA.

REVISIONS				
FB/PG	DATE	DRAWN	REVISION	CKD

Dewberry
520 SOUTH MAGNOLIA AVENUE
ORLANDO, FLORIDA 32801
PHONE: 321.354.9826 FAX: 407.648.9104
WWW.DEWBERRY.COM
CERTIFICATE OF AUTHORIZATION NO. LB 8011

THE HIGHLANDS AT OAK HILL PHASE ONE AND PHASE 1A AND PORTIONS OF LANDS SITUATED IN SECTION 29, 30 AND 32, TOWNSHIP 18 SOUTH, RANGE 22 EAST
SUMTER COUNTY, FLORIDA

SPECIFIC PURPOSE SURVEY FOR WALTON DEVELOPMENT AND MANAGEMENT

FB/PG	FIELD DATE
29–18–22 / 4–6	08/11/15

DRAWING DATE	BY	APPROVED
08/24/15	TRC	WDD

PROJECT NO. 50069719

SCALE 1" = 500'

1 OF 2

Drawing name: S:\Walton_Villages at Panasoffkee_job LOWC-Civil 3D\Walton_Panasoffkee Preserve_Survey\lands.dwg SHEET 1 Sep 14, 2015 11:49am by tcamden

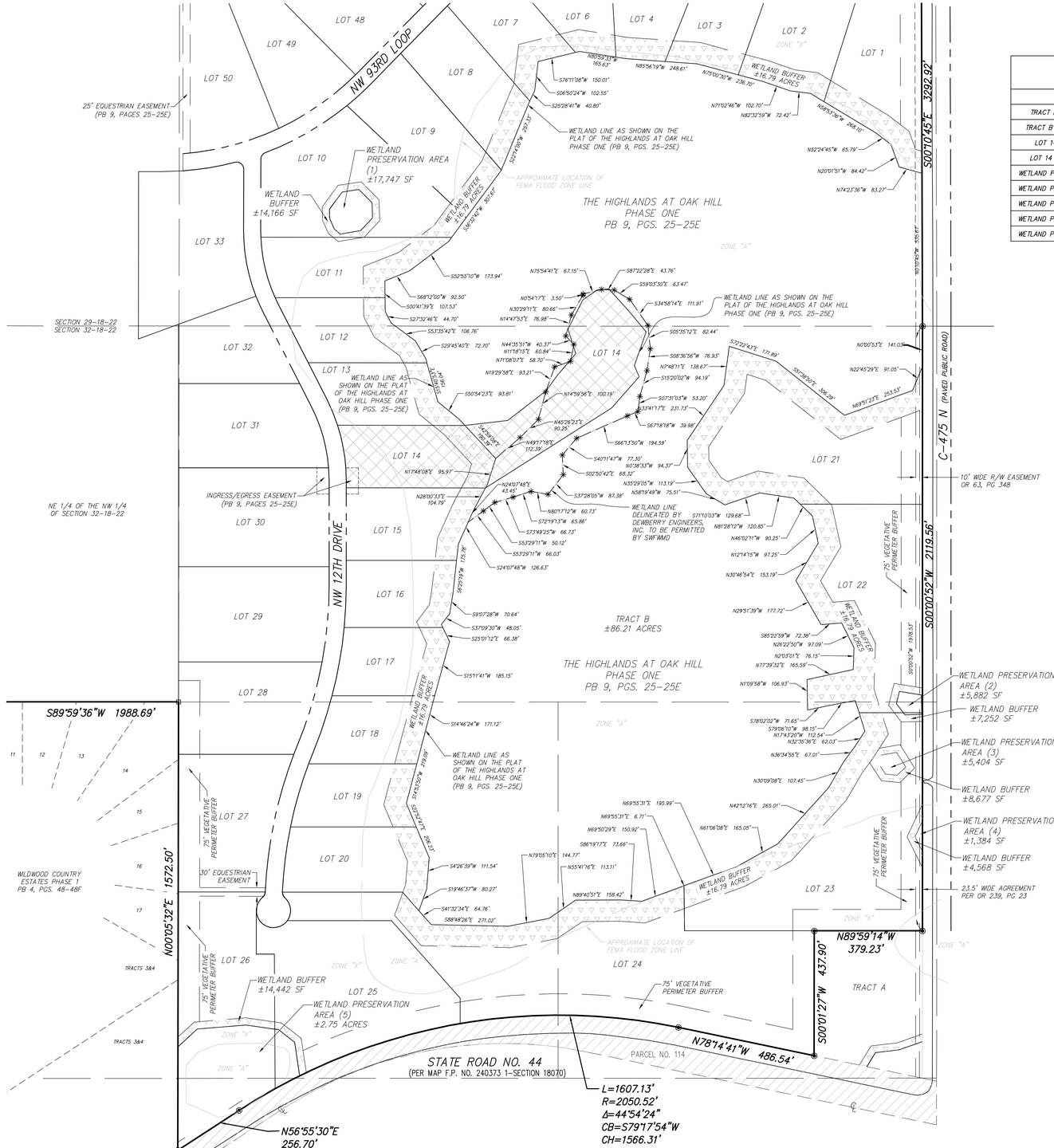
WETLAND PRESERVATION AREA ACREAGE TABLE

WETLAND	ACREAGE	BUFFER ACREAGE
TRACT B WETLAND (PLAT)	±86.20 ACRES	±16.32 ACRES
TRACT B WETLAND (REVISED)	±84.81 ACRES	N/A
LOT 14 WETLAND (PLAT)	±3.53 ACRES	±0.47 ACRES
LOT 14 WETLAND (REVISED)	±0.51 ACRES	N/A
WETLAND PRESERVATION AREA (1)	±0.41 ACRES	±0.33 ACRES
WETLAND PRESERVATION AREA (2)	±0.14 ACRES	±0.17 ACRES
WETLAND PRESERVATION AREA (3)	±0.12 ACRES	±0.20 ACRES
WETLAND PRESERVATION AREA (4)	±0.03 ACRES	±0.10 ACRES
WETLAND PRESERVATION AREA (5)	±2.75 ACRES	±0.33 ACRES

LEGEND AND ABBREVIATIONS:

±	MORE OR LESS
EL.	ELEVATION
LB	LICENSED BUSINESS
NO.	NUMBER
LS	LAND SURVEYOR
I.D.	IDENTIFICATION
