

**7**

**AGENDA ITEM  
Planning & Zoning**

Meeting

3/7/2024

MEETING DATE

**TO:** Planning and Zoning Board Members

**DATE:** February 26, 2024

**FROM:** Saleena Randolph, Senior Planner

**PHONE:** 904 209-0688

**SUBJECT OR TITLE:** CPA(SS) 2023-08 Pine Island

**AGENDA TYPE:** Business Item, Legislative, Recommendation, Report

**PRESENTER:** Curtis Hart, Hart Resources LLC

**BACKGROUND INFORMATION:**

Request for a Small-Scale Comprehensive Plan Amendment to change the Future Land Use Map designation of approximately 20.67 acres of land from Rural/Silviculture (R/S) to Mixed Use District (MD); specifically located at 9050, 9060, and 9080 US Hwy 1 North along with unaddressed parcels located on US Hwy 1 North and Old Dixie Highway. This request is a companion application to PUD 2023-17.

**SUGGESTED MOTION/RECOMMENDATION/ACTION:**

**APPROVE:** Motion to recommend approval of CPA(SS) 2023-08 Pine Island based upon four (4) findings of fact as provided in the Staff Report.

**DENY:** Motion to recommend denial of CPA(SS) 2023-08 Pine Island based upon four (4) findings of fact as provided in the Staff Report.



## Growth Management Department

Planning Division Report

Application for Small Scale Comprehensive Plan Amendment

CPA(SS) 2023-08 Pine Island

**To:** Planning and Zoning Agency

**From:** Saleena Randolph, Senior Planner

**Date:** February 26, 2024

**Subject:** **CPA(SS) 2023-08 Pine Island**, a request for a Small Scale Comprehensive Plan Amendment to change the Future Land Use Map designation of approximately 20.67 acres of land from Rural/Silviculture (R/S) to Mixed Use District (MD); specifically located at 9050, 9060, and 9080 US Hwy 1 North along with unaddressed parcels located on US Hwy 1 North and Old Dixie Highway. This request is a companion application to PUD 2023-17.

**Applicants:** Curtis Hart, Hart Resources LLC

**Owners:** Woodland Heights LLC

**Hearing Dates:** Planning and Zoning Agency – March 7, 2024  
Board of County Commissioners – April 16, 2024

**Commissioner District:** District 4

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### SUGGESTED MOTION/ACTION

**APPROVE:** Motion to recommend approval of **CPA(SS) 2023-08 Pine Island** based upon four (4) findings of fact as provided in the Staff Report.

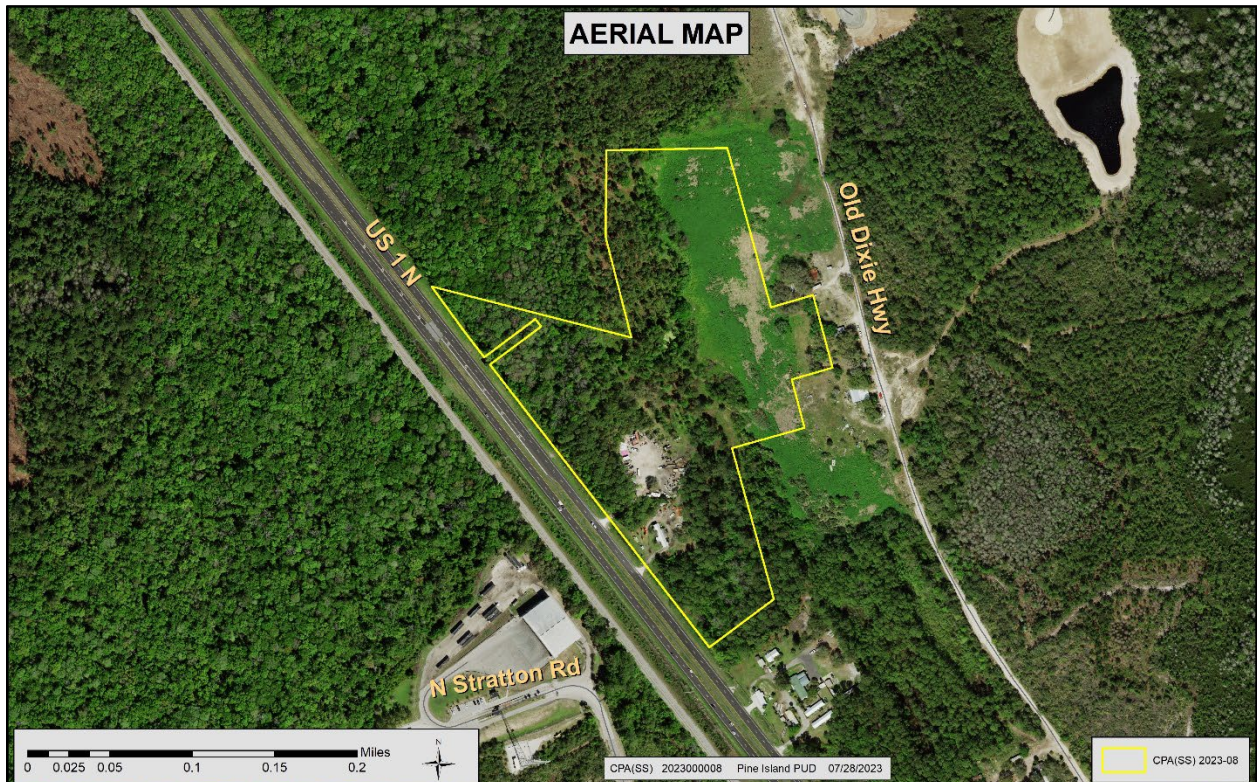
**DENY:** Motion to recommend denial of **CPA(SS) 2023-08 Pine Island** based upon four (4) findings of fact as provided in the Staff Report.

### MAP SERIES

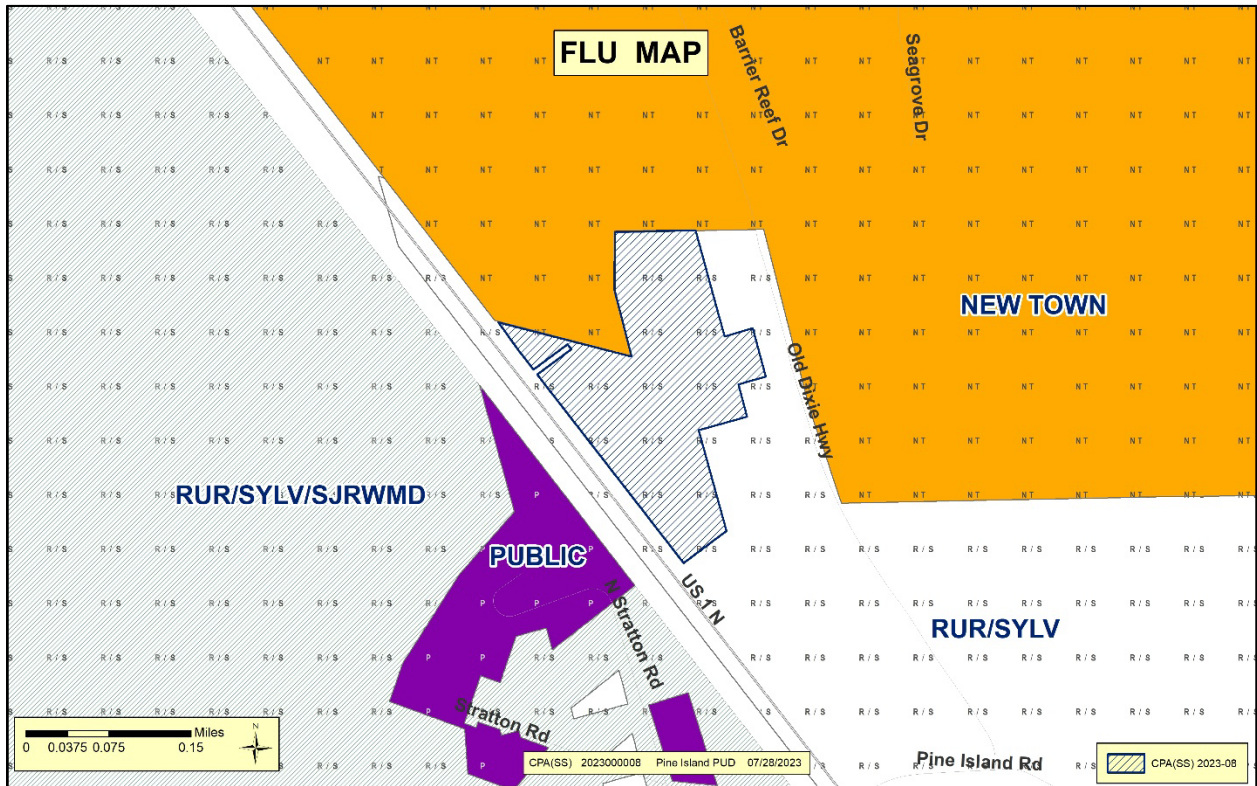
**Location:** The subject property is located on the east side of US Highway 1 North, just north of Pine Island Road and west of Old Dixie Highway.



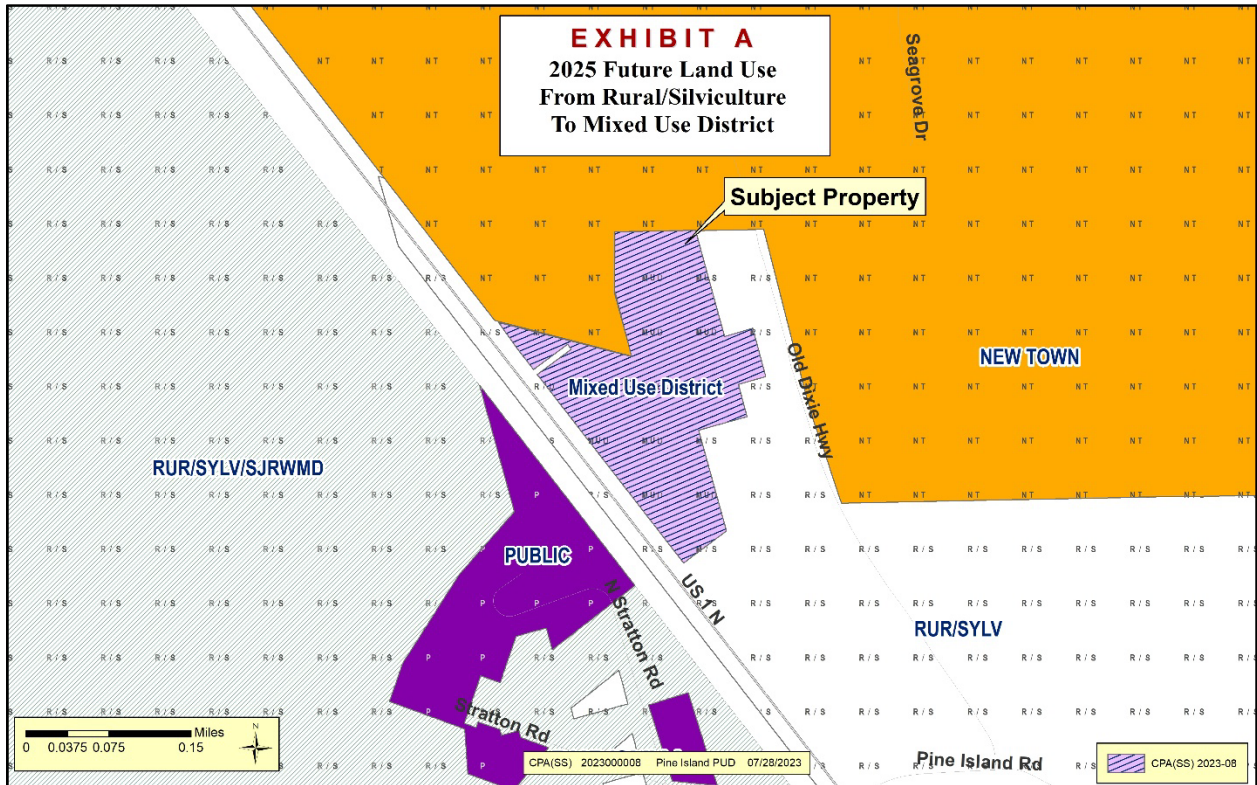
**Aerial Imagery:** The subject property is approximately 20.67 acres in size and appears to contain one mobile home and undeveloped residential land. Aerial imagery also shows what looks like outside storage of vehicles and/or a salvage yard.



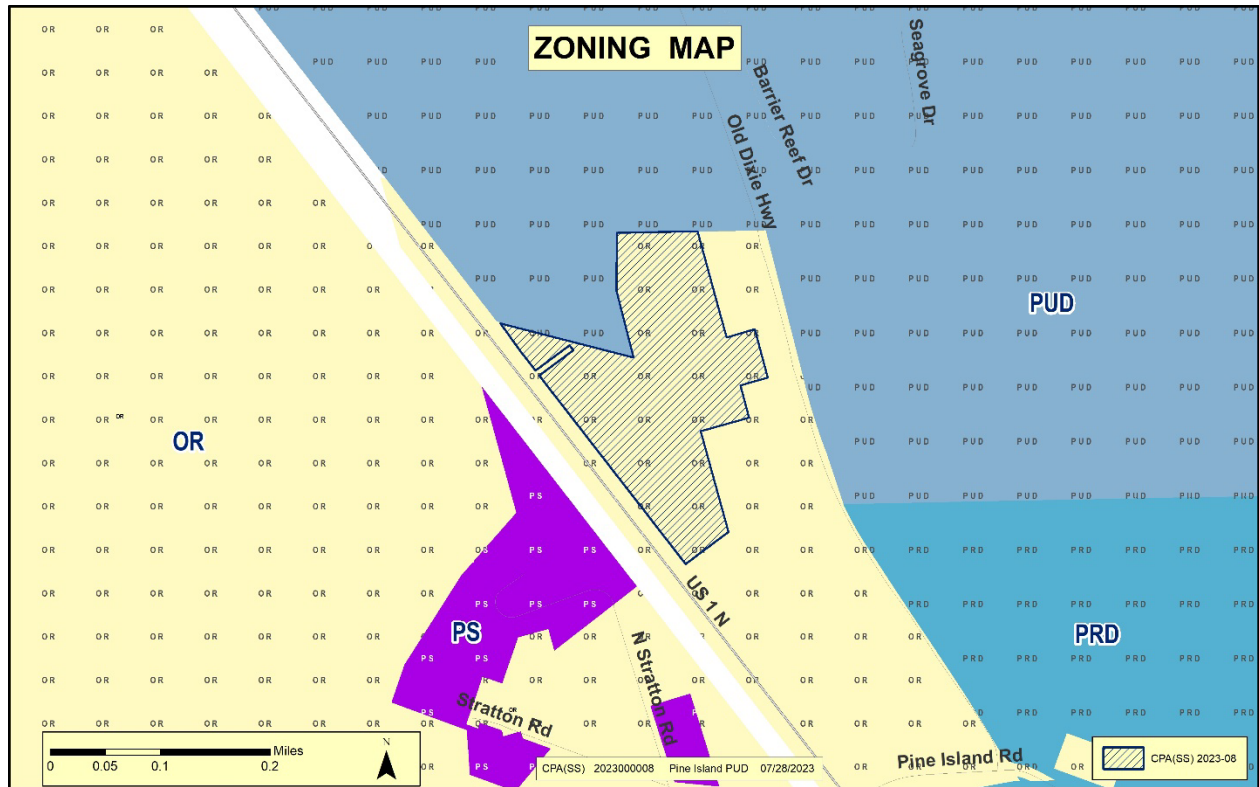
**Existing Future Land Use:** The subject property is currently designated Rural/Silviculture (R/S) on the Future Land Use Map. Surrounding properties are designated Rural/Silviculture (R/S), Public, and New Town on the Future Land Use Map.



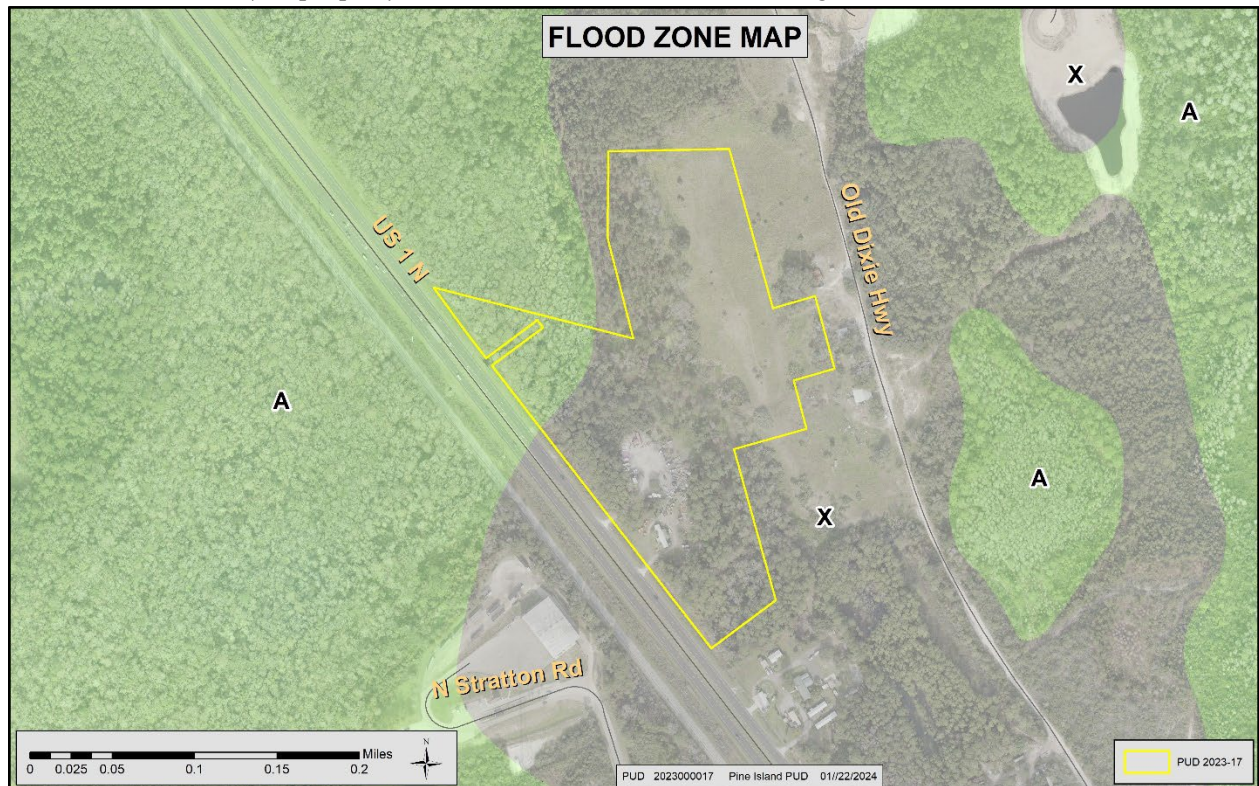
**Proposed Future Land Use:** The applicant is proposing a Mixed-Use District (MD) Future Land Use designation.



**Zoning District:** The subject property is currently zoned Open Rural (OR) with a requested change to Planned Unit Development (PUD) via a companion Rezoning application (PUD 2023-17). Surrounding properties are zoned OR, Public Service (PS), Planned Unit Development (PUD) and Planned Rural Development (PRD).



**Flood Zone:** The subject property is located within the flood zone designations of X and A.



### APPLICATION SUMMARY

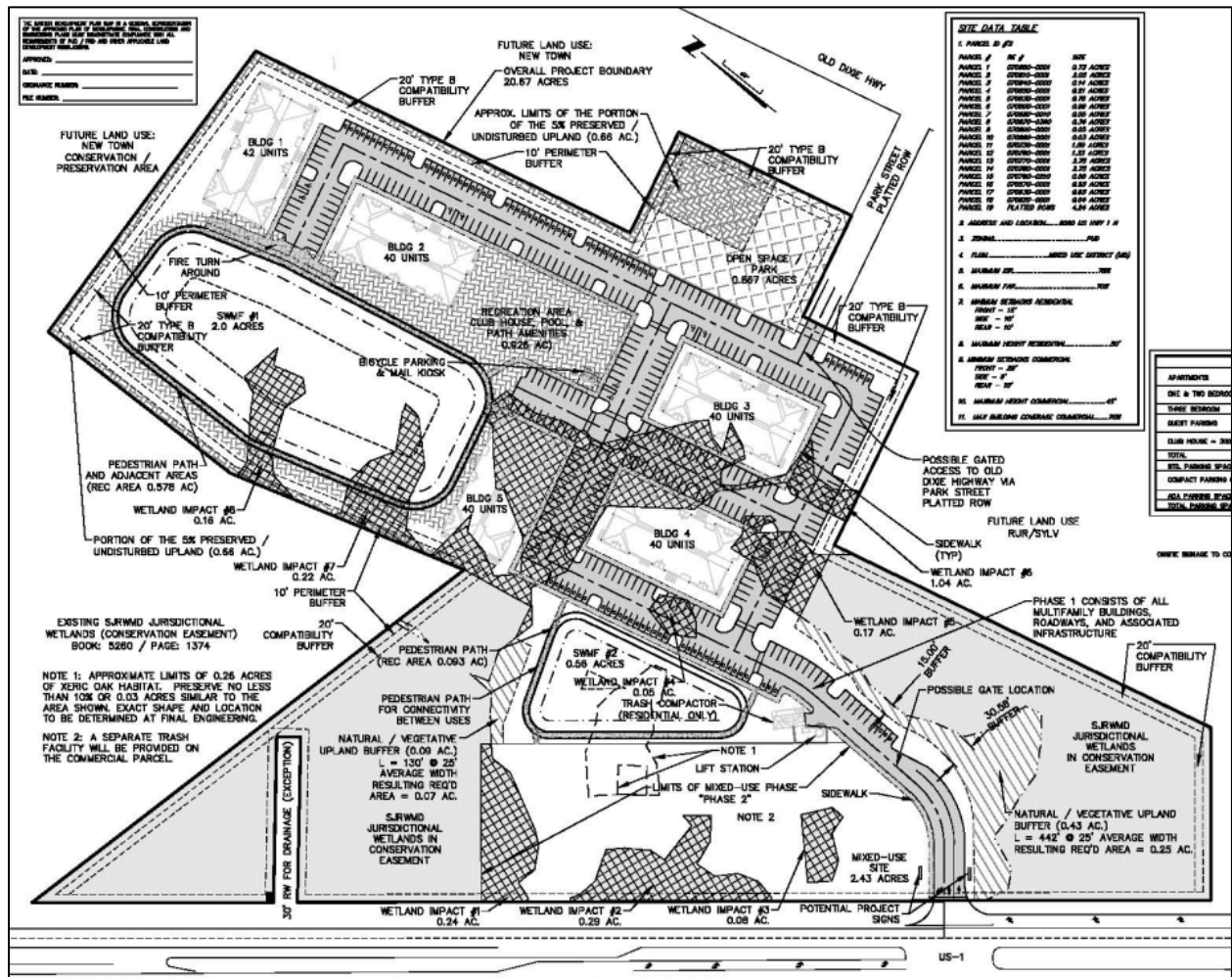
This is a request to amend the Future Land Use Map (FLUM) designation from Rural/Silviculture (R/S) to Mixed-Use District (MD) for property located on US Hwy 1 North. The property contains approximately 20.67 total acres. A companion PUD rezoning (PUD 2023-17) project was submitted with this Small-scale Comprehensive Plan Amendment.

As provided within the narrative, the applicant is proposing a Mixed-Use development that will incorporate commercial, office, neighborhood, and residential uses in a manner that will promote diversity of residential and non-residential activities in one centralized area. The development will provide for pedestrian, bicycle, and vehicular systems providing interconnectivity and ensuring accessibility within and between the uses.

Within the applicant’s narrative, they list the following public benefits with approval of this project:

- Provides a development with commercial and residential uses to accommodate the continued growth in the Northeast portion of the County
- Preservation of the majority of the wetlands and natural habitat located on site
- Commitment to water conservation and use of native plants in landscaping
- Commercial uses will generate jobs for local residents in the surrounding area

### Site Plan:



## IMPACT REVIEW

### Transportation:

The following assessment is a non-binding traffic impact analysis for Pine Island [CPA(SS) 2023-08] to assess for potential impact based solely upon the applicant's intent to develop within this application. As provided by the applicant in the companion PUD application (PUD 2023-17), the applicant intends to develop 202 multi-family units and a maximum 50,000 square feet of commercial uses as shown on the proposed MDP Map. In accordance with the CPA (SS) application, the applicant seeks to change the existing Rural/Silviculture Future Land Use designation to Mixed Use future land use to allow for the development of a multi-family project along with commercial uses.