ORB	OFFICIAL RECORDS BOOK
℄	CENTERLINE
R	RADIUS
L	ARC LENGTH
Δ	DELTA (CENTRAL ANGLE)
CH	CHORD LENGTH
CB	CHORD BEARING
POC	POINT ON CURVE
POL	POINT ON LINE
PCC	POINT OF COMPOUND CURVATURE
PRC	POINT OF REVERSE CURVATURE
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PI	POINT OF INTERSECTION
P.O.C.	POINT OF COMMENCEMENT
P.O.B.	POINT OF BEGINNING
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
SWFWMD	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
PB	PLAT BOOK
OR	OFFICIAL RECORDS BOOK
PG(S)	PAGE(S)
R/W	RIGHT OF WAY
ESMT.	EASEMENT
SEC	SECTION
FND	FOUND
REC	RECOVERED
CCR	CERTIFIED CORNER RECORD
RLS	REGISTERED LAND SURVEYOR
CM	CONCRETE MONUMENT
IRC	IRON ROD AND CAP
IR	IRON ROD
IP	IRON PIPE
CLF	CHAIN LINK FENCE

- ⊡ FOUND CONCRETE MONUMENT AS NOTED
- ○ FOUND NAIL AS NOTED
- ◎ FOUND NAIL & DISK AS NOTED
- ◎ SET NAIL & DISK (LB 8011)
- ◉ FOUND IRON ROD & CAP AS NOTED
- ● FOUND IRON ROD AS NOTED
- ◎ SET 5/8" IRON ROD & CAP (LB 8011)
- ✳ WETLAND FLAG
- LINE BREAK
- FENCE LINE AS NOTED
- WETLAND BUFFER
- LOT 14



REVISIONS				
FB/PG	DATE	DRAWN	REVISION	CKD

Dewberry
520 SOUTH MAGNOLIA AVENUE
ORLANDO, FLORIDA 32801
PHONE: 321.354.9826 FAX: 407.648.9104
WWW.DEWBERRY.COM
CERTIFICATE OF AUTHORIZATION NO. LB 8011

THE HIGHLANDS AT OAK HILL PHASE ONE AND PHASE 1A AND PORTIONS OF LANDS SITUATED IN SECTION 29, 30 AND 32, TOWNSHIP 18 SOUTH, RANGE 22 EAST
SUMTER COUNTY, FLORIDA