The existing platted lots of record are exempt from concurrency pursuant to Section 11.08.04 of the Land Development Code (LDC). A modification of an exempt project is subject to review pursuant to Section 11.08.06.A of the LDC to determine if project impacts to public facilities and services are being increased or the location or timing of impacts are being altered in a way that would impact any public facility not previously impacted.

Residential: The proposed development will result in a reduction in trip generation by modification of an exempt project from 177 single family platted lots of record (1,706 daily trips; 170 pm peak hour trips) to 202 mid-rise multi-family units (917 daily trips; 79 pm peak hour trips), a reduction of 789 daily trips and 91 pm peak hour trips. Therefore, the proposed development will remain exempt from concurrency at the County, but will pay the road impact fee due at the time of permitting. This calculation does not include the existing lots of record where the non-residential development is proposed in the PUD. The change from single family to multi-family must be reviewed by the School District in the same manner to determine if there is an increase in student generation, which application is currently pending at the School District.

Non-residential: The proposed non-residential development is exempt from concurrency pursuant to Section 11.00.05 of the Land Development Code. A detailed site access analysis is required at the time of construction plan review to determine appropriate access design and necessary access improvements to provide for safe and efficient access to the proposed development.

Site Access: Site analysis is required prior to construction plan approval for review of the proposed driveway design, median opening, and turn lanes subject to FDOT permitting requirements for US 1 for both the residential and non-residential development.

### Water and Sewer:

Central water and sewer utilities are provided by St. Johns County Utilities.

### Drainage and Stormwater Management:

The project will comply with all applicable federal, state, regional and local permitting requirements.

### Solid Waste:

The project will comply with all applicable federal, state, regional and local requirements.

### Parks and Recreation, Open Space, and Mass Transit:

Within the PUD rezoning documents, the applicant proposes 2.46 acres of onsite open space, park, and recreation space.

### Schools:

A school concurrency determination by the St. Johns County School District is required prior to issuance of a Final Certificate of Concurrency by the County.

**Fire Services:**

ISO's Public Protection Classification (PPC) information plays an important part in the decisions many insurers make affecting the underwriting and pricing of property insurance. ISO analyzes the relevant data and assigns a PPC- grading from 1 (lowest risk) to 10 (highest risk). A higher ISO rating could mean higher homeowner insurance. This information is provided for the consideration of future homeowners. It is important to note, St. Johns County Fire Rescue does and will continue to respond to all properties within the County regardless of the ISO rating.

As of August 2016, ISO applies the following classification to properties in St Johns County:

- Class 3- property within 5 road miles of an existing fire rescue station and within 1000 feet of a creditable water supply such as a fire hydrant, suction point, or dry hydrant.
- Class 3X- property within 5 road miles of an existing fire rescue station but beyond 1000 feet of a creditable water supply.
- Class 10W- property beyond 5 road miles but less than 7 road miles from an existing fire rescue station, and has a creditable water source.
- Class 10- property beyond 5 road miles of a recognized fire rescue station.

Based on this project submitted, as well as the current primary fire station location at 220 Pine Island Rd and creditable water supply, ISO would assign a rating of Class 3.

**DEPARTMENTAL REVIEW**

The Planning and Zoning Division has routed this request to all appropriate reviewing departments. There are no open comments.

**Office of the County Attorney Review:**

All amendments to the St. Johns County comprehensive plan are legislative in nature. This is a policy-making decision to determine the future growth pattern of St. Johns County (i.e. is it appropriate to expand the development area boundary or to change the maximum theoretical growth in this area). A determination of consistency with the Comprehensive Plan and state law and approval or denial of the proposed amendment must not be arbitrary and capricious. Decisions on approval or denial of legislative land-use policy are determined on whether the decision is supported by evidence that is fairly debatable (i.e. whether reasonable minds may differ). This item is a legislative hearing, and therefore the Agency may take into account policy preferences expressed by persons with an interest in the amendment. The types of information, evidence, and documentation that the Agency may consider is broader than the competent substantial evidence of a quasi-judicial hearing.

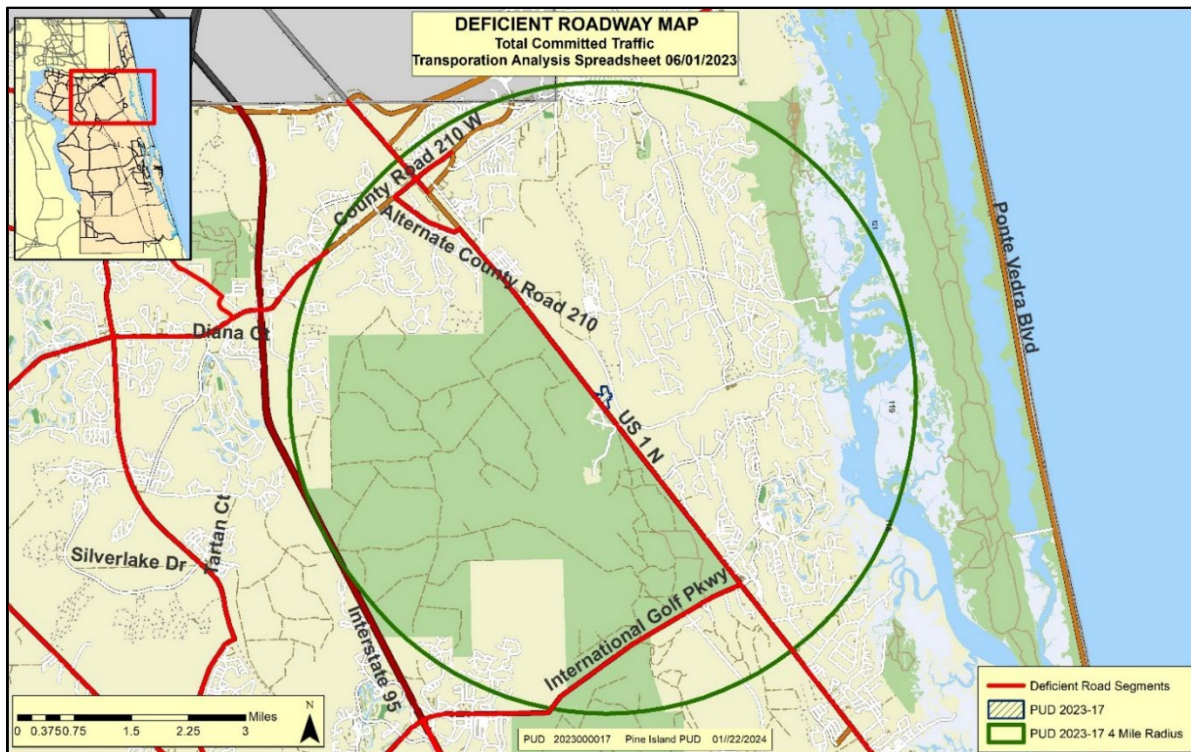
**Technical Division Review:**

All future site engineering, drainage and required infrastructure improvements will be reviewed pursuant to the established Development Review Process to ensure that the development has met all applicable local regulations and permitting requirements. No permits will be issued prior to compliance with all applicable regulations.



### **Transportation Planning Review:**

The following map displays deficient roadway segments within a 4-mile radius of the project boundaries. The proposed development is exempt from concurrency and is not required to pay proportionate share; however, the proposed development is required to pay road impact fees at the time of permitting for both residential and non-residential development.



### **Planning and Zoning Division Review:**

The subject property is currently designated as Rural/Silviculture (R/S) and currently zoned Open Rural (OR). The applicant is requesting a Small-Scale Comprehensive Plan Amendment to change the Future Land Use Map designation of the subject property to Mixed-Use District (MD). The property contains approximately 20.67 acres. The applicant has provided a companion request to change the zoning to a Planned Unit Development (PUD) to allow multi-family and commercial uses on the site (PUD 2023-17). The rezoning request will be contingent on an approved Future Land Use change from R/S to MD.

The Comprehensive Plan contains several policies regarding Comprehensive Plan Amendments, including Policies A.1.2.5, A.1.2.7, and A.1.3.11. These policies state the following (provided in part):

- Policy A.1.2.5: All Comprehensive Plan amendments shall provide justification for the need for the proposed amendment and demonstrate how the proposed amendment discourages urban sprawl and not adversely impact natural resources. In evaluating proposed amendments, the County shall consider each of the following:
  - a) the extent to which the proposed amendment is contiguous to an existing Development Area that has developed in a manner providing a compact, contiguous development pattern with the proposed amendment;
  - b) the extent to which population growth and development trends warrant an amendment, including an analysis of vested and approved but unbuilt development;
  - c) the extent to which adequate infrastructure to accommodate the proposed amendment exists or is programmed and funded through an adopted Capital Improvement Schedule, such as the County Capital Improvement Program, the Florida Department of Transportation Five-Year Work

- Program, the North Florida Transportation Planning Organization (TPO) Transportation Improvement Program, or will be privately financed through a binding executed agreement, or will otherwise be provided at the time of development impacts as required by law;
- d) the extent to which the amendment will result in an efficient use of public funds needed for the provision of new infrastructure and services related to it;
  - e) the extent to which the amendment will not result in a sprawl development pattern as determined by Chapter 163, Florida Statutes, and will not discourage infilling of more appropriate areas available for development within existing Development Area Boundaries; and
  - f) the extent to which the amendment will result in a sustainable development pattern through a balance of land uses that is internally interrelated; demonstrates an efficient use of land; ensures compatible development adjacent to agriculture lands; protects environmental qualities and characteristics; provides interconnectivity of roadways; supports the use of non-automobile modes of transportation; and appropriately addresses the infrastructure needs of the community.
  - g) the extent to which the amendment results in positive market, economic and fiscal benefits of the area as demonstrated through a market demand analysis, economic impact analysis, and fiscal impact analysis.
- Policy A.1.2.7: The County shall encourage urban and suburban growth within the development areas where public facilities and services exist. Development Areas are those areas designated on the Future Land Use Map, which depict the overall future growth pattern of the County. Areas designated R/S and A-I are not Development Areas. Comprehensive Plan amendments to add development areas shall be discouraged unless the applicant demonstrates the amendment provides economic development, job creation, preservation of the natural environment, or other public benefit.
  - Policy A.1.3.11: When a Comprehensive Plan amendment, rezoning or development application is considered, the County shall ensure compatibility of adjacent and surrounding land uses. Land uses, include but are not limited to permitted uses, structures, and activities allowed within the land use category or implementing zoning district. Compatibility means a condition in which land uses can co-exist in relative proximity to each other in a stable fashion over time such that no use is unduly negatively impacted directly or indirectly by another use. Compatibility does not mean “the same as”. Compatibility refers to the sensitivity of development proposals in maintaining the character of existing development and environments. The compatibility of land uses is dependent on numerous characteristics which may impact adjacent or surrounding uses.. In order to ensure compatibility with a Comprehensive Plan amendment, the County may require the submittal of a companion rezoning application, such as a PUD, Special Use request or other application showing development of the property.

The Comprehensive Plan contains policies directed towards Rural/Silviculture (R/S), including A.1.6.1 and A.1.6.3. These policies state the following (provided in part):

- Policy A.1.6.1: The County shall maintain the Rural/Silviculture (R/S) as depicted on the Future Land Use Map. Unless determined an Exempt Parcel the minimum lot size for residential development within the R/S designation is 40 acres. This Policy shall not be construed to prevent amendments of the Future Land Use Map to re-designate lands presently classified as R/S pursuant to the requirements of this Plan and applicable law.
- Policy A.1.6.3: Parcels of land designated as R/S on the Future Land Use Map recorded as of September 14, 1990 that do not meet the acreage requirement for R/S shall be considered Exempt Parcels. Each Exempt Parcel shall be permitted one dwelling unit.

The Comprehensive Plan contains policies regarding Mixed-Use Development, including Policies A.1.9.1, A.1.9.2, A.1.9.4, and A.1.9.7. These policies state the following (provided in part):

- Policy A.1.9.1: The Mixed-Use Districts are intended to provide for areas that have a mixture of land uses, including commercial, light industrial, office, and low, medium, and high-density residential development, and are supported by urban services (e.g. central water and sewer).
- Policy A.1.9.2: Mixed Use Districts are not intended to provide for linear strip commercial development, but rather to incorporate commercial, light industrial, office, and residential uses in a manner that promotes a diversity of residential and non-residential activities in a concentrated area. It is intended that the highest land use intensities occur at the center of the Mixed-Use Districts with decreasing intensity of uses proceeding outward toward the adjacent land use designations. When not appropriate, development of the Mixed-Use District shall ensure compatibility with the adjacent properties. Adequate buffering can be shown to alleviate incompatibilities and protect existing community character.
- Policy A.1.9.4: All new development within Mixed Use Districts on parcels equal to or greater than ten (10) acres in size shall be required to apply for development approval under the provisions of the Planned Development land development regulations.
- Policy A.1.9.7: Enhanced buffers may be required at the periphery of developments within Mixed Use Districts to provide for compatibility with adjacent uses and shall be determined during the review of proposed developments.

Figure 1 provides a comparison of permitted use categories within the current and proposed Future Land Use Map designations.

**Figure 1: FLUM Designation Allowed Use Categories**

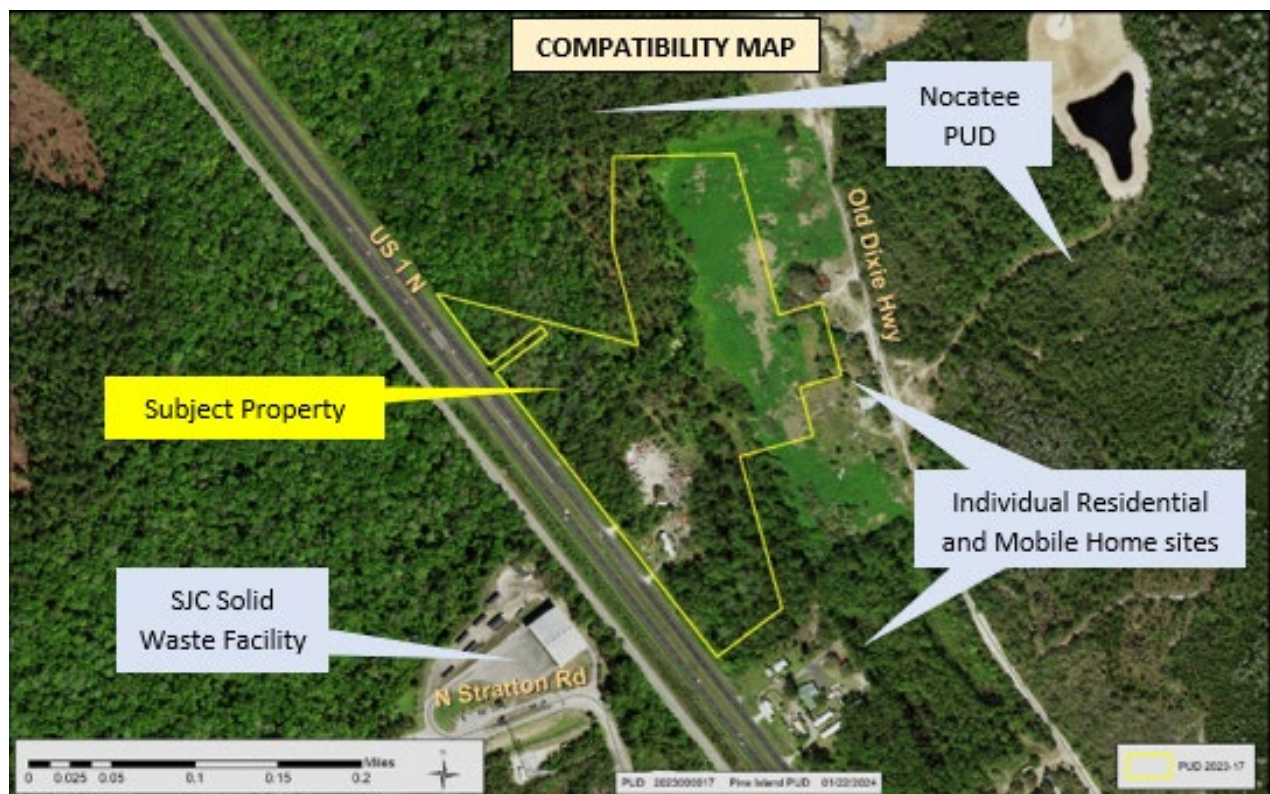
Permitted Uses	Mixed Use District (MD) (proposed)	Rural/Silviculture (R/S) (current)
Residential	X *	X
Agricultural	X **	X
Cultural/Institutional	X	X
Neighborhood Business and Commercial	X	
General Business and Commercial	X	
High Intensity Commercial	X	
Highway Commercial	X	
Light Industrial	X	
Heavy Industrial	X ***	
Office and Professional	X	
Mining and Extraction		X
Outdoor/Passive		X
Neighborhood Public Service	X	X
Solid Waste and Correctional Facilities	X ****	X
General Public Service	X	
Regional Business and Commercial	X	
Regional Cultural and Entertainment	X	
*Up to 13 units per acre **When not incompatible with the surrounding area ***Subject to Policy A.1.9.8 ****When not incompatible and subject to Policy A.1.9.9		

Figures 2 and 3 provide a compatibility analysis and map of adjacent lands. The subject property is surrounded by existing residential sites, undeveloped residential sites, the south end of Nocatee, and the County Transfer Station.

**Figure 2: Compatibility Analysis**

Criteria	Subject Property	North	East	South	West across US Hwy 1 N
<b>Current / Proposed FLUM</b>	Currently: R/S Proposed: Mixed Use District	New Town	R/S	R/S	Public
<b>Current / Proposed Zoning</b>	Currently: OR Proposed: companion: PUD 2023-17 Pine Island PUD	Nocatee PUD (Ord 2002-46, as amended)	OR	OR	Public Service
<b>Current / Proposed Use</b>	Proposed Mixed Use site to include Commercial and Multi-family Apartments	Approved Commercial, Single Family, and Multi-family development with a Town Center, Villages, and Neighborhoods	Various sized lots of record adjacent to Old Dixie Hwy; Single Family, Mobile Homes, clear/undeveloped land	Various sized lots of record; Mobile Homes and undeveloped land; some owned by DOT and State of Florida	SJC Stratton Road Transfer Station – Solid Waste Facility
<b>Density</b>	Proposed: 13 du per acre	Various densities from 3-8 units per net acre in residential areas of New Town	Various sized lots	Various sized lots	N/A

**Figure 3: Compatibility Map**



The applicant is asking for a Mixed-Use District designation which would allow 13 dwelling units per acre. The applicant's proposal is for 202 multi-family apartments and 50,000 square feet of non-residential development on a total of approximately 20 acres (15.58 net acres). The proposed density of the site calculates to 13 dwelling units per net acre of the entire subject property. Review by staff found that the subject site is part of an existing residential plat; Woodland Heights was platted in 1925 and can be found in Map Book 3 Page 78. It appears the subject site contains approximately 205 platted residential lots and several other partial lots along with platted Rights of Way.

Based on the provided application materials, the applicant intends to create a mixed-use site with both residential and commercial uses. The northeastern portion of the property is proposed for the multi-family residential units while the portion closest to US Highway 1 North is proposed for the commercial development. As provided within the application, the commercial uses allowed would be those under the Neighborhood Business/Commercial, General Business/Commercial, plus Office and Professional Services. The current FLUM designation of R/S would not permit the proposed types of uses; therefore, the applicant is requesting to change the FLUM to Mixed-Use. Based on the companion PUD project (PUD 2023-17), the applicant proposes 50,000 square feet of non-residential development on a total of approximately 20 acres (15.58 net acres). There is no Text Amendment submitted with this CPA(SS) project to limit the amount of square footage of commercial use, but with the companion PUD Text and Map, the site would be limited through the allowed zoning.

The proposed commercial, office, and residential uses are consistent with the MD land use designation. Properties in the immediate area are both residential and commercial. Access to the property is one access directly off of US Hwy 1 North.

## **CORRESPONDENCE/PHONE CALLS**

As of the writing of this staff report, Staff has received no correspondence regarding this request.

## **ACTION**

Staff offers four (4) findings of fact to support a motion to recommend approval or four (4) findings of fact to recommend denial. These findings are subject to change during the public hearing process.

## **ATTACHMENTS**

1. Recorded Documents Section
2. Application and Supporting Documents

**PROPOSED FINDINGS OF FACT  
CPA(SS) 2023-08 Pine Island PUD**

<b>APPROVE</b>	<b>DENY</b>
1. The proposed Comprehensive Plan Amendment was fully considered after public hearing pursuant to legal notice duly published as required by law.	1. The proposed Comprehensive Plan Amendment was fully considered after public hearing pursuant to legal notice duly published as required by law.
2. The proposed Comprehensive Plan Amendment is consistent with the St. Johns County Comprehensive Plan, Ordinance No. 2010-38, as amended, the Northeast Florida Strategic Regional Policy Plan, the Community Planning Act and Land Development Regulation Act (Chapter 163, Florida Statutes).	2. The proposed Comprehensive Plan Amendment is not consistent with the St. Johns County Comprehensive Plan, Ordinance No. 2010-38, as amended, the Northeast Florida Strategic Regional Policy Plan, the Community Planning Act and Land Development Regulation Act (Chapter 163, Florida Statutes).
3. The proposed Comprehensive Plan Amendment is procedurally consistent with Part 9.05.00 of the Land Development Code.	3. The proposed Comprehensive Plan Amendment is not procedurally consistent with Part 9.05.00 of the Land Development Code.
4. The amendment is consistent with the Goals, Objectives, and Policies of the St. Johns County Comprehensive Plan, including Policies A.1.2.5, A.1.2.7, A.1.3.11, A.1.15.2, and with other provisions provided during the hearing.	4. The amendment is not consistent with the Goals, Objectives, and Policies of the St. Johns County Comprehensive Plan, including Policies A.1.2.5, A.1.2.7, A.1.3.11, A.1.15.2, and with other provisions provided during the hearing.

**ATTACHMENT 1**  
**RECORDED DOCUMENTS SECTION**

**BEGIN DOCUMENTS  
TO BE RECORDED**



**ORDINANCE NO. 2024 - \_\_\_\_\_**

**AN ORDINANCE OF THE COUNTY OF ST. JOHNS, STATE OF FLORIDA, AMENDING THE 2025 COMPREHENSIVE PLAN, ORDINANCE NO. 2010-38, AS AMENDED, TO CHANGE THE FUTURE LAND USE MAP DESIGNATION FROM RURAL SILVICULTURE (R/S) TO MIXED USE DISTRICT (MD), FOR APPROXIMATELY 20.67 ACRES OF LAND LOCATED AT 9050, 9060, AND 9080 US HWY 1 NORTH ALONG WITH UNADDRESSED PARCELS LOCATED ON US HWY 1 NORTH AND OLD DIXIE HWY; PROVIDING FOR FINDINGS OF FACT; FINDINGS OF CONSISTENCY; SEVERABILITY; AND AN EFFECTIVE DATE.**

**WHEREAS**, Chapter 125 and 163, Florida Statutes provide for the Board of County Commissioners to prepare, implement and enforce Comprehensive Plans and Land Development regulations for the control of development within the County;

**WHEREAS**, Section 163.3184 and 163.3187 Florida Statutes provide the process for the adoption of Comprehensive Plan amendments; and,

**NOW THEREFORE BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF ST. JOHNS COUNTY, FLORIDA:**

**SECTION 1.** The St. Johns County Comprehensive Plan is amended to change the Future Land Map designation from **Rural/Silviculture (R/S)** to **Mixed-Use District (MD)**, for approximately 20.67 acres of land as described and shown on the attached **EXHIBITS A and B**.

**SECTION 2.** The 2025 Comprehensive Plan amendment described in Section 1 is based upon the following Findings of Fact:

- (a) The amendment was fully considered after public hearing pursuant to legal notice duly published as required by Law.
- (b) The amendment is consistent with the Northeast Florida Strategic Regional Policy Plan.
- (c) The amendment is consistent with the applicable sections of the St. Johns County Comprehensive Plan and the Land Development Code.
- (d) The amendment is consistent with the Goals, Objectives, and Policies of the St. Johns County Comprehensive Plan, including Policies A.1.2.5, A.1.2.7, A.1.3.11, A.1.15.2, and with other provisions provided during the hearing.

**SECTION 3.** The remaining portions of the St. Johns County Comprehensive Plan, Ordinance No. 2010-38, as amended and the 2025 Future Land Use Map, as amended, which are not in conflict with the provisions of this ordinance, shall remain in full force and effect.

**SECTION 4.** Should any section, subsection, sentence, clause, phrase or portion of this ordinance be held invalid or unconstitutional by any court of competent jurisdiction, such portions shall be deemed a separate, distinct and independent provision and shall not affect the validity of the remaining portions.

**SECTION 5.** It is the intent of the St. Johns County Board of County Commissioners that scrivener and typographic errors which do not change the tone or tenor of this Ordinance may be corrected during codification and may be authorized by the County Administrator or designee, without public hearing, by filing a corrected or recodified copy of the same with the Clerk of the Board.

**SECTION 6.** Small scale development amendments may not become effective until 31 days after adoption. If challenged within 30 days after adoption, small-scale development amendments may not become effective until the state land planning agency or the Administration Commission, respectively, issues a final order determining that the adopted small-scale development amendment is in compliance. No development orders, development permits, or development dependent on this amendment may be issued or commence before it has become effective.

**SECTION 7.** This ordinance shall be recorded in a book of land use regulation ordinances kept and maintained by the Clerk of Court in accordance with Section 125.68, Florida Statutes.

**PASSED AND ENACTED BY THE BOARD OF COUNTY COMMISSIONERS OF ST. JOHNS COUNTY, FLORIDA, THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2024.**

**BOARD OF COUNTY COMMISSIONERS OF  
ST. JOHNS COUNTY, FLORIDA**

**BY: \_\_\_\_\_  
Sarah Arnold, Chair**

**ATTEST: Brandon J. Patty, Clerk of the Circuit Court & Comptroller**

**BY: \_\_\_\_\_  
Deputy Clerk**

**Effective Date: \_\_\_\_\_**

**EXHIBIT A**  
**2025 Future Land Use**  
**From Rural/Silviculture**  
**To Mixed Use District**

**Subject Property**

**Mixed Use District**

**RUR/SYLV/SJRWMD**

**NEW TOWN**

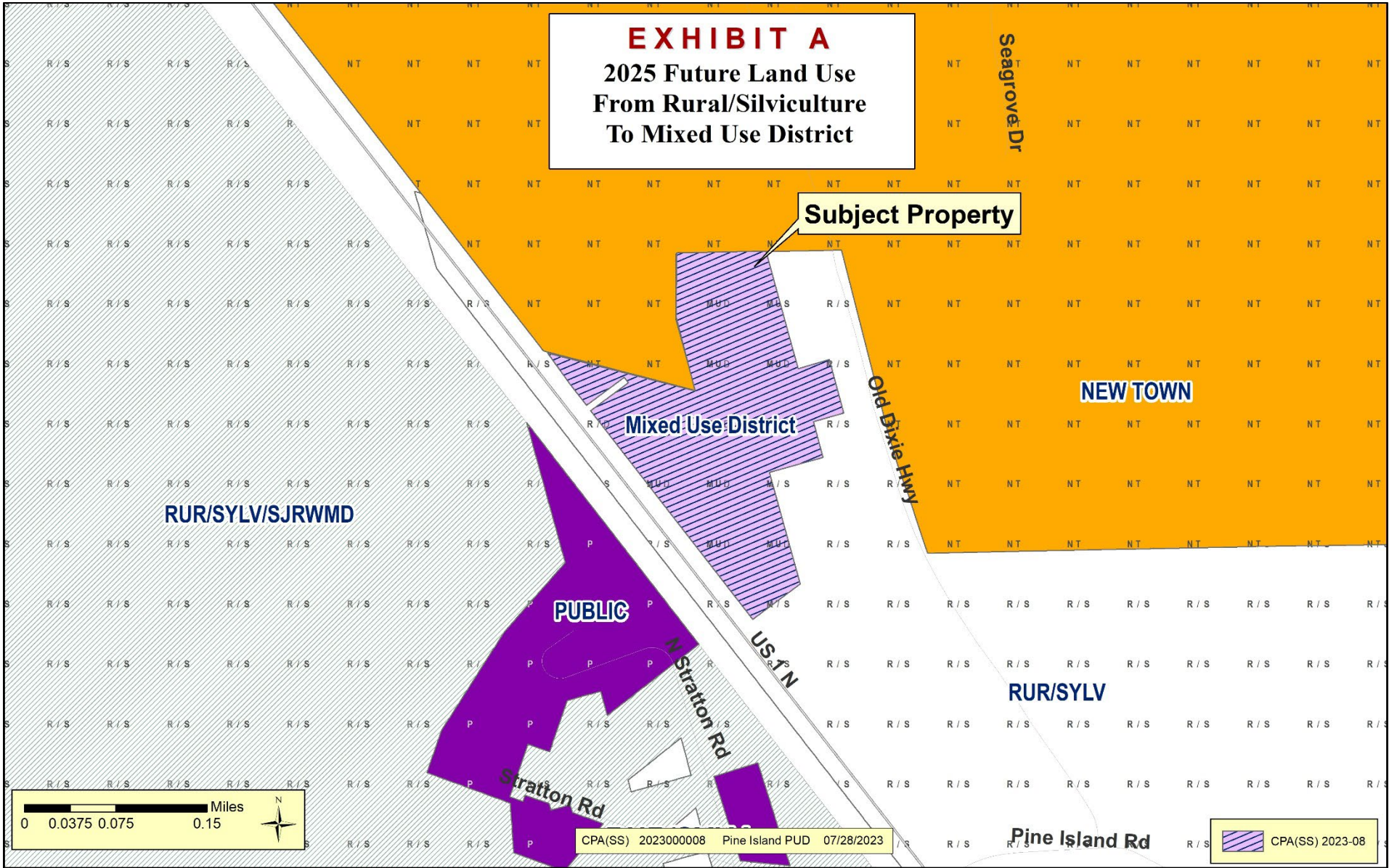
**PUBLIC**

**RUR/SYLV**



CPA(SS) 2023000008 Pine Island PUD 07/28/2023

CPA(SS) 2023-08



**EXHIBIT B - Legal Description**

BLOCK D, 2, 3, 16, 17, 18, 19, 21, 22, AND 23 WOODLAND HEIGHTS, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 3, PAGE 78, OF THE PUBLIC RECORDS OF ST. JOHNS COUNTY, FLORIDA, LYING NORTHEASTERLY OF U.S. HIGHWAY NO. 1 (A VARIABLE WIDTH RIGHT OF WAY AS NOW ESTABLISHED).

TOGETHER WITH:

LOTS 21 THROUGH 28, BLOCK 20, WOODLAND HEIGHTS, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 3, PAGE 78, OF THE PUBLIC RECORDS OF ST. JOHNS COUNTY, FLORIDA.

TOGETHER WITH:

LOTS 1 THROUGH 4 AND LOTS 41 THROUGH 44, BLOCK E, WOODLAND HEIGHTS, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 3, PAGE 78, OF THE PUBLIC RECORDS OF ST. JOHNS COUNTY, FLORIDA.

TOGETHER WITH:

THOSE PORTIONS OF UN-OPENED PLATTED RIGHT OF WAYS LYING ADJACENT TO SAID BLOCKS.

LESS AND EXCEPT:

LOTS 22 THROUGH 27, BLOCK 21, WOODLAND HEIGHTS, AS RECORDED IN MAP BOOK 3, PAGE 78, PUBLIC RECORDS OF SAINT JOHNS COUNTY, FLORIDA

LESS AND EXCEPT:

CORAL RIDGE AT NOCATEE PHASE 2, AS RECORDED ON THE PLAT THEREOF IN MAP BOOK 121, PAGE 14 THROUGH 33 OF THE PUBLIC RECORDS OF DUVAL COUNTY, FLORIDA.

LESS AND EXCEPT:

A 30' RIGHT OF WAY FOR A DRAINAGE DITCH AS SHOWN ON FLORIDA STATE ROAD RIGHT OF WAY MAP FOR STATE ROAD NO. 5 SECTION NO. 78020, OLD PROJECT NO. 7802-(110) 275 BEING A PORTION OF LOUISE AVENUE AND BLOCK D, WOODLAND HEIGHTS, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 3, PAGE 78, OF THE PUBLIC RECORDS OF ST. JOHNS COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE INTERSECTION OF THE SOUTHERLY LINE OF CORAL RIDGE AT NOCATEE PHASE 2, AS RECORDED ON THE PLAT THEREOF IN MAP BOOK 121, PAGES 14 THROUGH 33 AND THE NORTHEASTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 (A VARIABLE WIDTH RIGHT OF WAY AS NOW ESTABLISHED);

THENCE S37°49'39"E, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, A DISTANCE OF 301.96 FEET TO THE POINT OF BEGINNING; THENCE S37°49'39"E, CONTINUING ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, A DISTANCE OF 30.01 FEET; THENCE N53°20'21"E, DEPARTING SAID NORTHEASTERLY RIGHT OF WAY LINE, A DISTANCE OF 206.68 FEET; THENCE N36°39'39"W, A DISTANCE OF 30.00 FEET; THENCE S53°20'21"W, A DISTANCE OF 207.29 FEET TO SAID NORTHEASTERLY RIGHT OF WAY LINE AND THE POINT OF BEGINNING.

CONTAINING 0.14 ACRES, MORE OR LESS.

**END DOCUMENTS  
TO BE RECORDED**

**ATTACHMENT 2**  
**APPLICATION AND SUPPORTING**  
**DOCUMENTS**



**Comprehensive Plan Amendment Application**  
**St. Johns County Growth Management Services Department**  
**4040 Lewis Speedway**  
**St. Augustine, Florida 32084**  
 Phone (904) 209-0675 Fax (904) 209-0676

This application, together with ALL REQUIRED EXHIBITS and application fee, should be completed and filed with the Long Range Planning Division prior to the established filing deadline for the public hearings before the Planning and Zoning Agency and Board of County Commissioners. A COMPREHENSIVE PLAN AMENDMENT DOES NOT ENTITLE THE APPLICANT TO A DEVELOPMENT PERMIT OR CERTIFICATE OF CONCURRENCY.

File No. \_\_\_\_\_ Fee \_\_\_\_\_ Date \_\_\_\_\_

Property Owner(s) Woodland Heights LLC Phone \_\_\_\_\_

Address 401 Walnut Street Fax \_\_\_\_\_

City Green Cove Springs State FL Zip Code 32043 Email \_\_\_\_\_

Are there any owners not listed  No  Yes If yes please list on separate sheet to be included with your application

Applicant Curtis Hart / Hart Resources LLC Phone 904-993-5008

Address 8051 Tara Lane Fax \_\_\_\_\_

City Jacksonville State FL Zip Code 32216 Email curtishart@hartresources.net

**Type of Request** This is a request to amend the **St. Johns County Comprehensive Plan as follows:**

Text Amendment (Sign certification statement and attach additional pages as necessary)

Element \_\_\_\_\_ Goal, Objective or Policy # \_\_\_\_\_ Page \_\_\_\_\_

Future Land Use Map Amendment (Complete the following sections)

Existing Future Land Use Map Designation RS Zoning OR

Proposed Future Land Use Map Designation MD Zoning PUD

**Location/Description:** Property Appraiser's Parcel Identification No. See list of Parcel Id's attached

Street Address/Location US-1 between Hilden Road and Pine island Road

Total Acreage 20.67 Overall Dimensions \_\_\_\_\_ Flood Zone X,A

Adjacent Future Land Use Designation North: New Town South: R/S East: New Town West: R/S

Wetlands: Yes:  No:  Type: St. Johns Fine Sand (Depressional) & Buffly sandy loam Acres: 7.33

Soil Associations: Immokalee Fine Sand, Orsino Fine Sand (0 to 5% slopes) and Pottsburg Fine Sand

Provide brief description of existing property. Include existing land cover and uses, any existing structures, infrastructure.

Current use of Parcels 1, 2 & 6 is residential mobile home and Utility Construction Contractor with open storage yard, and Parcels 4 & 5 is Landscape Contractor with open storage yard. Both are month to month tenants. The northwestern and southeastern portions are wooded swamp land, and Parcel 8 and portion of Parcel 18 contain a large mound of landscape debris compost. According to the St. Johns County Proper Appraiser (SJCPA), Parcels 1 thru 10 and 16 thru 19 are designated Vacant Residential, and except Parcels 11 thru 15 are Marshes/Wetlands/Waste Lands. SJCPA deed record indicates Woodland Heights, LLC is the current owner of the property. Property is mostly vacant but owner does have two tenants (month to month) in trailers who operate a landscaping company and other commercial business. Applicant proposes small scale comprehensive plan amendment from RS to Md and a rezoning to PUD from O/R. PUD will be a mixture of up to 50,000 sq ft of Commercial Uses and 202 multi-family units. 070860-0001, 070810-0001, 070840-0000, 070850-0001, 070830-0001, 070800-0001, 070580-0010, 070870-0360, 070890-0001, 070880-0001, 070730-0001, 070760-0001, 070770-0001, 070780-0001, 070790-0210, 070570-0001, 070630-0001, 07062-0001



**CONSISTENCY WITH COMPREHENSIVE PLAN (attach separate pages):**

1. Provide justification/reasons for not developing in designated development areas as shown on Future Land Use Map. Include economic reasons and, if available, market study.
2. Provide information regarding the consistency of the proposed land use amendment with the adopted Future Land Use Element objectives and Policies and any other relevant section of the Comprehensive Plan. Also address consistency with the Strategic Regional Policy Plan and the State Comprehensive Plan.

**ESTIMATED IMPACT ON THE AVAILABILITY OF PUBLIC FACILITIES:**

3. Describe how property is to be developed. Include phasing, uses and estimates of (a) number and type of dwelling units; (b) square feet and type of commercial/industrial uses; (c) open space and recreational area; (d) buffers; (e) wetlands; (f) drainage and infrastructure areas; and (g) other uses and sizes. Account for all acres. Provide phasing dates and anticipated buildout.
4. (a) The project will use:  public sewer or  private sewer or  septic tank.  
 (b) The project will use:  public water or  private water or  private well.
5. (a) Will the project build its own water plant?  Yes  No.  
 (b) Will the project build its own sewage plant?  Yes  No.
6. If public or private utilities are to provide services, attach letters from the utility company or companies stating whether the utility company anticipates the availability of capacity to service the project through all phases.

**7. Estimated Water and Sewage Demand:**

	Phase (Years)	Use	GPD	Peak
Water	1 & 2	Com & Res	65,600	262,400
Sewage	1 & 2	Com & Res	53,480	213,940
Water Utility	Name: SJCU		Address: 1205 FL-16, St. Augustine	
Sewer Utility	Name: SJCU		Address: 1205 FL-16, St. Augustine	

8. Describe anticipated drainage system: Curb & Gutter, Inlet, and Pipe Collection System to wet pond storm water management facility with required treatment and positive outfall.

**9. Estimate the Solid Waste Demand by 5.7 pounds per person per day or by use. Indicate methodology:**

Phase (Years)	Number of People or Use	Pounds per Day
1	505	2880 lb/day

**10. Estimate the Transportation Disadvantaged Van Services Demand by applying 1.5 percent times the number of Dwelling Units times 2.44 Persons Per Unit. (Only applies to residential developments.)**

Phase (Years)	demand = Dwelling Units X 2.44 Persons Per Unit X 0.015
1	202*2.44*.015 = 7.4

**11. Estimate the Recreation and Open Space Demand of residential projects by applying the following formulas:**

(a) Number of Dwelling Units X 2.4 Persons Per Unit X 5 Acres Per 1,000 Population for Neighborhood/Community Park Recreation, by phase:  
 $202 * 2.4 * 5 / 1000 = 2.42$  acres

(b) Number of Units X 2.5 Persons Per Unit X 24 Acres per 1,000 Population for Regional/Open Space, by Phase.  
 $202 * 2.5 * 24 / 1000 = 12.12$  acres

12. Traffic – Estimate Average Weekday Peak Hour Trips by phase by number of dwelling units and square feet of each on-residential use using the trip generation rates from the latest edition of the Institute of Transportation Engineers *Trip Generation Manual*.

Phase (Years)	Dwelling Units or Square Feet of Each Use	Trips
1	202 units	79
2	50,000 sf commercial	156

13. Estimate the area of impact using the *Traffic Impact Methodology and Procedures* contained in Appendix A of the **Land Development Code** and estimate the impacts on the Levels of Service on the segments within the Area of Impact by Phase. ATTACH CALCULATIONS (staff will complete for up to 29.99 peak hour trips).

Phase Years	Road Segment #	Existing LOS	Project Trips	LOS with Project & Background Traffic by Phase End
n/a	n/a	n/a	n/a	N/A: Reduction in trips compared to platted lots

**REQUIRED EXHIBITS: (MUST BE SUBMITTED IN THIS ORDER)**


1. Owner's Authorization for Agent Form. All persons listed on the deed, purchase agreement, title opinion or other acceptable proof of ownership must complete an Owners Authorization.
2. Proof of ownership (copy of deed or purchase agreement, and title opinion).
3. Legal description and tax identification number.
4. General location map with subject property clearly identified.
5. Property Appraiser's Map with identification of subject property, zoning, and Comprehensive Plan Land Use Designation within 300 feet of property.
6. Comprehensive Plan Future Land Use Map with subject property clearly identified.
7. Most recent aerial of site showing property boundaries.
6. Copy of soils map showing property boundaries.
8. Generalized site plan with uses, phases as described in Question 13.
9. Water and Sewer Utility letter, if applicable (Question 16).
10. One (1) copy of application and exhibits.

**NOTE: On each map include north arrow, property outline, name of person or firm who prepared the map, date of map preparation, and source of the map.**

I HEREBY CERTIFY THAT ALL INFORMATION IS CORRECT:

Signature of owner(s) or authorized person if Owner's Authorization Form is attached:

Printed or typed name(s): Curtis Hart

Signature(s): 

NAME AND ADDRESS OF PERSON TO RECEIVE ALL CORRESPONDENCE REGARDING THIS APPLICATION:

Name: Curtis Hart

Mailing Address: 8051 Tara Lane, Jacksonville FL 32216

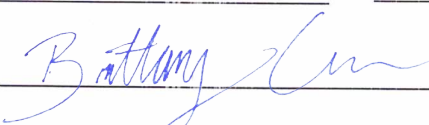
Phone: 904-993-5008 FAX: \_\_\_\_\_ E-mail: curtishart@hartresources.net

State of Florida County of St. Johns

The foregoing instrument was acknowledged before me by means of physical presence X or online notarization \_\_\_ this 17 day of July, 2023, by Curtis Hart as Applicant

for Woodland Heights LLC Notary Public, State of Florida

Name Brittany Caroon # HH 153890 Oath sworn: Yes X No \_\_\_

Notary Signature  My Commission expires: 7/14/2025



Brittany Caroon  
Comm.: HH 153890  
My Commission Expires:  
July 14, 2025

**PINE ISLAND  
COMPREHENSIVE PLAN AMENDMENT**

**PROJECT OVERVIEW, DEVELOPMENT SUMMARY, JUSTIFICATION STATEMENT AND  
CONSISTENCY ANALYSIS**

**Project Overview/Development Summary**

Woodland Heights, LLC (the “**Applicant**”) has proposed to amend the Comprehensive Plan for 20.67 acres of land located at U.S. Highway-1 between Hilden Road and Pine Island Road (the “**Property**”). The Property is owned by Woodland Heights, LLC and the current use of the property is residential, vacant, and some parcels currently have a utility contracting company and landscape company. The location of the Property is depicted on the **Future Landuse Map** as included in the application. The Property is compiled of 19 parcels. The St. Johns County Parcel Identification Numbers are listed below;

Parcel 1	070860-0001	0.73 acre
Parcel 2	070810-0001	2.05 acres
Parcel 3	070840-0000	0.14 acre
Parcel 4	070850-0001	0.21 acre
Parcel 5	070830-0001	0.76 acre
Parcel 6	070800-0001	0.99 acre
Parcel 7	070580-0010	0.55 acre
Parcel 8	070870-0360	0.34 acre
Parcel 9	070890-0001	0.05 acre
Parcel 10	070880-0001	0.03 acre
Parcel 11	070730-0001	1.50 acres*
Parcel 12	070760-0001	1.33 acres*
Parcel 13	070770-0001	2.75 acres
Parcel 14	070780-0001	2.75 acres
Parcel 15	070790-0210	0.55 acre
Parcel 16	070570-0001	0.23 acre*
Parcel 17	070630-0001	0.83 acres*
Parcel 18	070620-0001	0.64 acres*
Parcel 19	Platted ROWs	4.24 acres**
TOTAL		20.67 acres

\*a portion of this block only

\*\*existing platted right-of-way (to be vacated)

The Property is located on U.S. Highway-1 and is adjacent to New Town. The Applicant has filed a rezoning to Planned Unit Development (PUD) of this Property in conjunction with the Comprehensive Plan Amendment.

The existing Future Land Use Map (“FLUM”) designation of the Property is Rural/Silviculture (“R/S”). The Applicant is requesting a FLUM amendment to change the designation of the Property to Mixed-Use District (Md). The Property is surrounded by New Town to the North and East,

January 3, 2024

Rural/Silviculture to the South and Rural/Silviculture owned by St. John River Water Management (SJRWM) to the West.

The existing Zoning designation of the Property is Open Rural (“OR”). The Applicant is requesting a Zoning change to PUD. The Property is surrounded by PUD to the North and East, OR and PRD to the South, and OR across U.S. Highway-1 to the West.

The Applicant is proposing to develop a mix of commercial and residential uses. The proposed PUD is planned to consist of up to 50,000 square feet of commercial uses and 202 multi-family units to be completed in two phases as depicted on the Conceptual Site Plan (“Site Plan”). The Property consists of 20.67 acres of which 7.33 acres are wetlands. Most of the wetlands will be preserved with only 2.25 acres being impacted.

### **Project Benefits**

The property is surrounded by existing and future planned residential developments (Nocatee). The Project is planned to connect to U.S. Highway-1, a four-lane divided roadway designated as a Principal Arterial. Additionally, there is a future connection between this project and Old Dixie Highway which is designated as a County Local Road. This property will allow infill development in an area where the community continues to grow. With the existing and approved adjacent residential developments and infrastructure, the Project is compatible with the area and does not constitute urban sprawl.

St. Johns County Fire Station 15 (Pine Island) is located less than one (1) mile from the site. Water and sewer are currently available and will be provided by St Johns Utility. The Applicant will connect to existing utility lines to provide water and sewer service to the Property.

The Property has been designed to minimize impacts to the wetlands and endangered or threatened species. The Applicant will preserve the majority of wetlands, only impacting 2.25 acres of wetlands.

The proposed Mix Use development will incorporate commercial, office, neighborhood, and residential uses in a manner that promotes diversity of residential and non-residential activities in one centralized area. The development will provide for pedestrian, bicycle, and vehicular systems providing interconnectivity and ensuring accessibility within and between the uses.

A list of the project’s public benefits includes:

1. Provides a development with commercial and residential uses to accommodate the continued growth in the Northeast portion of St. Johns County.
2. Preservation of the majority of the wetlands and natural habitat located on site.
3. Commitment to water conservation and use of native plants in project landscaping.
4. Commercial uses will generate jobs for local residents in the surrounding area.

### **Project Justification – Comprehensive Plan Amendment Application Question 1**

The Property is in an area of continued growth and development with the surrounding neighborhoods of Nocatee. This area has seen exponential growth and is no longer Rural or Silviculture in

nature. Allowing the Comprehensive Plan Amendment to change from Rural/Silviculture to Mix-Use District would be compatible and complimentary to the surrounding properties. This would also allow additional housing options in the area outside of Nocatee for those future residents who do not wish to reside in a Master Planned Community and can take advantage of the future commercial uses in an interconnected community with easy access to an arterial roadway and quick access to major roadways and interstates.

The proposed FLUM amendment to Mixed-Use District is consistent and compatible with the land uses and FLUM designations of surrounding properties and the vision of the St. Johns County Comprehensive Plan. Since there is existing development surrounding this Property, allowing this FLUM amendment to Mixed-Use District will not result in incompatible land uses or densities. Therefore, the project meets the requirements of Comprehensive Plan, including Policies A.1.3.11.

### **Comprehensive Plan Amendment Application Question 2**

The following sections reference Goals, Policies and Objectives of the St. Johns County 2025 Comprehensive Plan, the Strategic Regional Policy Plan and the State Comprehensive Plan (the “Plans”). Only those goals, policies and objectives that the Applicant believes are relevant to the proposed Comprehensive Plan Amendment have been addressed. The goals, policies and objectives are identified in bold-face type and the Applicant has provided responsive information in italics below as a justification for the amendment and to evidence its consistency with the Plans.