SPECIFIC PURPOSE SURVEY FOR WALTON DEVELOPMENT AND MANAGEMENT

FB/PG	FIELD DATE	PROJECT NO.
29-18-22 / 4-6	08/11/15	50069719
DRAWING DATE	BY	APPROVED
08/24/15	TRC	WDD
SCALE 1" = 200'		

2 OF 2

Drawing name: S:\Walton_Villages at Parrasoffkee_job\DWG-Civil 3D\Walton_ParrasoffkeePreserve_SurveyHands.dwg SHEET 2 Sep 14, 2015 11:50am by: tcamden

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: Tract B

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) upland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°53'5.9" N Long: 82°7'31.8" W Datum:

Soil Map Unit Name: Candler sand, 0 to 5 percent slope NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photos available

Remarks:
Upland data point for Tract B wetland

VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point Tract B

Tree Stratum (Plot size: 20ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus virginiana (Oak,live)	40	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	40	= Total Cover	

50 % of total cover: 20 20 % of total cover: 8

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

20ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Paspalum notatum (Grass,bahia)	45	Y	FACU
2. Cynodon dactylon (Grass,bermuda)	25	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70	= Total Cover	

50 % of total cover: 35 20 % of total cover: 14

Woody Vine Stratum (Plot size: 20ft)			
1. Vitis rotundifolia (Grape,muscadine)	15	Y	FAC
2.			
3.			
4.			
5.			
	15	= Total Cover	

50 % of total cover: 7.5 20 % of total cover: 3

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	X 2 =	0
FAC species	15	X 3 =	45
FACU species	110	X 4 =	440
UPL species	0	X 5 =	0
Column Totals:	125 (A)		485 (B)

Prevalence Index = B/A = 3.88

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: Tract B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR4/2				N/A	N/A	N/A	
8-30	10YR6/4				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Suface (S9) **(LRR S, T, U)**
- ___ Loamy Gleyed Matrix (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** **X**

Remarks:
Sandy upland soils

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: Tract B

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) wetland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°53'7.3" N Long: 82°7'23.5" W Datum:

Soil Map Unit Name: Placid fine sand, depressional NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15) **(LRR U)**
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- X Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches): 30-40
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches):

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photos available

Remarks:

VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point Tract B

Tree Stratum (Plot size: 20ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Myrica cerifera (Bayberry,southern)	5	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	5	= Total Cover	

50 % of total cover: 2.5 20 % of total cover: 1

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

20ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Panicum hemitomon (Maiden-cane)	50	Y	OBL
2. Ascyrum edisonianum (St. john's-wort,edison's)	10		OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	= Total Cover	

50 % of total cover: 30 20 % of total cover: 12

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species		X 4 =	
UPL species		X 5 =	
Column Totals:		(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: Tract B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR2/1				N/A	N/A	N/A	
10-16	10YR3/1				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- X 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- X Stripped Matrix (S6)
- X Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Suface (S9) **(LRR S, T, U)**
- ___ Loamy Gleyed Matrix (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 1

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) Upland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°53'16.6" N Long: 82°7'35.1" W Datum:

Soil Map Unit Name: Candler sand, 0 to 5 percent slope NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photographs are available

Remarks:
This is an upland data point for Wetland 1

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point 1

Tree Stratum (Plot size: 20ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus virginiana (Oak,live)	90	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	90	= Total Cover	

50 % of total cover: 45 20 % of total cover: 18

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

20ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Cynodon dactylon (Grass,bermuda)	40	Y	FACU
2. Paspalum notatum (Grass,bahia)	40	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80	= Total Cover	

50 % of total cover: 40 20 % of total cover: 16

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	X 2 =	0
FAC species	0	X 3 =	0
FACU species	170	X 4 =	680
UPL species	0	X 5 =	0
Column Totals:	170 (A)		680 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR4/2				N/A	N/A	N/A	
8-30	10YR6/4				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P, T, U)**
___Muck Presence (A8) **(LRR U)**
___1 cm Muck (A9) **(LRR P, T)**
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
___Dark Surface (S7) **(LRR P, S, T, U)**
___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Ochric (F11) **(MLRA 151)**
___Iron Manganese Masses (F12) **(LRR O, P, T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Ochric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

___1 cm Muck (A9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A,B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12)
___Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** **X**