#### **A. FUTURE LAND USE ELEMENT**

##### **Goal A.1**

**To effectively manage growth and development by designating areas of anticipated future development which satisfy demand where feasible, in a cost-efficient and environmentally acceptable manner. Encourage and accommodate land uses which make St. Johns County a viable community. Create a sound economic base and offer diverse opportunities for a wide variety of living, working, shopping, and leisure activities, while minimizing adverse impact on the natural environment.**

##### **Objective A.1.2 Control of Urban Sprawl**

**The County shall control urban sprawl, characterized by leapfrog development, strip development, and low density residential over a large area.**

*The Property is located adjacent to an existing Development Area (New Town) and a neighborhood currently under construction called Coral Ridge. This project would be a natural extension of development and would not constitute leapfrog development. The proposed development will allow for a mixed-use development that interconnects commercial uses and integrate residential uses and will not contain strip development. Although the uses are compatible and a natural progression of development, the project will provide buffers between the adjacent uses.*

**Policy A.1.2.1 The County shall only issue development orders or development permits consistent with the provisions of the County Concurrency Management System, as provided in the Land Development Code.**

*The Applicant will comply with applicable provisions of Section 163.3180, Florida Statutes, and the County's Concurrency Management System, as provided in the Code.*

**Policy A.1.2.2 The County shall promote infill residential development, within the Development Areas as depicted on the Future Land Use Map, near existing facilities by offering a Variable Density Factor for residential developments that are served by central water and central sewer consistent with the Variable Density Factors established through Policy A1.11.1.**

*This Property is an infill property with access to central water and central service which allows the Applicant to apply for Mixed-Use District FLUM designation.*

**Policy A.1.2.5 All Comprehensive Plan amendments shall provide justification for the need for the proposed amendment and demonstrate how the proposed amendment discourages urban sprawl and not adversely impact natural resources. In evaluating proposed amendments, the County shall consider each of the following:**

- (a) the extent to which the proposed amendment is contiguous to an existing Development Area which has developed in a manner providing a compact, contiguous development pattern with the proposed amendment;**

*The Property is located adjacent to an existing Development Area (New Town) and a neighborhood currently under construction called Coral Ridge. This development is an infill development on aggregate of small parcels of land that is contiguous to the surrounding development and is a logical progression for development. The Property is surrounded by existing or approved developments, including large developments such as Nocatee and other commercial and public uses. This development will provide a land use that is consistent with surrounding area.*

- (b) the extent to which population growth and development trends warrant an amendment, including an analysis of vested and approved but unbuilt development;**

*Please see Project Benefits/Justification on page 2. This development is in an area that has seen significant growth the past several years. This development will provide additional housing opportunities to the area in which there has been significant growth in population as well as provide interconnectivity to commercial uses within the same development.*

- (c) the extent to which adequate infrastructure to accommodate the proposed amendment exists, or is programmed and funded through an adopted Capital Improvement Schedule, such as the County Capital Improvement Program, the Florida Department of Transportation Five-Year Work Program, the North Florida Transportation Planning Organization (TPO) 2025 COMPREHENSIVE PLAN Land Use Page 3 Transportation Improvement Program, or will be privately financed through a binding**

**executed agreement, or will otherwise be provided at the time of development impacts as required by law;**

*The Applicant will build and design the project according the rules and regulations of the Land Development Code. The project will be served by central water, and sewer, as well as electric services to be provided by St. Johns Utilities. Any impacts of traffic produced by these project will be mitigated for through the County's Concurrency Management System. A trip generation analysis was conducted and provided to staff. The analysis shows that the proposed 202 multi-family units will generate less trips than the 177 single-family platted lots of record.*

**(d) the extent to which the amendment will result in an efficient use of public funds needed for the provision of new infrastructure and services related to it;**

*The Applicant will provide for the infrastructure needed to accommodate the development and will pay for the extension of water and sewer services to the Property if needed.*

**(e) the extent to which the amendment will not result in a sprawl development pattern as determined by Chapter 163, Florida Statutes, and will not discourage infilling of more appropriate areas available for development within existing Development Area Boundaries; and**

*This amendment does not result in a sprawl development pattern. This amendment is consistent and compatible with the surrounding area.*

**(f) the extent to which the amendment will result in a sustainable development pattern through a balance of land uses that is internally interrelated; demonstrates an efficient use of land; ensures compatible development adjacent to agriculture lands; protects environmental qualities and characteristics; provides interconnectivity of roadways; supports the use of non-automobile modes of transportation; and appropriately addresses the infrastructure needs of the community.**

*This development is contiguous and adjacent to Development areas and will be compatible and consistent with the surrounding neighborhoods. Additionally, the Property is preserving most of the wetlands so both uses can enjoy the natural aesthetics.*

**Policy A.1.2.6 The extension or expansion of utilities and roads should promote compact, contiguous development patterns.**

*Water and Sewer area available to the Property. The Property is contiguous to the existing Development of New Town and Coral Ridge where public facilities and services already exists, so the site promotes compact, contiguous development patterns in this area of the County.*

**Policy A.1.2.7 The County shall encourage urban and suburban growth in Development Areas where public facilities and services exist. Development Areas are those areas designated on the Future Land Use Map, which depict the overall future growth pattern of the County. Areas designated R/S and A-I are not Development Areas. Comprehensive Plan amendments to add development area shall be discouraged unless the applicant**



**demonstrates the amendment provides economic development, job creation, preservation of the natural environment, or other public benefit.**

*Water and Sewer area available to the Property. The Property is contiguous to the existing Development of New Town and Coral Ridge where public facilities and services already exist. The Property has been designed to minimize impacts to the wetlands and endangered or threatened species. The Applicant will preserve the majority of wetlands and only impacting 2.25 acres of wetlands. This development will provide additional housing opportunities to the area in which there has been significant growth in population as well as provide interconnectivity to commercial uses within the same development.*

**Objective A.1.3 Surrounding Land Use: The County shall locate land uses so they are compatible and complementary.**

*The Property is adjacent to New Town and commercial uses. Therefore, allowing this amendment to allow the development of commercial and residential uses will not result in incompatible land uses or densities. The Property is located adjacent or near lands with FLUM designations of New town, Rural/Silviculture and, Commercial uses. The requested FLUM designation of Mixed-Use District is compatible with and complementary to the uses and designations of adjacent and nearby lands.*

**Policy A.1.3.11 When a Comprehensive Plan amendment, rezoning or development application is considered, the County shall ensure compatibility of adjacent and surrounding land uses. Land uses, include but are not limited to permitted uses, structures, and activities allowed within the land use category or implementing zoning district. Compatibility means a condition in which land uses can co-exist in relative proximity to each other in a stable fashion over time such that no use is unduly negatively impacted directly or indirectly by another use. Compatibility does not mean “the same as“. Compatibility refers to the sensitivity of development proposals in maintaining the character of existing development and environments. The compatibility of land uses is dependent on numerous characteristics which may impact adjacent or surrounding uses. These include, but are not limited to: type of use, density, intensity, height, general appearance and aesthetics, odors, noise, smoke, dust, vibration, traffic generation, sanitation, litter, drainage, fire risk, air quality, vegetation, topography, soil conditions, wildlife, aquifer recharge, surface waters, drainage, protection of Listed Species or Essential Habitat, maintenance of public infrastructure, availability of potable water, sanitary sewer and other necessary public services and nuisances.**

*Please see Pages 1 through 6 of this document for an analysis compatibility with surrounding uses.*

**Policy A.1.4.5 All public and private development shall be reviewed for its impact upon designated historic and archaeological resources, as required by the County Land Development Code.**

*A Cultural Resources Assessment Survey has been conducted and provided and is on file with the County.*

**Objective A.1.11 Provision of Efficient, Compact Development**

**The County shall encourage an efficient and compact land use pattern providing moderate overall densities and adequate land uses to support balanced growth and economic development.**

*The Property is located in the Northeast portion of St. Johns County with direct access to US-1 easy access to S.R. 206, Nocatee Parkway, and 9B. With easy access to major thoroughfares and local roads, this project is a sensible and centrally located development. The development will generate future revenue for the County from impact fees, ad valorem property taxes, and sales taxes on spending by residents on the goods and services within the development and nearby.*

**Objective A.1.6 Agricultural and Silvicultural Areas**

**Policy A.1.6.1 The County shall maintain Rural/Silviculture (R/S) and Agricultural-Intensive (A-I) as depicted on the Future Land Use Map.**

*The property is located within the Northeast portion of St. Johns County. This portion of the county has seen significant growth within the past several years. The property is adjacent to Residential, Commercial and Retail uses with direct access to US-1. This area is no longer Rural and Silvicultural in nature as development has increased along the US-1 and S.R. 210 corridor. The development of this parcel would provide an efficient and compact land use pattern that provides a moderate density mixed with commercial to support balanced growth and economic development. Additionally, Applicant intends to preserve a majority of the wetlands and significant natural habitats which would be the intent and spirit of the LDC.*

**Objective A.1.9 Mixed Use Development**

**The County shall provide a mixture of land uses within designated Mixed Use Districts to encourage large concentrated areas of commercial, office, light industrial, residential, recreation and cultural facilities at a scale which is capable of serving large segments of the County and region.**

**Policy A.1.9.1 All land uses, as provided for in the County Comprehensive Plan and County land development regulations, may be included within Mixed Use Districts as designated on the Future Land Use Map except as provided in Policy A.1.9.8. The Mixed Use Districts are intended to provide for areas that have a mixture of land uses including commercial, light industrial, office, and low, medium, and high density residential development, and are supported by urban services (e.g. central water and sewer). Residential densities within Mixed Use Districts shall be consistent with adjacent land uses and may transition from low to high density. Mixed Use Districts may be permitted up to thirteen (13) units per net acre plus any applicable optional, wetland, or affordable housing density bonuses. Density bonuses shall not apply within the Workforce Housing Zoning designation. Densities shall be determined on a site-specific basis considering design, compatibility, infrastructure, site characteristics, and other similar considerations, which may limit density appropriate to the**

**site. Intensity of non-residential uses shall be limited to 75% Impervious Surface Ratio (ISR) and 70% Floor Area Ratio (FAR) as further governed by Policy A.1.11.3.**

*The Property is adjacent to New Town and commercial uses. Allowing this amendment for the development of commercial and residential uses will not result in incompatible land uses or densities. The property is also supported by urban services. All the surrounding uses are a mixture of the FLUM designations therefore, the requested FLUM designation of Mixed-Use District is compatible with and complementary to the uses and designations of adjacent and nearby lands.*

**Policy A.1.9.2 Mixed Use Districts are not intended to provide for linear strip commercial development, but rather to incorporate commercial, light industrial, office, and residential uses in a manner that promotes a diversity of residential and nonresidential activities in a concentrated area. It is intended that the highest land use intensities occur at the center of the Mixed Use Districts with decreasing intensity of uses proceeding outward toward the adjacent land use designations. When not appropriate, development of the Mixed Use District shall ensure compatibility with the adjacent properties. Adequate buffering can be shown to alleviate incompatibilities and protect existing community character.**

*This development does not provide for linear strip commercial development, but instead, it incorporates commercial and residential uses that promotes a diversity of residential and non-residential activities in a concentrated area. The proposed density for the residential is 202 units. The maximum density allowable under Mixed Use Districts for this property is 202 units. The property currently has 177 platted lots. By right, the property could be developed for 177 single family homes. By allowing this development, it would impact the area significantly less than what is allow but it also brings diversity of having both residential and non-residential uses which otherwise would not be allowed by right.*

**Policy A.1.94 All new development within Mixed Use Districts on parcels equal to or greater than ten (10) acres in size shall be required to apply for development approval under the provisions of the Planned Development land development regulations. This requirement shall not apply to development within the Workforce Housing Zoning designation.**

*This development will apply for development approval as required under the LDC.*

**Policy A.1.9.7 Enhanced buffers may be required at the periphery of developments within Mixed Use Districts to provide for compatibility with adjacent uses and shall be determined during the review of proposed developments.**

*The proposed development provides for compatibility buffers between adjacent uses and internal uses if required by the LDC.*

## **E. COASTAL/CONSERVATION MANAGEMENT ELEMENT**

**Policy E.2.2.4 The County shall protect Environmentally Sensitive Lands (ESLs) through the continued implementation of Land Development Regulations (LDRs) that address the alternative types of protection for each type of Environmentally Sensitive Land and, at a minimum, address the following issues:**

**(a) For Wetlands, Outstanding Florida Waters (OFW), and Estuaries: 2025  
COMPREHENSIVE PLAN Coastal Management/Conservation Page 25**

**(1) Maintain buffers between the wetlands/OFW/estuaries and upland development as stated in the County's Land Development Regulations (LDRs) and as follows:**

**(a) A minimum natural vegetative upland buffer of twentyfive (25) feet shall be required and maintained between the developed areas and the contiguous wetlands to protect the water quality of the wetlands, except where buffer averaging may allow less than the required minimum of twenty-five (25) feet in certain locations while achieving a greater buffer width or where a variance is granted. Except where a variance is granted no buffer shall be reduced to less than ten (10) feet except in circumstances where an unavoidable wetland impact occurs such as, but not limited to, a road crossing. Such upland buffer shall be measured from the jurisdictional wetland line as determined by the SJRWMD and FDEP.**

**(b) A minimum of a fifty (50) feet natural vegetative upland buffer shall be required and maintained between the development areas and the St. Johns, Matanzas, Guana and Tolomato Rivers and their associated tributaries, streams and other interconnecting water bodies, except where buffer averaging may allow less than the required minimum of fifty (50) feet in certain locations while achieving a greater buffer width or where a variance is granted. Except where a variance is granted no buffer shall be reduced to less than twenty-five (25) feet except in circumstances where an unavoidable wetland impact occurs such as, but not limited to, a road crossing. Such upland buffer shall be measured from the jurisdictional wetland line as determined by the SJRWMD and DEP.**

**(2) Continue to coordinate with DEP and SJRWMD on the status of the water quality data in all the County's major rivers, especially areas which abut designated shellfish harvesting areas. If the SJRWMD water quality data reveals the need for more stringent stormwater regulations or other water quality standards, the County will work with DEP and the SJRWMD in the development of these regulations.**

**(b) For Coastal Resources and Beach and Dune Resources: E.2.2.4(a) 2025  
COMPREHENSIVE PLAN Coastal Management/Conservation Page 26**

**(1) Coordinate the consistency with Federal and State regulations and requirements applicable to the coastal resources.**

**(2) Coordinate the consistency with DEP regulations and requirements applicable to the Coastal Construction Control Line (CCCL).**

**(3) Prevent development activity which would negatively impact the beach and dune system or the coastal resources, unless such activity is required to protect public health and safety.**

**(c) Listed Species Habitat:**

**(1) Establish criteria that will be utilized in the development review process for the identification of potential habitat areas by proposed developments.**

**(2) Establish criteria for those areas of the County with a high probability of listed species habitat for additional review or habitat identification procedures.**

**(3) Establish standards and procedures for the protection or acquisition of specific habitat areas which have been identified as necessary for the support of an existing listed species population.**

*The proposed development has provided for natural and vegetative upland buffers where required by LDC as depicted on the MDP map. The applicant also intends to propose portions of the wetland conservation areas to be recorded Conservation Easements. Applicant will work the SJRWMD and the County during permitting regarding the Conservation Easements.*

**Policy E.2.2.6 Environmental surveys shall be required for all development. By December 2012, the County shall develop and adopt in the Land Development Regulations (LDRs) standards for environmental surveys. At a minimum, the focus of these surveys shall be jurisdictional wetland boundaries, existing vegetative communities, the presence and location of existing wildlife habitat, rookeries, listed species, Significant Natural Communities Habitat, historical and archaeological locations, and potential wildlife corridors.**

*The Applicant has provided a listed species report as required by the LDC.*

**Policy E.2.2.12 The County shall preserve and conserve uplands through various land development techniques as follows:**

**(a) St. Johns County shall require a buffer zone adjacent to the wetlands and open water habitats on all new development sites as specified in the LDRs and policy E.2.2.4.**

**(b) The County shall recognize the following vegetative natural communities as Significant Natural Communities Habitat. Due to the rarity of these vegetative communities, a minimum of ten (10%) percent of the total acreage of the Significant Natural Communities Habitat (excluding bona fide Agriculture or Silviculture operations) shall be preserved and maintained by the development.**

**(1) Beach Dune**

**(2) Coastal Grasslands/Coastal Strand**

**(3) Xeric Hammock**

**(4) Maritime Hammock**

**(5) Sandhill**

**(6) Scrub**

*The project contains roughly .26 acres of Xeric Oak Habitat. Due to the rarity of these vegetative communities, a minimum of ten (10%) of the total acreage of the Significant Natural*

January 3, 2024

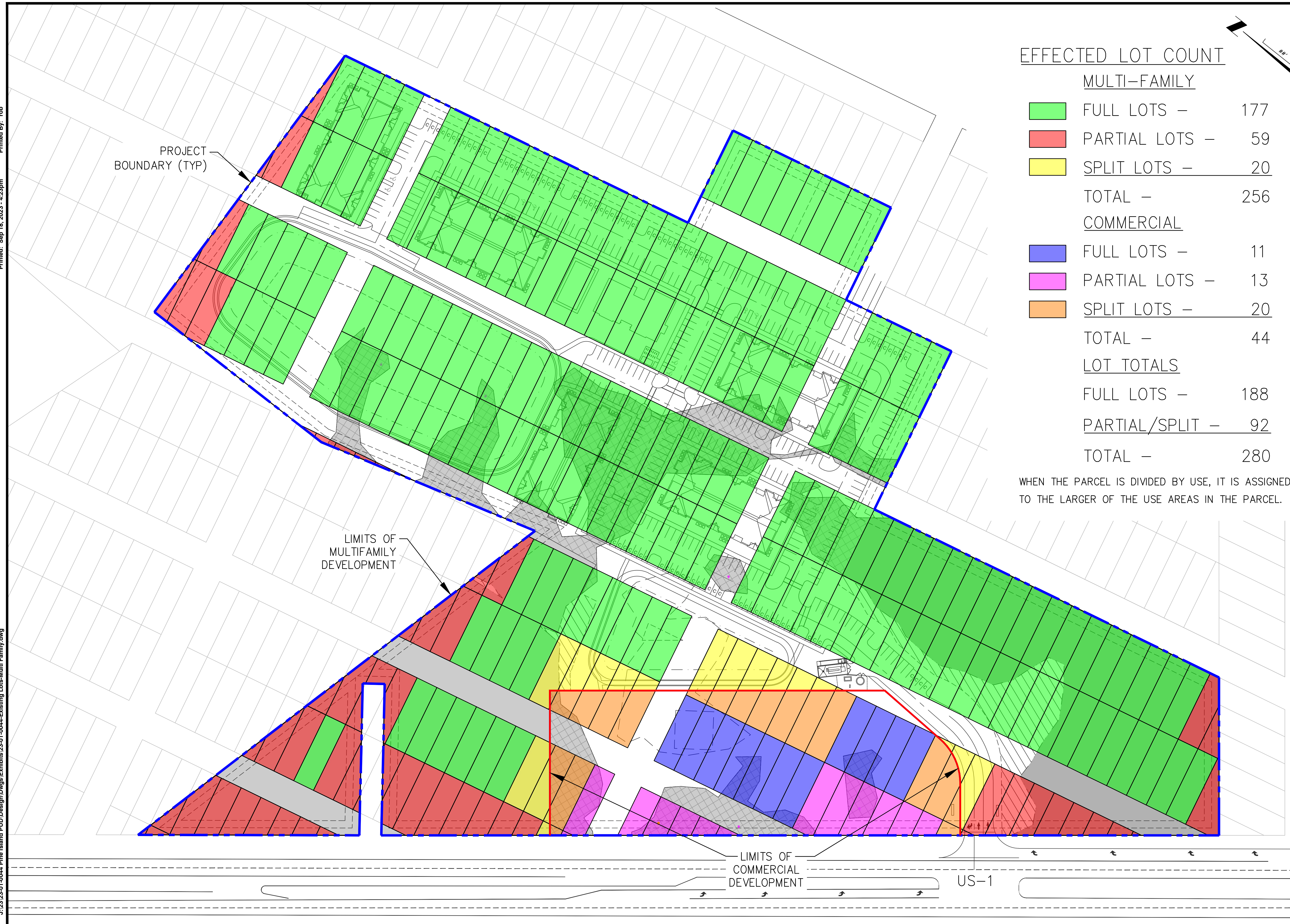
*Communities Habitat shall be preserved and maintained by the development. As depicted on the MDP map, the applicant is preserving no less than 0.03 acres of the Significant Natural Habitat.*

**CONSISTENCY WITH STRATEGIC REGIONAL POLICY PLAN**

*Consistent with the reasoning and analysis stated above, the Applicant believes this development is consistent with the Strategic Regional Policy Plan.*

**CONSISTENCY WITH THE STATE COMPREHENSIVE PLAN**

*Consistent with the reasoning and analysis stated above, the Applicant believes this development is consistent with the Strategic Regional Policy Plan.*



PROJECT  
BOUNDARY (TYP)

LIMITS OF  
MULTIFAMILY  
DEVELOPMENT

LIMITS OF  
COMMERCIAL  
DEVELOPMENT

US-1

EFFECTED LOT COUNT

MULTI-FAMILY

<span style="color: green;">■</span>	FULL LOTS -	177
<span style="color: red;">■</span>	PARTIAL LOTS -	59
<span style="color: yellow;">■</span>	SPLIT LOTS -	20
	TOTAL -	256

COMMERCIAL

<span style="color: blue;">■</span>	FULL LOTS -	11
<span style="color: magenta;">■</span>	PARTIAL LOTS -	13
<span style="color: orange;">■</span>	SPLIT LOTS -	20
	TOTAL -	44

LOT TOTALS

	FULL LOTS -	188
	PARTIAL/SPLIT -	92
	TOTAL -	280

WHEN THE PARCEL IS DIVIDED BY USE, IT IS ASSIGNED TO THE LARGER OF THE USE AREAS IN THE PARCEL.

**Connelly & Wicker Inc.**  
 Planning · Engineering · Landscape Architecture  
 10060 Skinner Lake Drive, Suite 500 Jacksonville, Florida 32246  
 (904) 203-3030 FAX: (904) 265-3031 www.cweng.com  
 Florida Registry 3650 L.A. Number: LC26000311

No.	Date	Revision

**PLAT EXHIBIT**

**PINE ISLAND PUD**  
**ST. JOHNS COUNTY**  
 PREPARED FOR  
**HART RESOURCES/  
 COASTLAND GROUP**

ERIC EVANS, PE  
 P.E. NUMBER: 93565  
 Reg. Engineer

Project No.: 23-01-0044  
 Designed: EDE  
 Drawn: EDE  
 Checked: JEJ  
 O.C.: RW  
 Date: JUNE 2023  
 Scale: 1" = 60'

THIS DRAWING IS THE PROPERTY OF CONNELLY & WICKER, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED ON REQUEST.

**US Highway 1 Mixed Use Development**  
**Environmental Assessment**

March 2023

Prepared for  
Coastland Group, LLC  
200 First Street, Suite 201  
Neptune Beach, FL 32266

Prepared by  
Peacock Consulting Group, LLC  
12058 San Jose Boulevard, Suite 604  
Jacksonville, FL 32223



Peacock Consulting Group, LLC has completed a preliminary environmental assessment on approximately 20.67 acres of land on US 1 in northern St. Johns County, Florida. The purpose of this assessment was to determine the presence and extent of wetlands and other surface waters regulated by the St. Johns River Water Management District (SJRWMD), the Florida Department of Environmental Protection (DEP) and the U.S. Army Corps of Engineers (CE). The property was inspected to determine the presence and potential presence of species listed as protected by the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (FWS) as listed in the FWC publication *Florida's Endangered and Threatened Species, Updated June 2021*. Another purpose of this study was to identify the presence and extent of any areas designated as "Significant Natural Communities Habitat" by St. Johns County pursuant to Section 4.01.07 of the Land Development Code. The results of this assessment are summarized in the following report.

## **I. Location of Property**

The property is located in Sections 19 and 41, Township 5 South and Range 29 East in northeastern St. Johns County (Figure 1). The property is located east of US Highway 1, south of CR 210 and north of International Golf Parkway (Figure 2).

## **II. Soils**

The *Soil Survey of St. Johns County, Florida* (USDA Soil Conservation Service, 1983) indicates that the subject property contains five soil types as depicted on Figure 3. A brief description of each of these soil types is provided below.

The uplands are mapped as containing the following three soil types.

### **A. Immokalee fine sand**

The uplands in the northeast half of the property (approximately 6.47 acres) are mapped as Immokalee fine sand. In an undisturbed condition, this soil is nearly level and poorly drained with a seasonal high water table within 10 inches of the ground surface for 2 to 4 months during most years. This soil has a layer of weakly cemented, dark fine sand known as a spodic horizon that starts between 30 and 50 inches below the ground surface. The pH of this soil ranges from extremely acid to very strongly acid.

Much of the area of Immokalee fine sand appears to have had fill material brought in and spread a number of years ago.

### **B. Orsino fine sand, 0 to 5 percent slopes**

A thin strip of land along the eastern property boundary (approximately 0.23 acre) is mapped as Orsino fine sand. This is a nearly level to gently sloping, moderately well drained soil that naturally occurs on low ridges and knolls in the flatwoods. The seasonal high water table ranges between 40 and 60 inches below the ground surface. This soil does not contain a spodic horizon. The pH generally ranges between extremely acid and strongly acid.

#### C. Pottsburg fine sand

The uplands in the southwest half of the property (approximately 8.95 acres) are mapped as Pottsburg fine sand. This is a nearly level, poorly drained soil that naturally occurs in upland pine flatwoods. The seasonal high water table is within 10 inches of the ground surface for 2 to 4 months during most years. This soil has a spodic horizon that generally starts between 50 and 60 inches below the ground surface. The pH of this soil ranges from strongly acid to very strongly acid.

The wetlands are mapped as containing the following two soil types.

#### D. St. Johns fine sand, depressional

The middle of the property contains an area (approximately 3.17 acres) mapped as St. Johns fine sand, depressional. In an undisturbed condition, this is a nearly level, very poorly drained soil that occurs in depressional areas (wetlands) within the pine flatwoods. The seasonal high water table is above the ground surface for 6 months or more during most years. The pH of this soil is extremely acid.

Much of the area mapped as St. Johns fine sand, depressional appears to have been filled a number of years ago and is now mostly uplands.

#### E. Bluff sandy clay loam, frequently flooded

The wetland in the northwest corner of the property (approximately 1.85 acres) is mapped as Bluff fine sandy clay loam, frequently flooded. This is a very poorly drained, nearly level soil that occurs in drainageways and on flood plains. The seasonal high water table is at a depth of less than 10 inches or is above the surface for 6 months or more. The soil is subject to frequent flooding for long durations. The surface layer of this soil is black to very dark gray. The pH of the soil is mildly to moderately alkaline below the first 12 inches.

### III. Existing Vegetation and Land Uses

The southwestern half of the property contains single family residences, although most of the property is currently undeveloped (Figure 4). The existing land uses and vegetative community types have been categorized pursuant to the Florida Department of Transportation publication *Florida Land Use, Cover and Forms Classification System (FLUCFCS)*. The various FLUCFCS codes types for the property are depicted on Figure 5 and are described below.

Peacock Consulting Group, LLC has flagged the extent of wetlands and other surface waters regulated by the St. Johns River Water Management District (SJRWMD) and the Florida Department of Environmental Protection (DEP). The wetland lines were located by GPS and are plotted on Figures 4 and 5. An application for a formal jurisdictional determination with SJRWMD is currently being reviewed (# 197279-1).

- |    |  |             |
|----|--|-------------|
| A. | Uplands                                | 13.34 acres |
| 1. | Residential, Low Density (FLUCFCS 110) | 2.13 acres  |

The south central part of the property has been developed for single family residences and contains a number of mobile homes, out buildings, dirt driveways and parking areas, and adjacent yard.

- |    |                         |            |
|----|-------------------------|------------|
| 2. | Open Land (FLUCFCS 194) | 5.98 acres |
|----|-------------------------|------------|

Most of the uplands in the northeastern half of the property may be described as open land. This area had been cleared and mostly filled over 20 years ago. The existing vegetation is dominated by various early successional species such as broomsedge (*Andropogon* sp.), Spanish needles (*Bidens alba*), and ragweed (*Ambrosia artemisiifolia*).

- |    |                              |            |
|----|------------------------------|------------|
| 3. | Pine Flatwoods (FLUCFCS 411) | 2.46 acres |
|----|------------------------------|------------|

Two of the uplands comprise pine flatwoods. The canopy in these areas is dominated by a mixture of slash pine (*Pinus elliottii*) and loblolly pine (*P. taeda*) along with scattered hardwoods such as water oak (*Quercus nigra*), laurel oak (*Q. laurifolia*) and southern magnolia (*Magnolia grandiflora*). The shrub layer and ground cover vegetation is dominated by such species as saw palmetto (*Serenoa repens*), bitter gallberry (*Ilex glabra*) and bracken fern (*Pteridium aquilinum*).

- |    |  |            |
|----|--|------------|
| 4. | Hardwood – Conifer Mixed (FLUCFCS 434) | 2.77 acres |
|----|--|------------|

Some of the uplands historically had comprised pine flatwoods but now have a canopy containing more hardwoods due to prolonged suppression of wildfires. The canopy includes such species as water oak, laurel oak, live oak (*Quercus virginiana*), loblolly bay (*Gordonia lasianthus*), southern magnolia, slash pine, and loblolly pine. The shrub layer and ground cover vegetation is similar to that of the upland pine flatwoods.

- |    |  |            |
|----|--|------------|
| B. | Wetlands                               | 7.33 acres |
| 1. | Inland Ponds and Sloughs (FLUCFCS 616) | 3.19 acres |

The deeper wetlands onsite comprise forested sloughs. The canopy in these wetlands includes a variety of species such as blackgum (*Nyssa sylvatica* var. *biflora*), sweet bay (*Magnolia virginiana*), red maple (*Acer rubrum*), pond cypress (*Taxodium ascendens*), loblolly bay, American elm (*Ulmus americana*), and Carolina ash (*Fraxinus caroliniana*). The shrub layer and ground cover vegetation includes such species as fetterbush (*Lyonia lucida*), buttonbush (*Cephalanthus occidentalis*), Virginia willow (*Itea virginica*), Virginia chain fern (*Woodwardia virginica*), royal fern (*Osmunda regalis*), and iris (*Iris* sp.). These areas regularly hold shallow standing water.

2. Hydric Pine Flatwoods (FLUCFCS 625) 3.99 acres

Most of the wetlands onsite comprise areas of hydric pine flatwoods. The canopy is dominated by slash pine and pond pine (*Pinus serotina*) mixed with lesser amounts of loblolly bay and dahoon holly (*Ilex cassine*). The shrub layer and ground cover vegetation include such species as cinnamon fern (*Osmunda cinnamomea*), Virginia chain fern and fetterbush. These areas are saturated to the ground surface during the rainy season and may also hold puddle water.

3. Wet Field (FLUCFCS 640) 0.15 acre

The east central portion of the property contains a wet grassy area vegetated with such species as torpedo grass (*Panicum repens*), spike rush (*Eleocharis* sp.), dollar weed (*Hydrocotyle* sp.), and Asian coinwort (*Centella asiatica*). This area is saturated to the ground surface during the rainy season.

#### IV. Protected Species

The property was surveyed by two biologists in July 2022 for the presence of species listed by the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (FWS) as listed in the FWC publication *Florida's Endangered and Threatened Species, Updated June 2021*. Pedestrian transects were walked through representative portions of the property. No species of wildlife or plants were observed that are listed as endangered or threatened by FWC or FWS.

FWS lists the following protected species as occurring in St. Johns County:

West Indian Manatee ( <i>Trichechus manatus latirostris</i> )	FWS – endangered, FWC – endangered
Green Sea Turtle ( <i>Chelonia mydas</i> )	FWS – endangered, FWC – endangered
Hawksbill Sea Turtle ( <i>Eremochelys imbricata</i> )	FWS – endangered, FWC – endangered
Leatherback Sea Turtle ( <i>Dermochelys coriacea</i> )	FWS – endangered, FWC – endangered
Kemp's Ridley Sea Turtle ( <i>Lepidochelys kempii</i> )	FWS – endangered, FWC – endangered
Loggerhead Sea Turtle ( <i>Caretta caretta</i> )	FWS – threatened, FWC – threatened
Wood Stork ( <i>Mycteria americana</i> )	FWS – endangered, FWC – endangered
Eastern Indigo Snake ( <i>Drymarchon corais couperi</i> )	FWS – threatened, FWC – threatened
Florida Scrub-jay ( <i>Aphelocoma coerulescens</i> )	FWS – threatened, FWC – threatened
Piping Plover ( <i>Charadrius melodus</i> )	FWS – threatened, FWC – threatened
Anastasia Island Beach Mouse ( <i>Peromyscus polionotus phasma</i> )	FWS – endangered, FWC – endangered

FWC lists the following additional species as occurring in St. Johns County:

Gopher Tortoise ( <i>Gopherus Polyphemus</i> )	FWS – threatened
Florida Pine Snake ( <i>Pituophis melanoleucus mugitus</i> )	FWS – threatened
Little Blue Heron ( <i>Egretta caerulea</i> )	FWS – threatened
Tricolored Heron ( <i>Egretta tricolor</i> )	FWS – threatened
Southeastern American Kestrel ( <i>Falco sparverius paulus</i> )	FWS – threatened

A. Aquatic Species

The property does not contain any suitable habitat for the manatee or any of the sea turtles.

B. Coastal Species

The piping plover and Anastasia Island beach mouse only live in coastal habitats. The project site is located miles from the Atlantic coast and does not provide suitable habitat for these coastal species.

C. Florida Scrub-jay

The property does not contain any scrub jay habitat such as sand pine scrub, xeric oak scrub, or scrubby flatwoods. No Florida scrub-jays have been observed onsite and are not known from this part of St. Johns County.

D. Wood Stork

The subject property is located within the core foraging areas of a wood stork nesting colony. The primary diet of the wood stork is small fish that range from 1 to 6 inches in length, particularly top minnows and sunfish, although other prey such as crayfish and tadpoles may be eaten as well. The wood stork forages in water that ranges from 6 to 10 inches deep. They feed in freshwater marshes, narrow tidal creeks, and flooded tidal pools. Favored foraging areas are depressions in marshes and swamps where prey becomes concentrated during periods of falling water levels. The wood stork will not forage in areas with dense undergrowth vegetation and will typically not forage in areas with a closed canopy.

No wood stork rookeries are located onsite. No wood storks have been observed foraging on the subject property. The areas of hydric pine flatwoods are periodically saturated to the ground surface and may hold shallow puddled water during the rainy season but do not have appropriate hydrology to provide suitable wood stork foraging habitat. Wood storks potentially could forage in the deepest forested wetlands. However, use of these wetlands would likely be sporadic due to the closed canopy and amount of ground cover and shrub vegetation. Development of the property is not anticipated to adversely impact the wood stork.

E. Gopher Tortoise

The gopher tortoise lives in areas with somewhat poorly drained to excessively well drained soils where there is adequate ground cover vegetation for foraging. Natural habitats that support gopher tortoises include longleaf pine-xeric oak forests, scrubby flatwoods, and sand dunes. Altered areas of such habitat can also provide suitable gopher tortoise habitat, including pasture, mowed roadsides, and cleared power line easements.

Almost all of the soils on the property are either poorly drained or very poorly drained and, therefore, do not provide suitable habitat for the gopher tortoise. The eastern edge of the property

contains a small area (0.23 acre) of Orsino fine sand, which is moderately well drained. This area of Orsino fine sand was inspected for tortoise burrows. No gopher tortoises or gopher tortoise burrows were identified in this area or anywhere else onsite. Development of the property will not adversely impact the gopher tortoise.

F. Eastern Indigo Snake

The eastern indigo snake (*Drymarchon corais couperi*) requires relatively large areas of undeveloped land and are often associated with gopher tortoises (*Gopherus polyphemus*), as they will utilize tortoise burrows as refugia. The subject property has been surveyed for the presence of the eastern indigo snake. No eastern indigo snakes or evidence of eastern indigo snakes, such as shed skins, have been observed onsite or on land immediately abutting the subject property. The property does not contain any gopher tortoise burrows. Development of the property is not anticipated to adversely impact the eastern indigo snake.

G. Florida Pine Snake

The Florida pine snake lives in areas with well drained sandy soils with a moderate to open canopy. They spend most of the time underground in the burrows of gopher tortoises and Southeastern pocket gophers (*Geomys pinetis*) and feed primarily on pocket gophers. No pocket gophers or gopher tortoises occur on the subject property. No Florida pine snakes have been observed onsite or are known to occur onsite. Development of the property is not anticipated to adversely impact the Florida pine snake.

H. Little Blue Heron  
Tricolored Heron

The little blue heron (*Egretta caerulea*) and tricolored heron (*Egretta tricolor*) are wading birds that forage primarily in shallow freshwater marshes and along the edges of ponds and lakes. Freshwater marshes and ponds and lakes do not exist on the subject property. No wading birds have been observed onsite. No nesting colonies of wading birds are located onsite. Development of the property will not adversely impact the little blue heron or tricolored heron.

I. Southeastern American Kestrel

The southeastern American kestrel (*Falco sparverius paulus*) is the non-migratory subspecies of the American kestrel. This subspecies remains in Florida during the warmer months of the year and does not migrate farther north. Positive identification of kestrels during the months of May through July or August provides prima facie evidence of the presence of southeastern American kestrels. This species is a cavity nester that lives in very open forests as well as pastures and golf courses. This type of habitat does not occur onsite. No suitable nesting trees (snags with cavities) were observed on the property. No southeastern American kestrels have been observed onsite. Development of the subject property is not anticipated to adversely impact the southeastern American kestrel.

## J. American Bald Eagle

The American bald eagle (*Haliaeetus leucocephalus*) is no longer listed as an endangered or threatened species by either FWS or FWC. However, the bald eagle is still protected pursuant to the Gold and Bald Eagle Protection Act and the Migratory Bird Treaty Act. Section 4.01.10 of the St. Johns County Land Development Code (LDC) pertains to bald eagle protection requirements. The LDC requires an undisturbed Primary Zone extending to a minimum of 750 feet outward from the nest tree. This area shall remain undisturbed with no construction or entry allowed. A Secondary Zone shall be in an area extending outward from the Primary Zone a minimum of 750 feet.

The closest documented bald eagle nest (SJ003) is located approximately 3.3 miles to the northeast of the property. Development of the property will not adversely affect the American bald eagle.

## V. Significant Natural Communities Habitat

Section 4.01.07 of the St. Johns County Land Development Code identifies the following vegetative community types as being “significant natural communities habitat”:

Beach Dune

Coastal Grassland/Coastal Strand

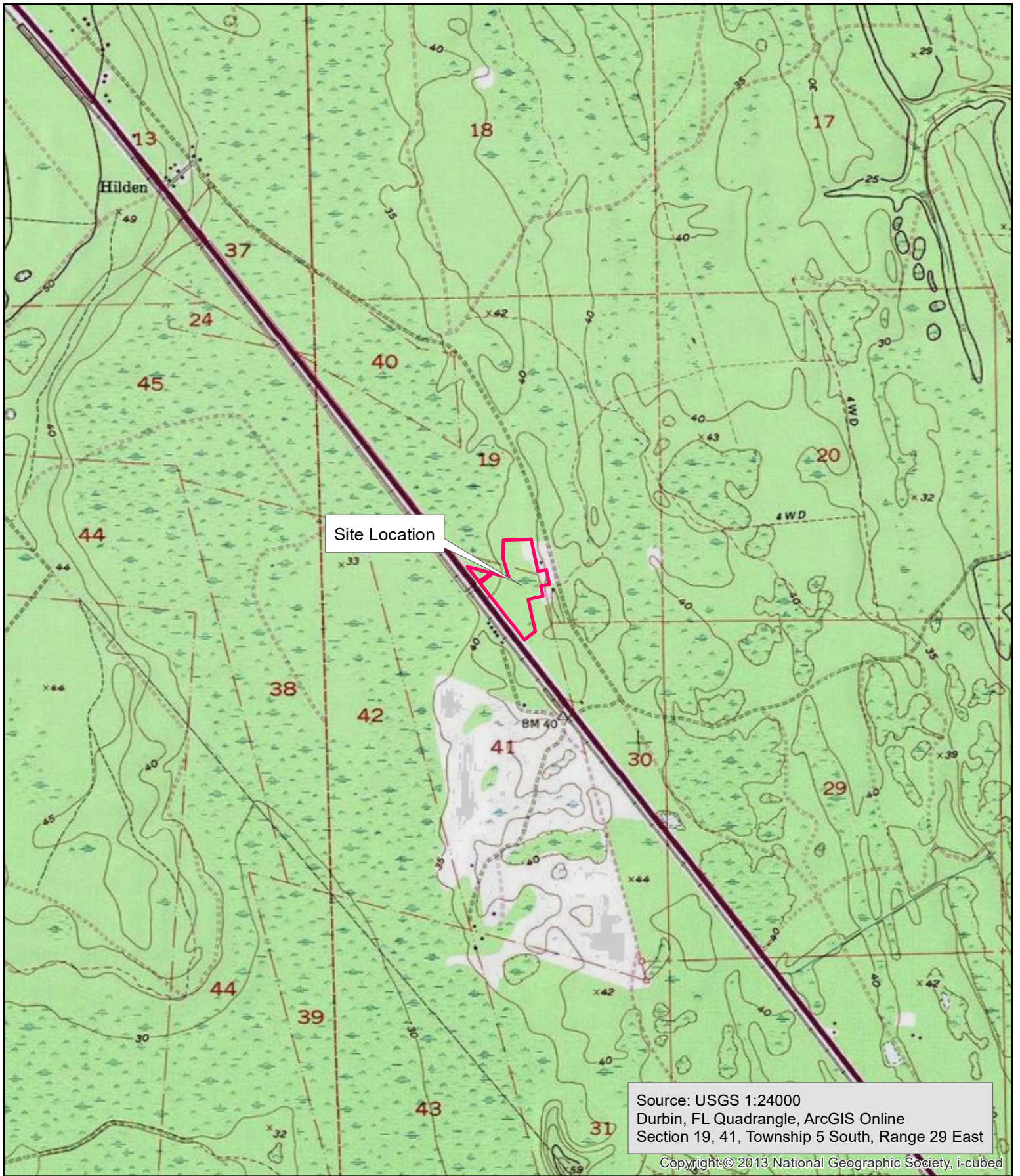
Xeric Hammock

Maritime Hammock

Sandhill

Scrub

Section 4.01.07 requires that proposed developments that are more than 10 acres in size and that contain any of these habitat types must preserve 10% of these habitats on-site. None of these habitat types occur on the subject property, so this requirement does not apply to this site.



**PEACOCK CONSULTING GROUP, LLC**



# Old Dixie Highway

St. Johns County

*Location Map*



FIGURE 1

3/6/2023

Scale: 1 in = 2,000 ft







Sources: Esri, HERE, DeLorme, Mapbox, OpenStreetMap contributors, and the GIS User Community  
 Source: World Street Maps, ArcGIS Base Maps

**PEACOCK CONSULTING GROUP, LLC**



Helping developers and landowners solve environmental issues

# Old Dixie Highway

St. Johns County

Vicinity Map

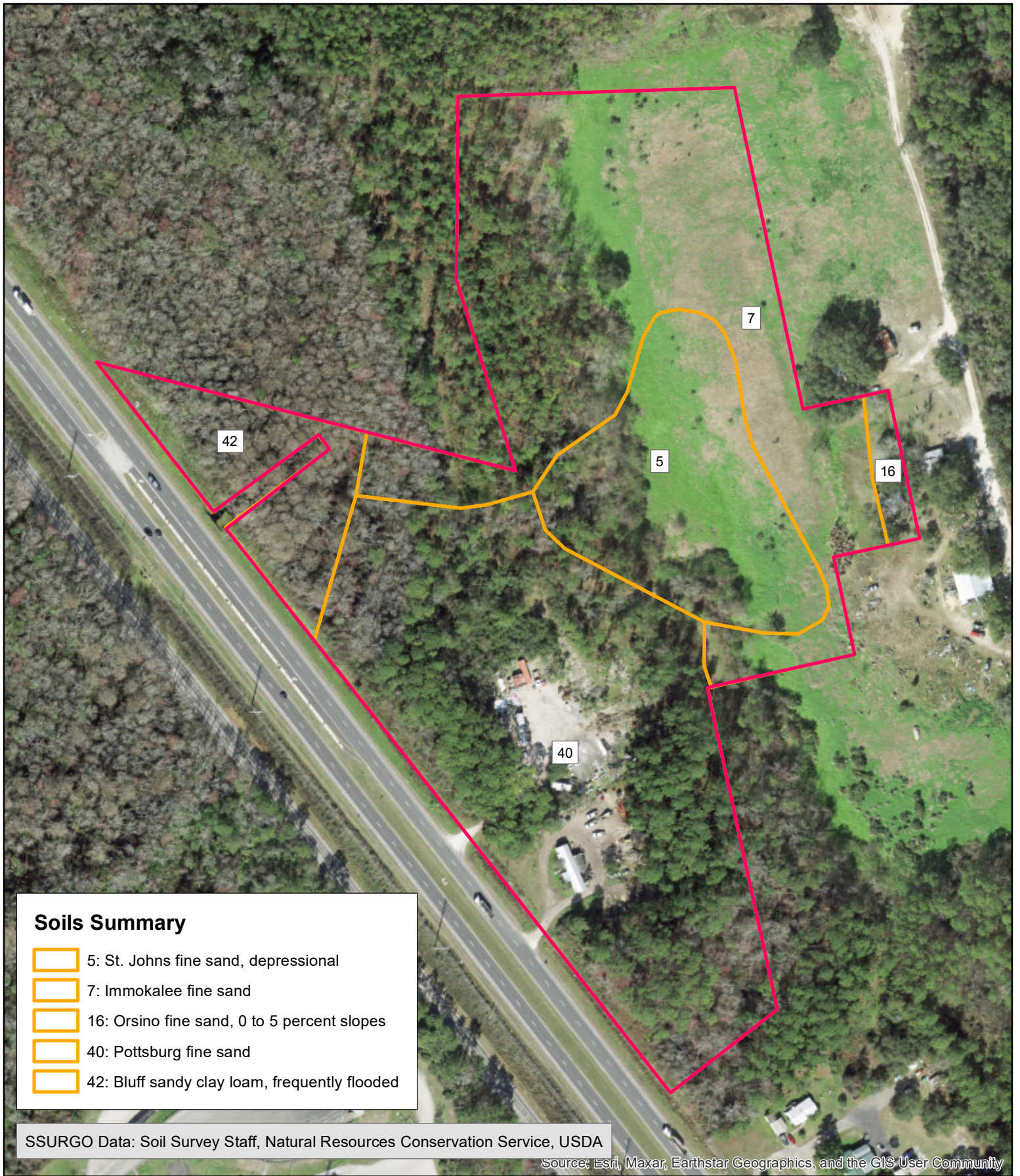


FIGURE 2

3/6/2023

Scale: 1 in = 5,000 ft





**Soils Summary**

- 5: St. Johns fine sand, depressional
- 7: Immokalee fine sand
- 16: Orsino fine sand, 0 to 5 percent slopes
- 40: Pottsburg fine sand
- 42: Bluff sandy clay loam, frequently flooded

SSURGO Data: Soil Survey Staff, Natural Resources Conservation Service, USDA

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

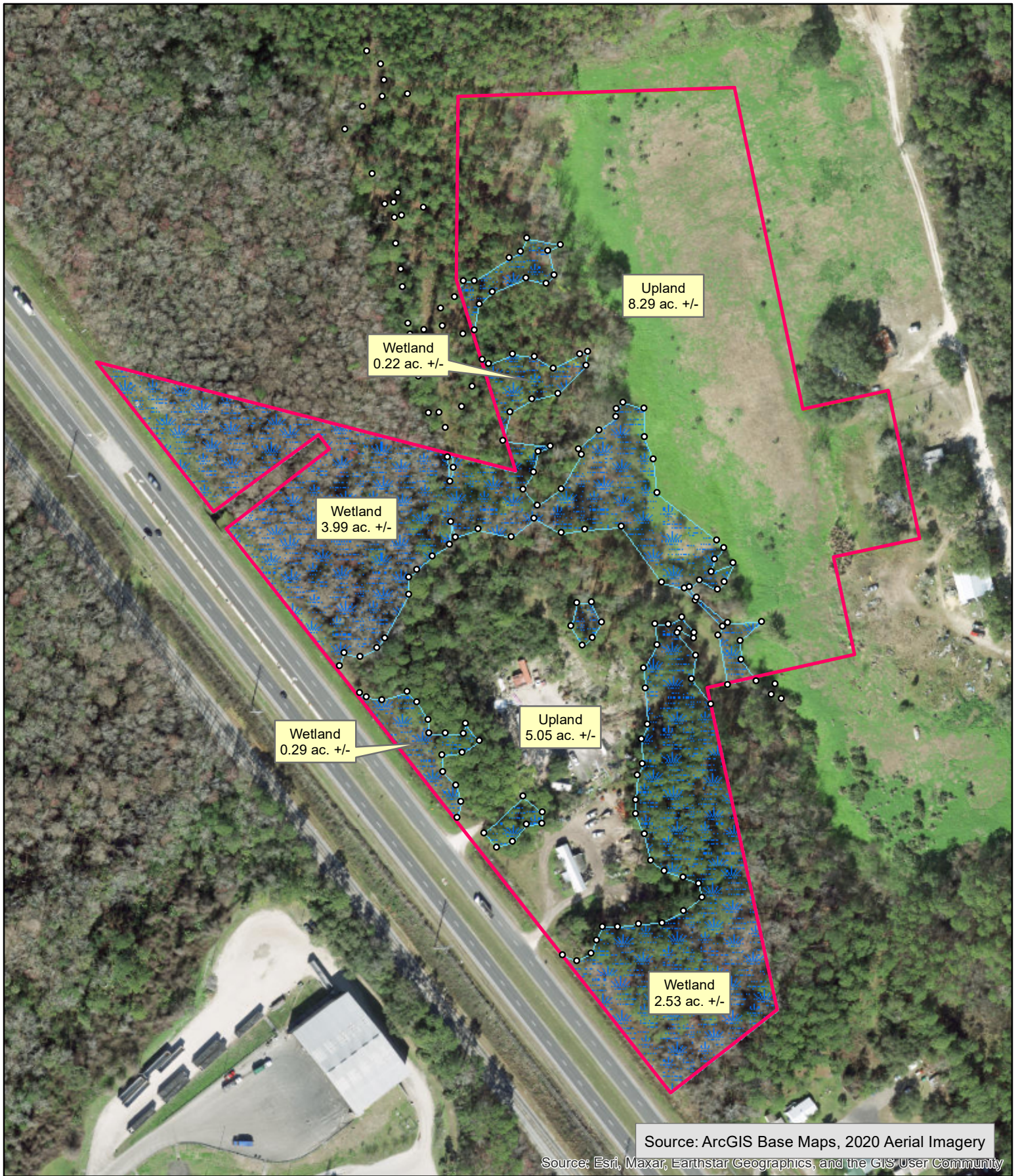
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Helping developers and landowners solve environmental issues