Remarks:
Sandy upland soils

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 1

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) wetland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°53'17.7" N Long: 82°7'34.5" W Datum:

Soil Map Unit Name: Candler sand, 0 to 5 percent slope NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- X Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- X Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photos are available

Remarks:
Wetland 1 appears to be an old sinkhole

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point 1

Tree Stratum (Plot size: 20ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix caroliniana (Willow,coastal-plain)	20	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	20	= Total Cover	

50 % of total cover: 10 20 % of total cover: 4

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

20ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Cephalanthus occidentalis (Buttonbush,common)	30	Y	OBL
2. Panicum hemitomon (Maiden-cane)	15	Y	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	45	= Total Cover	

50 % of total cover: 22.5 20 % of total cover: 9

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species		X 4 =	
UPL species		X 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR4/2				N/A	N/A	N/A	
8-30	10YR6/4				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P, T, U)**
X Muck Presence (A8) **(LRR U)**
___1 cm Muck (A9) **(LRR P, T)**
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
___Dark Surface (S7) **(LRR P, S, T, U)**
___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Ochric (F11) **(MLRA 151)**
___Iron Manganese Masses (F12) **(LRR O, P, T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Ochric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

___1 cm Muck (A9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A,B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12)
___Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 2

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) upland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°53'0.8" N Long: 82°7'14.2" W Datum:

Soil Map Unit Name: Myakka sand NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photographs

Remarks:
This is an upland data point for Wetland 2

VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point 2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

10ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Paspalum notatum (Grass,bahia)	95	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95	= Total Cover	

50 % of total cover: 47.5 20 % of total cover: 19

Woody Vine Stratum (Plot size: 10ft)			
1. Passiflora edulis (Passion-flower,purple)	5	Y	FACU
2.			
3.			
4.			
5.			
	5	= Total Cover	

50 % of total cover: 2.5 20 % of total cover: 1

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	X 2 =	0
FAC species	0	X 3 =	0
FACU species	100	X 4 =	400
UPL species	0	X 5 =	0
Column Totals:	100	(A)	400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	N2.5/				N/A	N/A	N/A	
6-12	10YR5/1				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P, T, U)**
___Muck Presence (A8) **(LRR U)**
___1 cm Muck (A9) **(LRR P, T)**
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
___Dark Surface (S7) **(LRR P, S, T, U)**
___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Ochric (F11) **(MLRA 151)**
___Iron Manganese Masses (F12) **(LRR O, P, T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Ochric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

___1 cm Muck (A9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A,B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12)
___Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** **X**

Remarks:
Sandy upland soils

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 2

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) wetland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°53'0.8" N Long: 82°7'13" W Datum:

Soil Map Unit Name: Immokalee sand NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15) **(LRR U)**
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- X Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- X Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches): 4-6
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches):

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photos are available

Remarks:

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point 2

Tree Stratum (Plot size: 10ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix caroliniana (Willow,coastal-plain)	10	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	10	= Total Cover	

50 % of total cover: 5 20 % of total cover: 2

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

10ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Cephalanthus occidentalis (Buttonbush,common)	25	Y	OBL
2. Panicum hemitomon (Maiden-cane)	10	Y	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	35	= Total Cover	

50 % of total cover: 17.5 20 % of total cover: 7

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species		X 4 =	
UPL species		X 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR3/1				N/A	N/A	N/A	
5-34	10YR7/1				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Organic Bodies (A6) **(LRR P, T, U)**
___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
___ Muck Presence (A8) **(LRR U)**
___ 1 cm Muck (A9) **(LRR P, T)**
_X_ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Coast Prairie Redox (A16) **(MLRA 150A)**
___ Sandy Mucky Mineral (S1) **(LRR O, S)**
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
_X_ Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR P, S, T, U)**
___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
___ Thin Dark Suface (S9) **(LRR S, T, U)**
___ Loamy Gleyed Matrix (F1) **(LRR O)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Marl (F10) **(LRR U)**
___ Depleted Ochric (F11) **(MLRA 151)**
___ Iron Manganese Masses (F12) **(LRR O, P, T)**
___ Umbric Surface (F13) **(LRR P, T, U)**
___ Delta Ochric (F17) **(MLRA 151)**
___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

___ 1 cm Muck (A9) **(LRR O)**
___ 2 cm Muck (A10) **(LRR S)**
___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _X_ **No** ___