**Old Dixie Highway**  
 St. Johns County  
*Soils Map*



**FIGURE 3**  
 3/6/2023  
 Scale: 1 in = 200 ft



**PEACOCK CONSULTING GROUP, LLC**



# Old Dixie Highway

St. Johns County

*Recent Aerial and Wetland Limits*

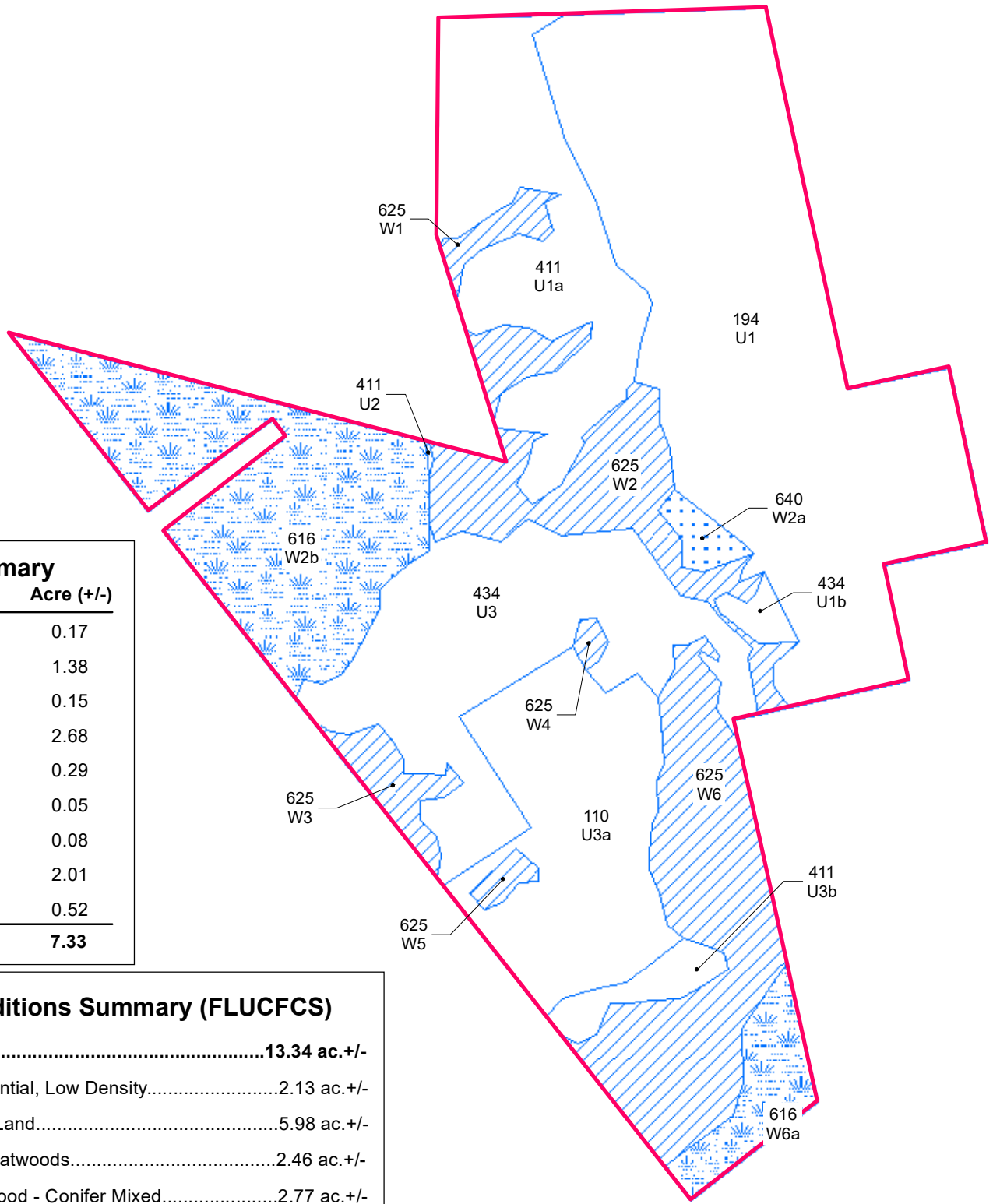


FIGURE 4

3/6/2023

Scale: 1 in = 200 ft












### Wetland Summary

Area	FLUCFCS	Acre (+/-)
W1	625	0.17
W2	625	1.38
W2a	640	0.15
W2b	616	2.68
W3	625	0.29
W4	625	0.05
W5	625	0.08
W6	625	2.01
W6a	616	0.52
<b>Total</b>		<b>7.33</b>

### Existing Conditions Summary (FLUCFCS)

<b>UPLAND.....</b>	<b>13.34 ac. +/-</b>
 110: Residential, Low Density.....	2.13 ac. +/-
 194: Open Land.....	5.98 ac. +/-
 411: Pine Flatwoods.....	2.46 ac. +/-
 434: Hardwood - Conifer Mixed.....	2.77 ac. +/-
<b>WETLAND.....</b>	<b>7.33 ac. +/-</b>
 616: Inland Ponds and Sloughs.....	3.19 ac. +/-
 625: Hydric Pine Flatwoods.....	3.99 ac. +/-
 640: Vegetated Non-Forested Wetlands.....	0.15 ac. +/-

PEACOCK CONSULTING GROUP, LLC



Old Dixie Highway

St. Johns County

Existing Conditions Map



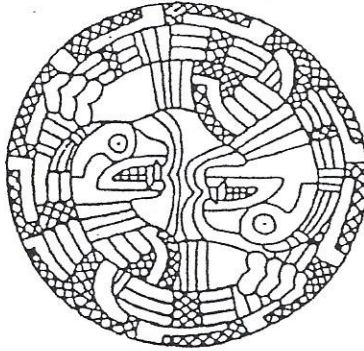
FIGURE 5

3/6/2023

Scale: 1 in = 200 ft



**A CULTURAL RESOURCE ASSESSMENT SURVEY OF  
THE PINE ISLAND MULTIFAMILY DEVELOPMENT TRACT,  
ST. JOHNS COUNTY, FLORIDA**



Submitted to:

**Hart Resources, LLC**  
8051 Tara Lane  
Jacksonville, FL 32216

Submitted by:

**Florida Archeological Services, Inc.**  
4250 Melrose Avenue  
Jacksonville, Florida 32210

April 2023

**A CULTURAL RESOURCE ASSESSMENT SURVEY OF  
THE PINE ISLAND MULTIFAMILY DEVELOPMENT TRACT,  
ST. JOHNS COUNTY, FLORIDA**

By:

Robert E. Johnson

Submitted to:

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April 2023

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## INTRODUCTION

The purpose of the following report is to present the findings of a recent Cultural Resource Assessment Survey (CRAS) of the proposed Hart Resources, LLC, Pine Island Multifamily Development tract located in northern St. Johns County Florida (Figure 1). This work was completed by Florida Archeological Services, Inc. (FAS) of Jacksonville on a 20.67 +/- acre parcel of land located within Township 5 South, Range 29 East, Sections 19 and 41. The tract was examined for Hart Resources, LLC, of Jacksonville who is proposing to complete residential development of the property in accordance with the St. Johns County LDC (Land Development Code), Part 3.01.00. As such, this project was completed at the request of Hart Resources as a prerequisite for planning and development approval by St. Johns County.

The primary goal of this study was to locate, define and evaluate all cultural resources within the 20.67 acre parcel, hereby defined as the project's Area of Potential Effect or APE. Also designed to comply with Chapters 267 and 373 *Florida Statutes*, and Florida's Coastal Management Program, the local regulatory "driver" for this investigation is the St. Johns County Land Development Code as indicated above. In terms of project goals, "locate" is defined as the physical archeological examination of the project APE in accordance with current professional standards and guidelines, while "define" is represented as a detailed discussion of the findings of the survey, per individual cultural resource (i.e. archeological or historic site). Finally, "evaluate" is defined as the professional assessment of a given site's significance in terms of each site's assessed eligibility or potential eligibility for inclusion in the *National Register of Historic Places* (NRHP) as defined in 36CFR60.4 (*National Register Criteria*). If discovered and evaluated, recommendations for the treatment or management of each cultural resource would be generated in accordance with 36CFR800, *Procedures for the Protection and Enhancement of Historic and Cultural Properties*, as well the St. Johns County LDC (Land Development Code), Part 3.01.00. All project activities were designed to comply with those Historic Preservation mandates discussed above and will be coordinated with the St. Johns County Historic Resources Coordinator and potentially with the State Historic Preservation Officer or SHPO in Tallahassee.

In short, the project was designed to locate and assess the proposed development project's potential to affect historic properties (archeological and/or historic sites) listed in or eligible for listing in the *National Register of Historic Places* (NRHP), or otherwise of archeological, historical, or architectural value. As such, Hart Resources, LLC, the project's sponsor, retained FAS to complete this study in order to meet St. Johns County Historic Preservation mandates in view of the fact that the parcels lies in a "Medium to Low Probability Zone" for potential archeological site occurrence per the detailed St. Johns County Archaeological Predictive Model (version 01/12/2009).

At the time of survey, the parcel contained a single contemporary or modern residential home represented by a single wide mobile home dating to 1999 (St. Johns County Property Appraiser's Office (Parcel ID#070840-0000). Represented by a mobile home, this structure is outside the 50-year age for National Register assessment, and as a mobile home, is not eligible to be considered for historical significance. Based upon information contained in the Property Appraiser's records,

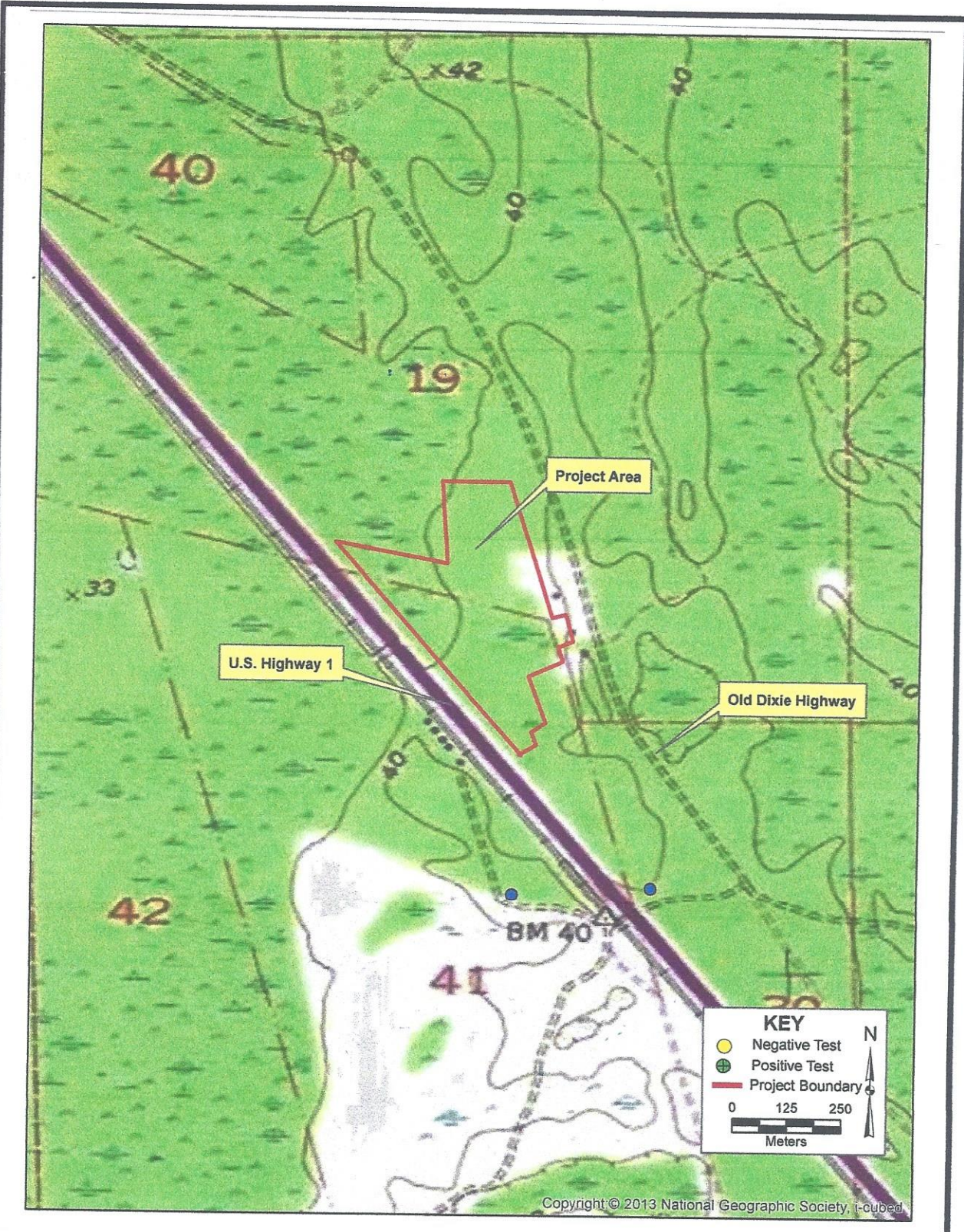


Figure 1. Portion of the 1992 Durbin, Fla. USGS Topographic Map Showing the Location of the Pine Island Multifamily Project Area, St. Johns County, Florida.



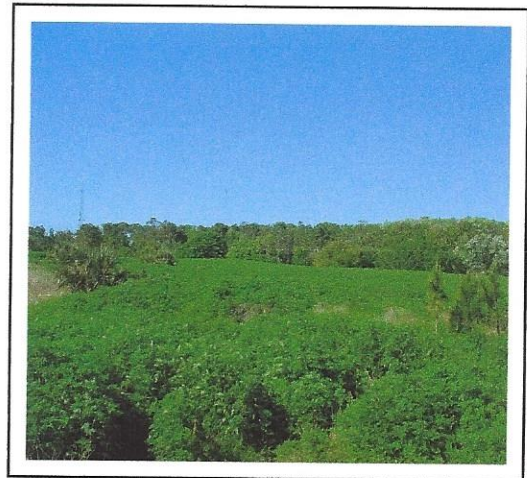
Florida  
Archeological  
Services, Inc.

the tract does not contain any standing historic structures, a view also confirmed during completion of the project's background research phase and archeological field investigation.

Following a review of the County's Archeological Probability Map, the Hart Pine Island Multifamily development tract was seen to occur in a regional Medium to Low Probability Zone of archeological potential. As will be seen, however, detailed evaluation of relative or pertinent environmental and cultural parameters determined that the project area represented more of a Low Probability Zone for containing regionally significant archeological deposits. In view of this finding, this investigation also included a formal archeological field survey which utilized intensive surface reconnaissance, as well as standard subsurface testing, in accordance with the DHR's Module 3 (*Guidelines for Use by Historic Preservation Professionals*) of the DHR's Historic Preservation Compliance Review program. Formally known as the *Historic Preservation Compliance Review Program Manual*, this directive is maintained by the DHR under the direction of the SHPO (State Historic Preservation Officer) in Tallahassee. Finally, this report will be designed to comply with Chapter 1A-46 *Florida Administrative Code*.

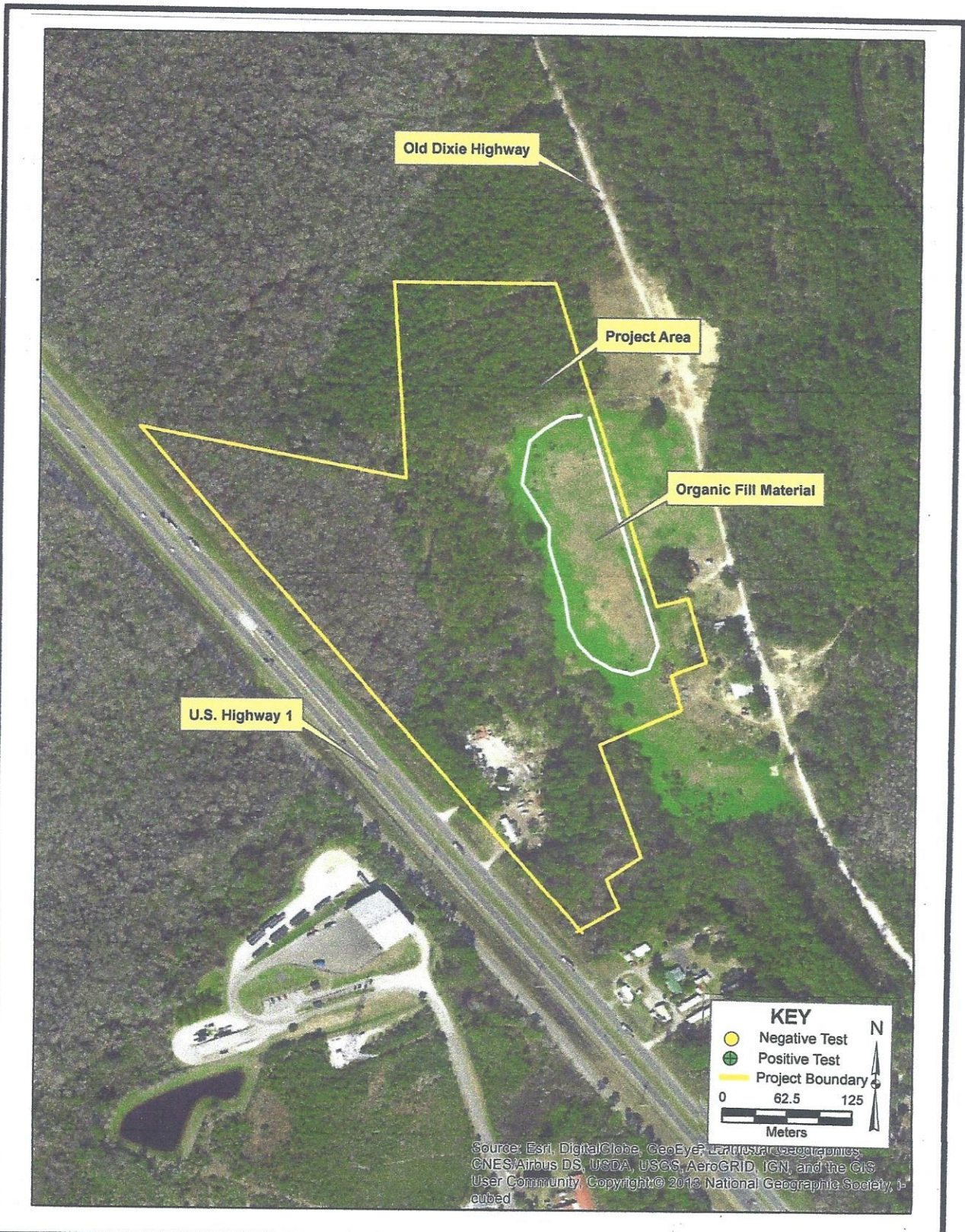
During the completion of background research, it was determined that a large portion of the uplands of the APE, was composed of fill materials generated by debris deposition from a recent hurricane (Steve Florey 2023, personal communication). This pronounced debris field covers several acres of land in the tract's eastern section of the APE (Figures 2 and 3). In addition, this debris pile appears to be as high as two to three meters in height and is covered by dense surface vegetation. While this fact served to detract from the parcel's archeological potential, the tract was still subjected to standard subsurface shovel testing designed to meet project goals and objectives.

Completion of archeological field survey operations at the Pine Island Multifamily tract resulted in a close examination of the tract's surface, as well as the completion of some 12 subsurface shovel tests none of which yielded evidence (or documentation) of archeological sites or materials. As such, no archeological or historic sites were discovered during the Pine Island Multifamily tract survey and in view of this finding, no further work is recommended pending completion of Local (St. Johns County) and State Historic Preservation Compliance Review procedures. In short, this project will have No Effect upon archeological or historic sites deemed eligible for listing in the National Register or otherwise of archeological, historical, or architectural value. Therefore, it is the recommendation of FAS that the proposed residential



**Figure 2. Organic Debris Field on the APE.**

development of the Pine Island Multifamily parcel by Hart Resources, LLC, be allowed to proceed as planned without further consideration for potential impact to significant cultural resources.



**Figure 3. GIS Aerial Photo Showing the Location of the Pine Island Multifamily Project Area, St. Johns County, Florida.**



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## PROJECT LOCATION AND NATURAL ENVIRONMENT

### Project Location

The Pine Island Multifamily parcel is situated within northern St. Johns County, Florida, and comprises some 20.67 +/- acres of land (see Figure 1). It is bounded on the north by vacant lands of others, on the south by developed and undeveloped lands of others, on the east by areas near Old Dixie Highway and on the west by portions of U.S. Highway 1. In addition, the greater or sprawling Nocatee development lies immediately east of these areas while the St. Johns County Transfer Station and the St. Johns County Pet Center lie across U.S. 1 and the FEC railroad west of the APE.

Utilizing the Durbin 1952 quadrangle map (PR 1992), the survey tract occurs within Sections 19 and 41 of Township 5 South, Range 29 East. At the time of survey, this land was composed primarily of heavily overgrown second growth timber which included pines, scattered water oaks, bays and a dense understory with a vegetation setting composed of saw palmetto, gallberry, along with dense ground cover of vines and grasses. These areas surrounded the upland debris field (Figures 4 and 5).

As the tract contains an abundance of wetlands which comprise approximately 82.8% of the APE, this figure was derived from a formal wetlands survey completed by Steve Florey of Environmental Consulting and Technology or ECT. Composed of some six individual wetlands mapped by ECT, these areas cover some 17.11 (82.8%) of the survey tract while some 3.56 acres, or 17.2% occur as upland areas (Appendix A, ECT wetlands map).

As anticipated, the wetland areas were not examined during the field survey of than to look for the presence of prehistoric or historic dikes, canals, or other water management facilities. None were noted. For the most part, these are heavily forested wetlands, based upon FAS field observations. When viewed in its present environmental setting, the tract lies within the pine flatwoods ecosystem. As will be seen below, the tract contains primarily poorly and very poorly drained soils throughout and as such, even the upland portions of the APE exhibited unusually wet soils. This fact also served to affect fieldwork conditions by extending the amount of field time necessary to complete this investigation as damp soils are much more difficult to screen through 1/4 inch hardware cloth, than are sandy, well drained soils.

### Physiography

Florida is the exposed land mass that separates the waters of the Gulf of Mexico on the west from those of the Atlantic Ocean on the east. This peninsula is part of the Eastern Gulf of Mexico Sedimentary Basin as described by Puri and Vernon (1959:1). The underlying geological foundation is known as the Floridan Plateau, thought to be an extension of the Piedmont section of Georgia (Fernald 1981:1).