Remarks:

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 3

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) upland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°52'58.3" N Long: 82°7'14.4" W Datum:

Soil Map Unit Name: Myakka sand NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photos are available

Remarks:

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point 3

Tree Stratum (Plot size: 10ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

10ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Amphicarpum muhlenbergianum	65	Y	FACW
2. Rubus alumnus (Blackberry,old field)	15		NI
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80	= Total Cover	

50 % of total cover: 40 20 % of total cover: 16

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species		X 4 =	
UPL species		X 5 =	
Column Totals:		(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	N2.5/				N/A	N/A	N/A	
6-12	10YR5/1				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P, T, U)**
___Muck Presence (A8) **(LRR U)**
___1 cm Muck (A9) **(LRR P, T)**
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
___Dark Surface (S7) **(LRR P, S, T, U)**
___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Ochric (F11) **(MLRA 151)**
___Iron Manganese Masses (F12) **(LRR O, P, T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Ochric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

___1 cm Muck (A9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A,B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12)
___Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** **X**

Remarks:
Sandy upland soils

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 3

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) wetland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°52'58.3" N Long: 82°7'13.4" W Datum:

Soil Map Unit Name: Immokalee sand NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- X Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 4-6
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photographs are available

Remarks:

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point 3

Tree Stratum (Plot size: 10ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix caroliniana (Willow,coastal-plain)	50	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50	= Total Cover	

50 % of total cover: 25 20 % of total cover: 10

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

10ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Panicum hemitomon (Maiden-cane)	20	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20	= Total Cover	

50 % of total cover: 10 20 % of total cover: 4

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species		X 4 =	
UPL species		X 5 =	
Column Totals:		(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR3/1				N/A	N/A	N/A	
5-34	10YR7/1				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Organic Bodies (A6) **(LRR P, T, U)**
___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
___ Muck Presence (A8) **(LRR U)**
___ 1 cm Muck (A9) **(LRR P, T)**
X Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Coast Prairie Redox (A16) **(MLRA 150A)**
___ Sandy Mucky Mineral (S1) **(LRR O, S)**
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
X Stripped Matrix (S6)
___ Dark Surface (S7) **(LRR P, S, T, U)**
___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
X Thin Dark Suface (S9) **(LRR S, T, U)**
___ Loamy Gleyed Matrix (F1) **(LRR O)**
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Marl (F10) **(LRR U)**
___ Depleted Ochric (F11) **(MLRA 151)**
___ Iron Manganese Masses (F12) **(LRR O, P, T)**
___ Umbric Surface (F13) **(LRR P, T, U)**
___ Delta Ochric (F17) **(MLRA 151)**
___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

___ 1 cm Muck (A9) **(LRR O)**
___ 2 cm Muck (A10) **(LRR S)**
___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 4

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) Upland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°52'56" N Long: 82°7'13.3" W Datum:

Soil Map Unit Name: Myakka sand NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photos available

Remarks:
Upland data point for Wetland 4

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point 4

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

10ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Paspalum notatum (Grass,bahia)	95	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95	= Total Cover	

50 % of total cover: 47.5 20 % of total cover: 19

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	X 2 =	0
FAC species	0	X 3 =	0
FACU species	95	X 4 =	380
UPL species	0	X 5 =	0
Column Totals:	95	(A)	380 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	N2.5/				N/A	N/A	N/A	
6-12	10YR5/1				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P, T, U)**
___Muck Presence (A8) **(LRR U)**
___1 cm Muck (A9) **(LRR P, T)**
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
___Dark Surface (S7) **(LRR P, S, T, U)**
___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Ochric (F11) **(MLRA 151)**
___Iron Manganese Masses (F12) **(LRR O, P, T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Ochric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

___1 cm Muck (A9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A,B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12)
___Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** **X**

Remarks:
Sandy upland soils

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 4

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) wetland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°52'56" N Long: 82°7'12.5" W Datum:

Soil Map Unit Name: Immokalee sand NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15) **(LRR U)**
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- X Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches): 1
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 1

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photos are available

Remarks:

VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point 4

Tree Stratum (Plot size: 10ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Ludwigia octovalvis (Seedbox,mexican)	15	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	15	= Total Cover	

50 % of total cover: 7.5 20 % of total cover: 3

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

10ft 0 20 % of total cover: 0

Herb Stratum (Plot size:)			
1. Carex rhynchophysa (Sedge,northwest,territory)	20	Y	
2. Panicum hemitomon (Maiden-cane)	20	Y	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	= Total Cover	

50 % of total cover: 20 20 % of total cover: 8

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species		X 4 =	
UPL species		X 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR3/1				N/A	N/A	N/A	
5-34	10YR7/1				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P, T, U)**
X Muck Presence (A8) **(LRR U)**
___1 cm Muck (A9) **(LRR P, T)**
X Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
___Dark Surface (S7) **(LRR P, S, T, U)**
___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Ochric (F11) **(MLRA 151)**
___Iron Manganese Masses (F12) **(LRR O, P, T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Ochric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

___1 cm Muck (A9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A,B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12)
___Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 5

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) upland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°52'50.8" N Long: 82°7'38.9" W Datum:

Soil Map Unit Name: Tavares fine sand, 0-5% slopes NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photos available

Remarks:
Upland data point for Wetland 5

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point 5

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Sapling/Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	

10ft 0 20 % of total cover: 0

Herb Stratum (Plot size:_____)			
1. Amphicarpum muhlenbergianum	70	Y	FACW
2. Rubus alumnus (Blackberry,old field)	25	Y	NI
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95	= Total Cover	

50 % of total cover: 47.5 20 % of total cover: 19

Woody Vine Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species		X 4 =	
UPL species		X 5 =	
Column Totals:		(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR3/2				N/A	N/A	N/A	
8-28	10YR5/2				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P, T, U)**
___Muck Presence (A8) **(LRR U)**
___1 cm Muck (A9) **(LRR P, T)**
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
___Dark Surface (S7) **(LRR P, S, T, U)**
___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Ochric (F11) **(MLRA 151)**
___Iron Manganese Masses (F12) **(LRR O, P, T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Ochric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

___1 cm Muck (A9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A,B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12)
___Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** **X**

Remarks:
Sandy upland soils

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Panasoffkee Preserve City/County: Sumter Sampling Date: Dec 10, 2016

Applicant/Owner: Walton Development and Management State: Florida Sampling Point: 5

Investigator(s): Clark Modica Section, Township, Range: 29/30/32

Landform (hillslope, terrace, etc.) wetland Local relief (concave, convex, none): none Slope (%):

Subregion (LRR or MLRA): LRR U Lat: 28°52'47.9" N Long: 82°7'39.4" W Datum:

Soil Map Unit Name: Placid fine sand, depressional NWI Classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15) **(LRR U)**
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No X	Depth (inches):

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Aerial photos available

Remarks:

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point 5

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
50 % of total cover: 0	20 % of total cover: 0		

Sapling/Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
10ft 0	20 % of total cover: 0		

Herb Stratum (Plot size:_____)			
1. Panicum hemitomon (Maiden-cane)	85	Y	OBL
2. Cephalanthus occidentalis (Buttonbush,common)	5		OBL
3. Rhynchospora stenophylla (Beakrush,chapman's)	2		FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	92	= Total Cover	
50 % of total cover: 46	20 % of total cover: 18.4		

Woody Vine Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
50 % of total cover: 0	20 % of total cover: 0		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species		X 4 =	
UPL species		X 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR2/1				N/A	N/A	N/A	
10-16	10YR3/1				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- X Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Suface (S9) **(LRR S, T, U)**
- ___ Loamy Gleyed Matrix (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Additional Vegetation Samples

		Abs% Cover	Dom Spec?	Ind Status			Abs% Cover	Dom Spec?	Ind Status
Tree Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29.				
18.					30.				
19.					31.				
Sapling/Shrub Stratum					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				
17.					29				
18.					30.				
19.					31.				
Herb Stratum					38.				
13.					39.				
14.					40.				
15					41.				
16.					42.				
17.					43.				
18.					44.				
19.					45.				
20.					46.				
21.					47.				
22.					48.				
23.					49.				
24.					50.				
25.					51.				
26.					52.				
27.					53.				
28.					54.				
29.					55.				
30.					56.				
31.					57.				
32.					58.				
33.					59.				
34.					60.				
35.					61.				
36.					62.				
37.					63.				
Vine Stratum					17.				
6.					18.				
7.					19.				
8.					20.				
9.					21.				
10.					22.				
11.					23.				
12.					24.				
13.					25.				
14.					26.				
15.					27.				
16.					28.				