**Figure 4. General View of the Northern Portion of the Pine Island Multifamily Tract, St. Johns County, Florida, view to southwest, note elevated organic debris field.**



**Figure 5. General View of the Northern Interior Portion of the Pine Island Multifamily Tract, view to west.**

St. Johns County is situated within the Sea Island District and Eastern Flatwoods District of Florida (Brooks 1981). More specifically, the study tract occurs within Section 1a4 of the District., also known as the Hastings Plain of the Eastern Flatwoods District. This plain is described as an area of estuarine and lagoonal deposits of Late Pleistocene age. Moreover, the area is dominated by silty and sandy soils which are predominately poorly drained. These soils lie at elevations generally less than 35 feet AMSL (Above Mean Sea Level), (USGS 1952; Brooks 1981). Within the Pine Island Multifamily project area, elevations range between 35 and 40 feet AMSL, as the tract falls off to the west and southwest towards the large expanses of Twelvemile Swamp. The highest elevation recorded on the Pine Island Multifamily APE during GPS work by the FAS archeological field team was 38 feet AMSL.

### **Hydrology**

Regionally, the Floridan Aquifer lies beneath the Hawthorne Formation and is composed of Eocene limestone and dolomite formations. These formations contain solution cavities which retain and transmit large quantities of water, where the softer carbonates have dissolved. Southwest of the region, artesian springs discharge enormous quantities of water contained within the aquifer. The principal recharge area of the Floridan Aquifer, however, occurs in the Central Lake District of central peninsular Florida (Brooks 1981; Brown et al. 1990: 41).

While the Pine Island Multifamily project area occurs just east of a northeastern branch of Twelvemile Swamp, drainage on the tract was difficult to determine due to the presence of unusually dense vegetation. However, it appeared that this trend is to the west and south/southwest towards Twelvemile Swamp which is located to the south and west of the tract's APE. In terms of major waterways, the nearest flowing water is represented by the headwaters of Sampson Creek which lies approximately 4.5 miles northwest of the project tract. An examination of a recent Pine Island Multifamily wetlands map provided by the project's biological consultant shows that of the tract's 20.67 acres of land, wetlands constitute some 82.8% of the tract, while uplands comprise approximately 17.2% of the parcel (see wetlands map in Appendix A).

### **Soils**

Soil is the natural unconsolidated surface material that sustains terrestrial plant life (Smith 1977: 136). Numerous localized factors affect the type of soil occurring within any given area, including climate, vegetation, landscape, topography, geology, and age of soils. Locally, that portion of St. Johns County which contains the Pine Island Multifamily project tract is composed predominately of spodosoils, a soil order which contains sandy soils that have a spodic horizon. These soils formed through the process of leaching of organic matter and minerals (Brown et al. 1990:48). The Pine Island Multifamily project corridor includes soils of the six types identified in the St. Johns County soil survey which occur in nearly level, poorly drained soils that have a dark subsoil stained by organic matter; some sandy to a depth of more than 40 inches and loamy below (Readle 1983).

More specifically, the Pine Island Multifamily project tract contains six soil types which can be seen graphically in Figure 6, while pertinent environmental characteristics and perceived



Soil Map—St. Johns County, Florida  
(USDA Soils of the Hart Resources US 1 Tract, St. Johns County, Florida)

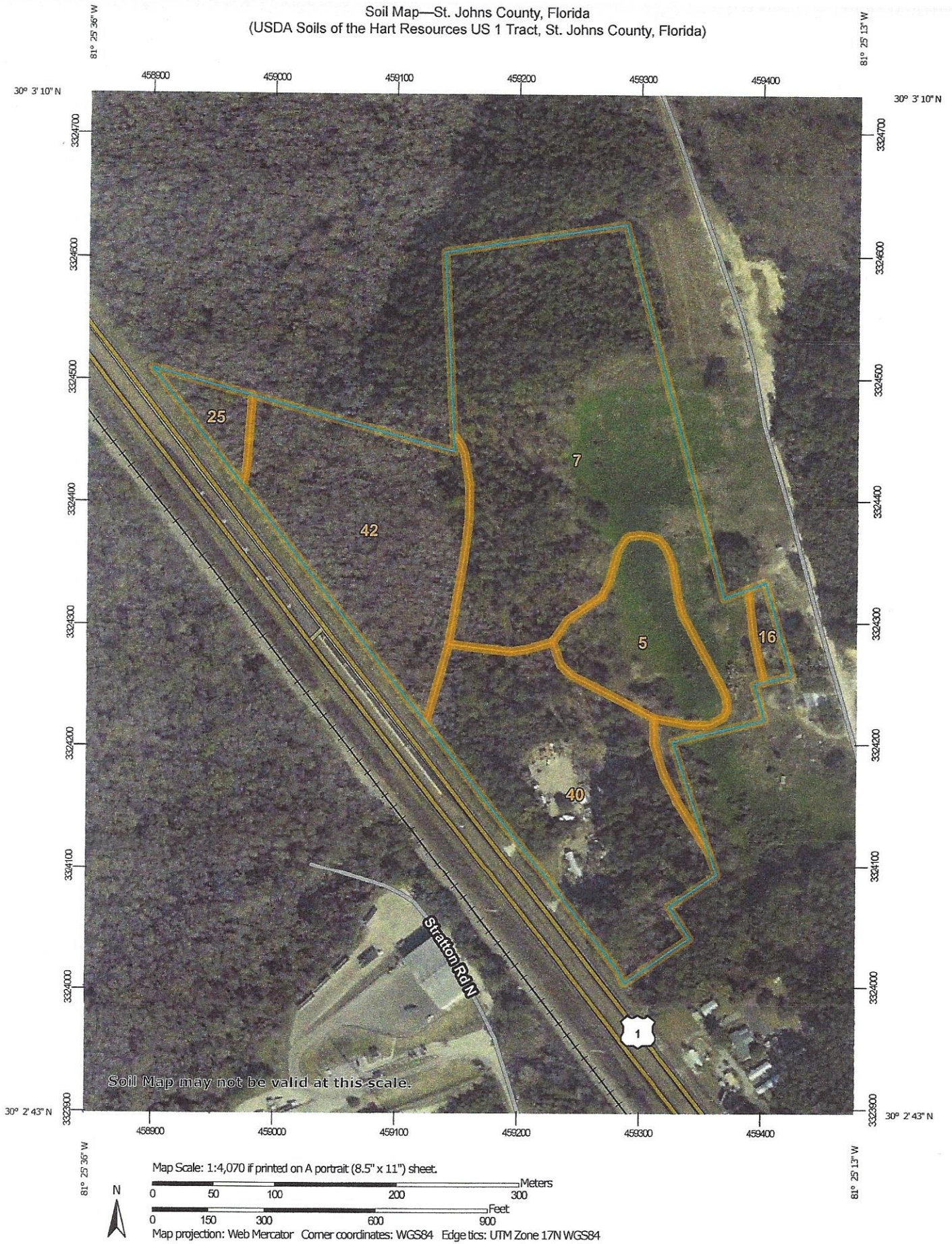


Figure 6. USDA Soils of the Pine Island Multifamily Tract, St. Johns County, Florida.

archeological potential can be seen in Table 1 and in Appendix B. This appendix contains a tract-specific soil report generated by the USDA's web soil survey. As will be seen, with one exception, all of the soils on the APE are either poorly drained or very poorly drained. Reported from the largest in volume to the lowest of tract-specific soils, the first of these is Immokalee fine sand (USDA Type 7) which is described as a poorly drained, nearly level sandy marine deposits which occur on rises on marine terraces of the flatwoods. While these soils cover approximately 43.3 % of the tract, it should be noted that the majority of project subsurface shovel testing occurred in this poorly drained soil type. The second soil based on areal volume is Pottsburg fine sand at 24.6% of the APE. Also a poorly drained variety, limited shovel testing occurred in this soil type. While the remaining soils on the APE, with one exception, were composed of very poorly drained varieties classified as "frequently flooded," these wetland areas were not subjected to subsurface testing but were closely examined for historic period modifications such as dams, canals, or spillways, etc. None were noted. Finally, the tract's "best drained" soils are composed of Orsino fine sand, a moderately well drained variety. However, this soil type occurred in the extreme eastern edge of the APE, it constituted only 1.1% of the tract. This type is common to sand ridges within marine terraces in the region. During field efforts, this soil was tested at 25m intervals, a High Probability strategy.

**Table 1. USDA <sup>1</sup> Soil Types on the Pine Island Multifamily APE <sup>2</sup> .**

Soil #	Soil Type	Drainage Characteristic	Depth to Water Table	% of APE	Archeological Probability
5	St. Johns fine sand, depressional	Very Poorly Drained	0 inches	8.9 %	N / A
7	Immokalee find sand	Poorly Drained	6 - 18 inches	43.3 %	Low
16 <sup>3</sup>	Orsino fine sand	Moderately Well Drained	42 - 60 inches	1.1 %	Medium
25	Parkwood fine sandy loam, frequently flooded	Poorly Drained	0 - 12 inches	2.3 %	Low
40	Pottsburg fine sand	Poorly Drained	6 - 18 inches	24.6 %	Low
42	Bluff sandy clay loam, frequently flooded	Very Poorly Drained	0 - 12 inches	19.9 %	N / A
	<b>TOTALS</b>			100.0%	

1. - United States Department of Agriculture  
2. - Area of Potential Effect  
3. - Best drained soils on the APE

Examination and pre-field archeological evaluation of the Pine Island Multifamily project soils indicated that the Pine Island Multifamily APE lies within an overall Low Probability Zone with one minor exception. While initial examination of the County's Archeological Probability map suggested that the regional assessment was Medium Probability, a tract-specific examination of

pertinent environmental and cultural parameters revealed that the tract contained more of a low potential to contain regionally significant archeological sites. The exception to this finding was a small pocket of Orsino fine sand, which as indicated, was tested as a high probability zone.

### **Biotic Communities**

The Pine Island Multifamily project region is composed primarily of pine flatwoods, which occupy a low, poorly drained topographic setting, and therefore support a mostly mesic community comprised principally of longleaf pine (*Pinus palustris*) and slash pine (*Pinus elliottii*). Regionally, other vegetation includes turkey oak (*Quercus laevis*) in slightly elevated areas, loblolly bay (*Gordonia lasianthus*) in lower areas, and inkberry (*Scaevola plumieri*), wax myrtle (*Myrica cerifera*), blackberry (*Rubus* spp.), wild grape (*Vitis* spp.), and fetterbush (*Lyonia lucida*) throughout. Native grasses consist of Indian grass (*Sorghastrum* spp.), threeawns (*Aristida* spp.), panicums (*Panicum* spp.), and bluestems (*Andropogon* spp.) (FNAI & FDNR 1990: 24); Abrahamson and Hartnett 1990: 110-116.

The flatwoods that dominate the project region do not typically provide a thriving biotic community for autochthonous fauna. However, some species do occur and are present in varying numbers. Animals that would have been of economic importance to regional aboriginal populations include white-tailed deer (*Odocoileus virginianus*), black bear (*Ursus americanus*), box turtle (*Terrapene carolina*), eastern diamondback rattlesnake (*Crotalus adamanteus*), gray fox (*Urocyon cinereoargenteus*), fox squirrel (*Sciurus niger*), and Florida panther (*Felis concolor coryi*). It should be mentioned that panthers are absent from the region now due to human encroachments (Abrahamson and Hartnett 1990: 116).

Wetlands such as nearby Twelvemile Swamp are numerous throughout the region, some of which are manifested as broad swamps and marshes, as well as hydric hammocks which support such overstory trees as sweetgum (*Liquidambar styraciflua*), blackgum (*Nyssa biflora*), water oak (*Quercus nigra*), swamp chestnut oak (*Quercus michauxii*) pine, and cypress (*Taxodium* spp.). Wetlands associated with flowing water may contain bald cypress (*Taxodium distichum*), sweetbay (*Magnolia virginiana*), magnolia (*Magnolia grandiflora*), sweetgum, cabbage palm (*Sabal palmetto*), water oak (*Quercus nigra*), and holly (*Ilex* spp.). Shallow depressions and poorly defined drainage ways generally support bald cypress, sweetbay, southern magnolia, cabbage palm, blackgum, pond pine (*Pinus serotina*), swamp chestnut oak, American holly (*Ilex opaca*), wax myrtle (*Myrica cerifera*), and water oak. The understory typically includes greenbrier, inkberry, maidencane (*Panicum hemitomon*), Indian grass (*Sorghastrum* spp), bluestems, and toothache grass (*Ctenium aromaticum*) (Readle 1983). At the time of survey, the vast majority of the project tract was dominated by second growth pine timber as well as wetland overstory species.

### **Climate**

The climate of St. Johns County is characterized by long, warm, humid summers and mild, dry winters. The average summertime temperature is 80 degrees Fahrenheit (F), while during the winter months it is 62 degrees F. These temperatures are moderated by the St. Johns River and the Atlantic Ocean, which border the county to the west and east, respectively. The average daily

minimum winter temperature is 46 degrees F and the average daily maximum summer temperature is 89 degrees F. As of 1983, the lowest recorded temperature in St. Johns County was 19 degrees F while the highest was 102 degrees F (Readle 1983:1).

The average annual rainfall in St. Johns County is approximately 140 cm; more than 50% of this precipitation falls from June through October often in the form of convective thundershowers which occur in the afternoon and early evening hours. Such storms are often accompanied by high winds, torrential but brief downpours, and, in the late spring, hail. The months of June through November also experience relatively frequent tropical disturbances, which sometimes reach hurricane force (Readle 1983:2).

**HISTORIC CONTEXT:**  
**The Pine Island Multifamily Project Regional Cultural Setting**

The Pine Island Multifamily project tract is located within the East and Central Florida Culture Area as defined by Milanich and Fairbanks (1980), and Milanich (1994). While previous archeological research completed in this region of Florida identified four archeological traditions: namely, Paleoindian, Archaic, St. Johns, and Historic, a more recent alternative approach has suggested that the region contains ceramic types indicative of distinct local cultures which reflect unique cultural affiliations and adaptations along the northeast Florida and southeast Georgia coastal areas. These affiliations have been placed within the Woodland Period (500 B.C. to A.D. 750), the Mississippian Period (A.D. 750 - A.D. 1562), and the aborigines of the Historic Period (post-A.D. 1562). The following discussion is intended to provide a general but brief overview of the 12,000 years or so of the region's prehistoric past, as well as a limited discussion of regional history. These data are summarized in Table 2.

**Paleoindian Period (ca. 10,000-7,500 B.C.)**

It is currently believed by many researchers that the first inhabitants settled in Florida approximately 12,000 years ago at a time when sea levels were some 160 feet lower than at present, and the land mass of the state was about twice the size it is today. During the Pleistocene Epoch, with lower sea levels, much of Florida was composed of arid uplands (Delcourt and Delcourt 1981; Dunbar 1991). As a result, Paleoindian sites have a tendency to be clustered around areas which would have supported permanent sources of water interspersed throughout this otherwise dry environment. Such locales include sinkholes, deep springs, and other perched retention basins associated with karstic Tertiary limestone deposits. The major areas of these Paleoindian site locations are concentrated within the Northern Panhandle and Central Gulf Coast regions of the state (Dunbar and Waller 1983).

Paleoindians hunted Pleistocene megafauna such as mammoth, mastodon, bison, and musk ox. These massive animals apparently coexisted with morphologically larger versions of extant species of deer, elk, beaver tortoise, and armadillo which also played roles in the subsistence of Paleoindians (Carbone 1983). The tool technology of the Paleoindians included atlatls and spears hafted with large projectile points. The most common Paleoindian period stone implement was the lanceolate projectile point, a fluted biface crafted by a distinctive well controlled percussion method (Goodyear et al. 1983: 61). Diagnostically, these finely crafted spear tips are known as Clovis, Suwannee, and Simpson projectile Points. Of these types, the Suwannee Point is the most widely recognized in Florida. This projectile point variety has been described as a slightly waisted point with concave base, basal ears, and basal grinding (Bullen 1975: 55). Also found in the Paleoindian tool assemblage are bone pins, stone knives, plano-convex scrapers, and spoke shaves (Milanich 1994: 48-51). Perhaps the best known Paleoindian sites in Florida are the Silver Springs Site in Marion County, the Nalcrest Site in Polk County, and the Harney Flats Site in Hillsborough County.

<b>Tradition</b>	<b>Period/Ceramic Affiliation</b>	<b>Phase</b>	<b>Temporal Placement</b>
Paleoindian			10,000 - 7500 B.C.
Archaic			7500 - 500 B.C.
	Early Archaic		7500 - 5000 B.C.
	Middle Archaic		5000 - 3000 B.C.
		Mt. Taylor	5000 - 2000 B.C.
	Late Archaic		3000 - 500 B.C.
		Orange	2000 - 500 B.C.
Woodland			500 B.C. - A.D. 750
	St. Johns I		500 B.C. - A.D. 750
		St. Johns I (early)	500 B.C. - A.D. 100
		St. Johns Ia	A.D. 100 - A.D. 500
		St. Johns Ib	A.D. 500 - A.D. 750
	Deptford		500 B.C. - A.D. 600
	Swift Creek		A.D. 200 - A.D. 600
	Weeden Island		A.D. 200 - A.D. 800
Mississippian			A.D. 750 - A.D. 1562
		St. Johns IIa	A.D. 750 - 1050
		St. Johns IIb	A.D. 1050 - 1513
		St. Johns IIc	A.D. 1513 - 1562
Historic			A.D. 1562 - present
		Mission	A.D. 1562 - 1763
		Seminole	A.D. 1716 - present

### **Archaic Period (7,500-500 B.C.)**

The Archaic period represents a cultural transition from nomadic band organization to a more sedentary village life, and has been divided into three temporal divisions (Early, Middle, and Late) based largely on projectile-point typologies (Bullen 1975; Goggin 1952). More recently, new environmental and climatic data and increased knowledge of artifact assemblages and site types have augmented and refined these divisions. After 8,000 B.C., climatic fluctuations, rises in sea level, and

increasing human populations gradually altered the lifeways of aboriginal groups (Milanich 1994:62). These changes are evident in the archeological record of such occupations.

With the onset of less arid conditions after 8,000 B.C., cultural changes began to occur in response to environmental shifts. During this time, the megafauna eventually succumbed to mass extinctions, and the species that were able to survive were smaller, swifter, more difficult to hunt, and provided less meat for human consumption. This phenomenon led to changes in human adaptation and as a result, changes in the Archaic lithic stone tool assemblages. Meanwhile, with the rise of the sea level, peninsular Florida witnessed a dramatic decrease in size. As a result, increasing aboriginal populations were forced to compete for dietary resources within a smaller land mass. These factors contributed to a subsequent shift in human adaptation and culture by 7,500 B.C., and the changes in artifact assemblages have allowed modern archeologists to recognize a new culture (Milanich 1994: 63). One major change was the replacement of large, lanceolate points of the Paleoindian period, with smaller stemmed varieties such as the Bolen, Kirk, Wacissa, Hamilton, and Arredondo types, collectively called Archaic Stemmed Points by archeologists. Prior investigations have indicated that Bolen points were also found at Harney Flasts (Daniel and Wisenbaker 1987), as well as at the Wetherington Ridge Site (Johnson 1985), both located in Hillsborough County near the Hillsborough River. Some researchers suggest that the Bolen point may be a temporal marker showing the transition from the Paleoindian period to the Early Archaic tradition (Johnson 1985).

Post-Pleistocene sea levels continued to rise until after 5,000 B.C., during which time the interior water table rose resulting in an increase in the size and number of available water sources. By ca. 3,000 B.C. environmental conditions had evolved into those which remained evident until many nineteenth- and twentieth-century land alterations caused widespread changes in the landscape. Increased water availability contributed to the emergence of pine/mixed hardwood forests, which supported abundant and diversified floral and faunal species (Watts 1969, 1971; Watts and Hansen 1988). During this period, Middle Archaic peoples thrived in the St. Johns River valley, the Hillsborough River drainage system areas northeast of Tampa bay, along the southwest Florida coast, and throughout the forests of interior northern Florida (Milanich 1994:76). In central and north Florida, the Late Archaic period is also manifested as the Mount Taylor Culture. Sites of the Mount Taylor culture occur within the St. Johns River Valley and indicate year round occupation throughout this terminal preceramic tradition (ca. 4,000 to 2,000 B.C.), (Goggin 1952: 40-21; Milanich and Fairbanks 1980: 147).

Beginning around 3,000 B.C., regionalization of cultures occurred as human populations favored lifeways well-adapted to essentially modern environmental conditions (Milanich 1994: 85). Plentiful freshwater and coastal wetlands, and their abundant subsistence resources, became increasingly important to native populations (Milanich 1994: 85). In east Florida, the preceramic Middle and Late Archaic Mount Taylor culture was replaced by the Orange culture, the latter associated with ceramics of the same name. These ceramic wares were hand-molded from local clays and tempered with vegetal material, usually palmetto fiber and Spanish moss (Milanich 1994: 86). This fiber-tempered pottery is known as Orange pottery, after the type site in Orange County, Florida. Initially, fiber-tempered pottery was undecorated. After 1,650 B.C., however, geometric

designs and punctations were introduced as surface decorations. Around 500 B.C. fiber-tempering disappeared altogether and was replaced with St. Johns wares, the most prolific aboriginal ceramic ware in northeast Florida in pre-Columbian times.

### **Woodland Period (500 B.C. - A.D. 750)**

Until recent times, cultures of 500 B.C. and later have been traditionally called the St. Johns Culture by archeologists such as Goggin (1952), Milanich and Fairbanks (1980) and Milanich (1994) and others. However, as more detailed ceramic studies have been completed in the past several decades, a "new" view of the northern portion of the St. Johns culture area has emerged. These recent studies have suggested that the northeast Florida and nearby southeast Georgia regions contain unique ceramic wares indicative of a distinct cultural affiliations. According to Russo (1992), these wares collectively occur within the "St. Marys Region," a region which appears to share distinct cultural links as well as similar environmental adaptations. Together, these ceramic chronologies offer an alternative view of aboriginal times in the region between some 500 B.C. and A.D. 750. This view is becoming more widely accepted and will surely be further refined as new information becomes available. As presented in Table 1, the cultures of the Woodland Period are described briefly below.

#### St. Johns I (500 B.C. - A.D. 750)

Believed to have developed out of the previous Orange culture, peoples of the St. Johns tradition made a distinctive pottery that was, for the most part, without tempering agents. These wares were made from local clays containing fossil sponge spicules that represents arguably the most common pottery type in the region (Borremans and Shaak 1986). Such pottery contains a distinctive "chalky" feel to the touch, and some early surface designs were somewhat reflective of previous Orange wares. In addition to new ceramic traits, the St. Johns cultural traditions saw an increase in social and secular complexity as reflected in an increase in native populations, continued and likely increased exploitation of coastal resources, and the construction of sand burial mounds (Milanich and Fairbanks 1980; Milanich 1994). While some researchers argue that this time period also saw an increase in plant cultivation, firm archeological evidence to support this view in a major way, remains somewhat elusive in the northeast Florida area.

In previous times, the St. Johns tradition has been divided into two major subperiods, St. Johns I (500 B.C. - A.D. 750) and St. Johns II (A.D. 750 - A.D. 1565), while more recent views place the latter subperiod into the subsequent Mississippian period, which lasted from some A.D. 750 to approximately A.D. 1562. The dominant subperiod ceramic maker for this discussion is St. Johns Check Stamped pottery which dates to post-A.D. 750-800 times. During the St. Johns I (early) period (i.e. 500 B.C. to A.D. 100), St. Johns Plain pottery dominates most assemblages, but types such as Deptford and St. Johns Incised (an Orange period surface treatment technique), also occur.

As seen in Table 2, the St. Johns I period has been subdivided into several subperiods including St. Johns I (early), St. Johns Ia, and St. Johns Ib with these divisions based primarily upon ceramic ware distributions. For example, following St. Johns I (early), the St. Johns Ia subperiod (A.D. 100 - 500) is reflected in archeological sites that yield quantities of Dunns Creek Red ceramic



wares in addition to the ever-present St. Johns Plain pottery. In addition, trade wares, which suggest contact with other Florida natives, as well as groups from outside the state (i.e. present-day Georgia), are also found during this early period. Such wares include Deptford ceramics and the more elaborate Swift Creek varieties. In addition to these subperiods, in St. Johns Ib times (A.D. 500 - 750) St. Johns Plain wares dominate midden deposits and village sites, while the ceramic wares found within burial mounds include Dunns Creek Red and Weeden Island types (Milanich and Fairbanks 1980).

#### Deptford (500 B.C. - A.D 600)

According to Milanich (1971, 1973), the Deptford culture of northeast Florida originated around 500 B.C. and lasted a little over a millennium terminating about A.D. 600. Primary Deptford lifestyles included a continuation of coastal adaptation that was well established by the end of the Late Archaic period or between 1000 B.C. and 500 B.C. Deptford peoples exploited the estuarine and maritime forests of the Atlantic coastal zone in order to hunt, fish, and gather biological resources of the coastal zone, as well as the nearby interior river valleys. While most occupational evidence of the Deptford culture occurs in the coastal zone, exploitation of the interior river valleys suggest possible seasonal migration between these areas and the coastal maritime hammocks where the majority of sites have been located. While previous archeological researchers suggest that plant domestication akin to horticulture was likely practiced, little if any direct archeological evidence to support this view has been documented.

Early researchers such as William Sears, examined Deptford sites on Florida's Gulf coast supporting his view that Deptford ceremonial life could be ascertained through its cultural material assemblage as the "Yent complex" (Sears 1962). Sears' view that the use of elaborate sacred pottery and other exotic "Hopewell-related" mortuary items defined the Deptford religious complex. However, more recent investigations of Deptford sites within the northeast Florida/southeast Georgia region have offered an alternative view that the Deptford culture was represented by an egalitarian social complex (Thomas and Larsen 1979:150).

The most common material culture items of Deptford archeological sites is the distinctive Deptford ceramic wares. While some lithic items occur in the archeological record of Deptford sites, such items are not common occurrences. As many Deptford sites occur in the region as shell midden deposits, shell and bone tools are more common. Deptford ceramic wares are usually grit or sand and grit tempered. Surface decorations include Linear and Bold Check Stamped varieties, as well as Simple Stamped and Plain types. Such wares are commonly found in Deptford sites along the lower St. Johns River and nearby marshes (Sears 1957, 1959; Jordan, Wing and Bullen 1963). Also common to such sites is Deptford Cord Marked pottery while incising and punctating techniques are often considered somewhat rare decorative techniques (Caldwell and Waring 1968 and Milanich 1971).

#### Swift Creek (A.D. 200 - A.D. 600)

Using information generated by the early studies of Clarence B. Moore, archeologist John Goggin was the first modern researcher to recognize that Swift Creek ceramic wares were not an

uncommon occurrence along the lower St. Johns River near its mouth. In 1952, Goggin recognized that Swift Creek Complicated Stamped ceramic wares were often found in burial mounds of the region along with non-local items such as copper, mica and steatite (Goggin 1952). During these times, commonly held views are that Early Swift Creek wares and design concepts likely spread from the northwest Gulf Coast of Florida to the northeast Florida coastal region (Sears 1962, 1973). Such views would account for the presence of non-local paste ceramic wares, as well as the presence of extra-local stone and other items recovered from some Deptford archeological contexts in the northeast Florida region.

Moreover, 1965 burial mound excavations at the Mayport Mound (8DU96) by Rex Wilson suggested that while some of the Swift Creek Complicated Stamped wares may have been locally manufactured in contrast to the oft-held theory that such wares were of non-local (i.e. trade) origin, the exact origin of Swift Creek wares remains unresolved. However, more recent archeological investigations near the mouth of the St. Johns River have recovered Late Swift Creek ceramics suggesting trade with nearby coastal Georgia Swift Creek populations (Johnson 1988, Ashley and Johnson 1990). In 1992, Ashley used data from these studies to theorize that over the approximate 600 year history of local Swift Creek occupations, that such wares had their origin in northwest Florida during the period A.D. 100 - A.D. 500, were manufactured locally during the A.D. 100 - A.D. 300 period, and were produced locally by non-local (i.e. migrant) populations (Ashley 1992). Although remaining to be confirmed, such views offer testable hypotheses as more secure-context Swift Creek data becomes available.

#### Weeden Island (A.D. 200 - A.D. 800)

While Weeden Island ceramic wares begin to occur in the local northeast Florida region by St. Johns Ib times, their appearance in archeological assemblages of what is now St. Johns and nearby Duval Counties is not considered extensive or widespread. Weeden Island is a cultural manifestation of pre-Mississippian peoples that occupied portions of Alabama, Georgia and Florida during mid to late St. Johns I or Woodland times. Much of what is known about the Weeden Island culture is derived from archeological excavations at the McKeithen site near Lake City and the Sigler-Lavelle archeological surveys of Suwannee and Columbia Counties in north central Florida. These studies culminated in the generation of a model of social and political organization which included a settlement pattern containing mound-village complexes, villages with no mounds present, and mound sites all of which were established in hardwood or mesic hammocks in close proximity to a permanent water source (Milanich, Cordell, Knight, Kohler and Sigler-Lavelle 1984:188).

At the McKeithen site, the presence of three mounds, each of which appear to have served a different function, within a horseshoe-shaped village occupation served to demonstrate what Milanich believed to be a direct relationship with the village's religious leader (Milanich et al. 1984). Based upon radiocarbon dates from mound and villages contexts at McKeithen, the north Florida Weeden Island culture has been shown to date between A.D. 200 and A.D. 800. In terms of subsistence, plant and animal remains at the McKeithen site were not well preserved, however, Milanich suggested that Weeden Island subsistence was likely similar to that of the interior Cades Pond peoples, a contemporaneous native population to the south of the Columbia County region.

Cades Pond cultures exhibited a subsistence pattern that focused on an intensive harvest economy (Milanich et al. 1984).

Weeden Island cultural material assemblages contain clearly defined secular wares recovered from village sites that included Weeden Island Plain, Weeden Island Punctated and Weeden Island Incised, while other varieties included Carabelle Punctate and Keith Incised. Other more elaborate sacred wares were restricted in use to burial mounds and mortuary contexts, a practice that was apparently restricted to the elite members of Weeden Island society. Weeden Island ceramic wares which included elaborate effigy forms represent a highly evolved ceramic technology that are among some of the most elaborate wares produced in the Southeast during prehistoric times.

#### Colorinda

While the potential for a unique culture known as Colorinda was first recognized by Sears in 1957, the extended details of this cultural phenomenon have yet to be defined other than the recognition of a distinct pottery ware that is represented by a sand tempered ceramic series which exhibits crushed St. Johns pottery as a primary tempering agent. Sears early view that this ware type appeared to be restricted to the banks of the lower St. Johns River, more recent work has suggested that Colorinda pottery appears to be more widespread than previously recognized (Russo 1992; Ashley and Roland 1997). More extensive archeological investigations are needed in the lower St. Johns River valley at sites with Colorinda pottery before this culture, if it actually represents a distinct chronological representation, can be forwarded.

#### **Mississippian Period (A.D. 750 - A.D. 1562)**

While the preceding Woodland period can also be equated to early to mid-St. Johns (I) times, the succeeding Mississippian period has been until recently, and still can be, described as the St. Johns II period. Cultural traits of the period, as reported in Milanich 1994, included the construction and continued use of sand burial mounds, an anticipated rise in horticulture, and the introduction of new ceramic styles. While the latter includes a significant chronological marker known as St. Johns Checked Stamped pottery, the firm demonstration that horticulture was an important and significant dietary mainstay equal to coastal adaptation economic pursuits remains somewhat elusive as few major archeological deposits have been excavated that have confirmed this view.

This period began around A.D. 750 with the onset of St. Johns IIa times (A.D. 750-A.D. 1050) and is clearly identified by the presence of check stamped chalky ware pottery in archeological sites of the region. The presence of other ceramic wares including Weeden Island trade wares and elements of the southwest Florida Safety Harbor culture are indicative of St. Johns IIa times. St. Johns wares also may include incised and punctated designs suggestive of interaction with native cultures of the Gulf coastal region. Exotic ceramic wares or copies of such wares often occur in predominantly ceremonial contexts. Such wares may include Deptford, Swift Creek, Belle Glade, Glades, and Weeden Island; in addition, Safety Harbor (southwest Florida) and Fort Walton (northwest Florida) ceramic wares may also occur (Milanich 1994:247). Regionally, coastal sites occur often as diffuse sheet midden deposits dominated by oyster with some clam and other minor

shellfish species. While plant remains are not well represented in sites of this period, freshwater fishes from inland lakes, ponds and rivers are often found as are estuarine fish and shellfish species.

Subsequent to St. Johns IIa times, the St. Johns culture began to reach its zenith during the following St. Johns IIb times (A.D. 1050-A.D. 1513). Subsistence patterns continue to be represented by coastal adaptation strategies that were supplemented by various plants some of which may have been cultivated, but the documentation of composition and degree of horticultural dependancy remains elusive due to the lack of preservation of such items. Direct evidence of cultivated plant species remains rare in period sites, but early Spanish explorers reported widespread cultivation of "corn, beans, and squash" during the latter part of this period (Bennett 1968). However, according to Purdy (1990), such items have been found in later period Mission contexts and indirect evidence exist during St. Johns IIb times in the form of cob marked ceramic styles (Milanich and Fairbanks, 1980; Milanich 1994).

While some cultigens were likely an important part of St. Johns II diets, they were not as important as the continued reliance on fish and shellfish from nearby coastal waters. Zooarchaeological studies have demonstrated the importance of such resources including shellfish (dominated by oyster, but also including quahog clam, whelk, and Atlantic ribbed mussel), and boney fishes such as Atlantic croaker, sea trout, flounder, as well as catfish and mullet among others. Also, from the nearby uplands, St. Johns II peoples exploited deer, raccoon, opossum and other species as a supplementary form of protein in their predominantly fish and shellfish diet (Milanich 1994).

During the latter part of the St. Johns IIb times, St. Johns cultures had reached the climax of sociopolitical and religious organization. In addition, the region of the lower St. Johns River saw a significant increase in aboriginal populations as evidenced by the discovery of over 30 archeological sites along the south bank of the river from Reddie Point to Mayport during an archeological reconnaissance of the area in the late 1980's (Johnson 1988). Moreover, early archeological excavations conducted primarily in Native American burial mounds in nearby Duval County during the late 19<sup>th</sup> century yielded important information about burial practices of late St. Johns II peoples (Moore 1894, 1895). The recovery of elaborate, often non-local mortuary items such as copper beads, plates, and masks as well as galena, ground stone implements and other items indicative of "southern cult paraphernalia" from sites such as the Grant Mound and nearby Shields Mound in Duval County are indicative of what was likely a widespread trade network that extended north into Georgia and northwest towards the Mississippian culture's heartlands (Ashley 2000).

During the final stages of the Mississippian period in northeast Florida, European contact represents the region's protohistoric period. Lasting from A.D. 1513 until approximately A.D. 1562, the region saw several explorations by early Spanish explorers such as Ponce de Leon and Pedro Menendez but it was the founding of St. Augustine by Menendez in 1565 that signaled the end of Native American lifeways that had existed in the region for thousands of years.

### **Historic Period (A.D. 1562 - Statehood)**

Following early European contact, Native American lifeways and cultures of north Florida began a precipitous decline that led to the ultimate demise of what had been the St. Johns culture for several millennia resulting in nothing short of total cultural decimation. Between the A.D. 1513 Ponce de Leon expedition and ending with the 1565 founding of St. Augustine (and later), European goods such as glass beads, wood working tools, hawk's bells, and even precious metals such as gold and silver made their way into St. Johns IIC burial and other native archeological deposits. While such items were undoubtedly attractive to native populations, contact with Europeans also brought diseases that would lead to the death of many native peoples, sometimes in epidemic proportions. According to Milanich and Fairbanks (1980:211), there were as many as 100,000 natives in what is now Florida at the time of European contact. As in northern Florida, native populations all across Florida would later be decimated by diseases brought by European explorers and settlers.

Following European contact, both French and Spanish narratives provided a view of native populations of the north Florida region. While the French established short-live Fort Caroline near the mouth of the St. Johns River in 1562, the Spaniards established St. Augustine in 1565. Following the destruction of Ft. Caroline and its inhabitants by the Spaniards, St. Augustine gained importance due to its strategic location. It survived over the following centuries as both a military outpost as well as a religious base for missionaries who came to Florida to convert the native populations to the ways of Catholicism (Deagan 1983). During these times, remaining native populations were exploited for their labor as between the period of 1562 and 1763, a series of Spanish missions were established from the coast of Georgia to St. Augustine, and as far west as Pensacola. In the year 1702, raids by the British and their Indian allies decimated the Native American populations of the north Florida area. By 1763, virtually none of the regions's aboriginal populations remained (Gannon 1965).

With the failure of the early Jesuits, the Franciscan order assumed the missionary effort, which they began in earnest by 1578. The mission of San Juan del Puerto was founded on the west side of Fort George Island in nearby Duval County, and in 1595 Frey Francisco Pareja arrived to begin what would prove to be 33 years of service to that mission (Gannon 1965). During this period, the Guale Indians of the southeast Georgia coast revolted against the local Spanish mission in 1597. The revolt was soon quelled but to avoid the revolt three Guale leaders led their people south to San Juan del Puerto. Although the Guale missions were reestablished in 1603, the Georgia natives continued to be moved to northeast Florida missions, primarily to bolster the dwindling Timucuan populations which were being ravaged by epidemic diseases introduced from Europe (Gannon 1965).

By 1686, the last of the missionized Guales had been moved south to missions on Amelia Island and further south, including San Juan del Puerto and St. Augustine. This was largely the result of incursion against the Spanish mission system by the English. The governor of South Carolina, James Moore, stepped up this aggression in 1702 during the War of Spanish Succession. Along with a number of other missions, San Juan del Puerto was destroyed as a result of one of these raids, when in 1702 troops burned the *doctrina* and captured those friars and defenders who failed to escape south to St. Augustine. Moreover, Moore also attacked the Spanish missions of what is now

northwest St. Johns County along the St. Johns River including the mission of San Diego de Salamototo (Johnson 2010). He also laid siege (unsuccessfully) to St. Augustine where he attacked and burned the Castillo de San Marcos. While this attempt was not successful, Spain was forced to surrender Florida to England in 1763, due to the former's role in the Seven Years' War. The British immediately instituted a policy of distributing land grants to encourage settlement of the region as a means by which to bolster their grip on the region. As a result of this policy, lands in the vicinity of the Pine Island Multifamily project tract were granted to a number of people (Gannon 1965).

In 1763, the British acquired control of Florida from the Spanish government. Lasting but 20 years until 1783, the British period saw an influx of settlers some of which established extensive land holdings. Often in exchange for settlement, large tracts of land were given to British and later Spanish settlers who agreed to grow crops for export to Europe. One such grant, known as the "R. Charles" or Reuben (sic) Charles grant, contained some 350.0 acres of land; it can be seen in Figure 7. In addition, what is now called the "Old Dixie Highway" is clearly shown within both Sections 19 and 41 in close proximity to, but outside of the current project area. It is unknown if Charles developed his grant as no indication of such land modification can be seen on this early survey of Township 5, Range 29 East.

Following the British tenure of 20-years, the Spanish again gained control of what is now Florida at the Treaty of Paris in exchange for lands it had wrest from British control, including the Bahama Islands, Grenada, and Montserrat ( Tebeau 1971). During this, the Second Spanish period, which lasted from 1784 to 1821, Spanish Florida never regained the prominence it held during the First Spanish period. During the latter years of this period, large expanses of "Spanish Land Grants" were awarded by the Spanish government. Some of these were used in the production of timber, sugar and cotton. As Native American populations were no longer available to serve as laborers, African slaves were used in this endeavor. The period ended in 1821 when Florida was ceded to the United States thus becoming a U.S. Territory. Several decades later, in 1845, Florida became the 27<sup>th</sup> state to join the union ( Tebeau 1971).

Following statehood, the northeast Florida region began to develop at first slowly, but in modern times, it represents one of the most rapidly developing regions of the country. While nearby Jacksonville developed into an industrial/seaport, St. Augustine became dependant on tourism as its major attraction with historical sites such as the Castillo de San Marcos among the most important such attractions. While much of St. Augustine still maintains a quaint charm, what were once rural areas of St. Johns County became home to expansive housing developments. To wit, developments such as World Golf Village, Palencia, and nearby Nocatee, have brought new residents to the once pristine timber lands of the region. Along with these new residents, shopping and business centers, support amenities, and other small and large businesses have replaced the rural settings that were at one time, representative of the county's agricultural and silvicultural heritage.

Regarding specific history in the immediate vicinity of the Pine Island Multifamily tract, little detailed written history was reviewed other than broad countywide statements made about



what is now the vicinity of the project area. Mention of the historic settlements of Durbin, Hilden, and Palm Valley (formally Diego) was reviewed in several historical reports and monographs. However, the project vicinity has been, and still is to some extent, associated primarily with silvicultural operations like those in other rural areas of St. Johns County. In fact, in order to help protect rural silvicultural operations from wildfires, fire watch towers were installed across heavily forested portions of the county in the 1940s. Once such tower was constructed at nearby Durbin to the north of the Pine Island Multifamily tract. Moreover, construction of the nearby intracoastal waterway facilitated the development of early trade and later new homes along its banks especially in the nearby Palm Valley vicinity.

Examination of the 1918 USGS Palm Valley topo (1:62,500) map revealed that the vicinity of what is now the Pine Island Multifamily tract was shown to occur along U.S. Highway 1 south of the communities of Durbin and Hilden, small rural communities that were once located immediately north of the project area. In addition, a close examination of this topographic map shows what appears to be a structure immediately east of the northeast corner of the Charles Grant (Section 41) in Section 19 along the west side of the old Spanish trail. However, this structure is no longer present as indicated by the subsequent 1952 Durbin USGS topographic map. Moreover, it was not seen during the examination of pertinent historic period aerial photographs as depicted in the 1942 USDA flights of St. Johns County, and specifically Flt. 3C Tile 19 taken on 4-1-42.

Perhaps one of the most notable communities in the vicinity at the turn of the 20<sup>th</sup> century was nearby Palm Valley. While the region was originally known as the Plains of Diego, the community of Palm Valley was once known as Diego. Renamed in the early 20<sup>th</sup> century to Palm Valley after the sabal or cabbage palm, the area produced freshly cut palm buds for many of the nation's churches during the winter months leading up to the religious holiday of Palm Sunday. These palms were cut and shipped annually by train and later by boats which hauled freight between Jacksonville and Miami following the opening of the Intracoastal Waterway in 1912.

During the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, what are now considered historic roadways and railroads were developed in parts of St. Johns County, primarily in the eastern section both north and south of St. Augustine. These include Old Dixie Highway (Site 8SJ5036), Kings Road (8SJ3476), US Highway 1 (Site 8SJ5271) and Florida East Coast Railroad (8SJ5272). While recorded segments of the Kings Road and Old Dixie Highway occur north of the project area in the vicinity of Durbin, US Highway 1 and the Florida East Coast Railroad lie immediately west of the APE. In addition, unrecorded portions of Old Dixie Highway lie immediately east of the Pine Island Multifamily tract. Based primarily upon archeological and historical integrity, small portions of Old Dixie Highway and Kings Road that occur well north of the APE have been deemed NR-eligible by SHPO, while all of the FEC Railroad has been deemed eligible for inclusion in the *National Register of Historic Places*. In contrast, US Highway 1 has been deemed not eligible. Regardless of NR significance, each of these roadways and the FEC railroad played different, but nonetheless important roles in the late historic and modern periods of development in St. Johns County.



## PREVIOUS ARCHEOLOGICAL RESEARCH

Prior to initiating the field operations for the Pine Island Multifamily archeological study, a thorough program of background research dealing primarily with the project's environmental and cultural setting was completed. During this phase of the project, a review of regional archeological literature, previously completed CRM investigations, previously recorded archeological sites, and historic land records pertinent to the Pine Island Multifamily project area was conducted at the Bureau of Archeological Research (BAR), the Department of Environmental Protection (DEP) in Tallahassee, and other repositories such as the St. Johns County property appraiser, County land records, etc. Much of this work was completed using standard web-based data collections.

In addition, pertinent archeological and historical reports, journals, monographs, and other literature relating to the survey region were also examined as a means by which to establish previous historic land use, aboriginal settlement patterns, etc. Similarly, the application of a Geographic Information System (GIS) software program utilizing countywide data archived by the Florida Master Site File (FMSF) was also completed. This program gave FAS researchers a visual representation of all historic properties in St. Johns County, along with previous archeological and historical surveys conducted within the Pine Island Multifamily project "Study Region," an area arbitrarily defined as occurring within a 1-2 mile radius of the APE. This GIS spatial analysis was also used to help generate the information presented in Tables 3 and 4, which summarize the findings of this element of the Pine Island Multifamily archeological study.

The purpose of the background research was to review available archeological and historical data pertaining to the project area for use in developing a project-specific archeological site predictive model and field research strategy. Table 3 shows a compilation of some 15 previously recorded archeological or historic sites located within an approximate 1-2 mile range of the Pine Island Multifamily tract. This "Study Region" was established as a comparative database for the examination of existing information for the areas's cultural resources, as well as pertinent environmental parameters associated with each of these resources. This element of the study led FAS researchers to determine what types of sites *might* occur on the Pine Island Multifamily project tract. While Table 3 shows nearby historic resources, Table 4 shows a compilation of CRM surveys previously conducted within the Pine Island Multifamily project vicinity.

In addition to completing an overview of existing archeological and historic site information, prior archeological and historic CRM investigations within the project's Study Region were examined for pertinent cultural and environmental information that would assist FAS researchers in completing the Pine Island Multifamily survey. Such studies alert archeological researchers to the types of historic properties already documented in a given region. Moreover, pertinent environmental/cultural parameters revealed by such studies are also important considerations for field archeologists. Regarding previous archeological field surveys, a select sample of these studies was examined during background research. While a relatively large number of surveys have occurred within the study region, only a few are discussed below in order to place the background research into pertinent project-specific perspective.

**Table 3. Previously Recorded Historic Properties Within the Vicinity of the Pine Island Multifamily Study Region.**

Site No.	Site Name	Culture Period	Function	SHPO NR <sup>1</sup> Evaluation
<b>Archeological</b>				
SJ3718	Nocatee 15	Orange, Deptford, St. Johns (unspecified)	campsite	not eligible
SJ3723	Nocatee 20	Deptford, prehistoric (unspecified)	campsite	not eligible
SJ3724	Nocatee 21	St. Johns (unspecified)	campsite	not eligible
SJ3725	Nocatee 22	Orange	campsite	not eligible
SJ3726	Nocatee 23	Orange, St. Johns (unspecified)	campsite, habitation site	not eligible
SJ3727	Nocatee 24	Orange, St. Johns (unspecified)	campsite, land site	not eligible
SJ3728	Nocatee 25	prehistoric - aceramic	campsite	not eligible
SJ3729	Nocatee 26	Orange, Deptford, St. Johns, Mission	campsite, land site	not eligible
<b>Historic</b>				
SJ2809	Old Dixie Highway	American 20 <sup>th</sup> century	linear resource	not eligible
SJ2811 <sup>2</sup>	140 Stratton Road	ca. 1910	single family residence	not evaluated by SHPO
SJ2816	northeast corner of US 1 and Pine Island Road	Not available	single family residence	not evaluated by SHPO
SJ3730	Meldrim Park Terpentine Camp D	Not available		not evaluated by SHPO
SJ5034 <sup>3</sup>	Waste Transfer 1	Orange, American 20 <sup>th</sup> century	land terrestrial	not eligible
SJ5036	FEC: St. Augustine and Palatka	American 19 <sup>th</sup> and 20 <sup>th</sup> century	Historic railway segment	Eligible
SJ5271 <sup>4</sup>	U.S. Highway 1	American 20 <sup>th</sup> century	linear resource	not eligible

- 1 - National Register of Historic Places via SHPO  
 2 - Nearest Historic Structure, 330m south  
 3 - Nearest Prehistoric Archeological Site, 125m south  
 4 - Nearest Historic Archeological Site, adjacent west

While the majority of the investigations shown in Table 4 occurred after the year 2000, the earliest study in the vicinity was the 1989 Southeast Landfill archeological survey which was completed by FAS for the City of Jacksonville. This study documented three archeological sites, 8DU5630, 8SJ3223 and 8SJ3224 (Johnson and Ashley 1989). While two of these deposits were deemed insignificant, additional investigation was recommended for Site 8SJ3223. Subsequent study of this site during the 2000 Nocatee survey yielded a finding of not significant (Handley, Smith

and Parker 2000). This latter study indicated that none of the cultural resources recorded during the FAS 1989 study were eligible for inclusion in the *National Register of Historic Places*.

One survey in particular yielded important information regarding previous findings in the vicinity of the current APE, as well as data important in planning the completion of the Pine Island Multifamily survey by FAS archeologists. This study occurred in 2000 as the CRM investigation of the 13,055-acre Nocatee Tract in St. Johns and Duval Counties. This Phase I survey documented some 31 newly recorded archeological and/or historic sites, as well as conducting a reexamination of five previously recorded sites. This large tract of land borders the eastern portion of the current Pine Island Multifamily tract. Of the 36 sites documented or examined during the Nocatee investigation, only three sites (8SJ53, 8SJ3476, and 8DU13980) were deemed significant and possibly eligible for inclusion in the *National Register of Historic Places* (Handley, Smith and Parker 2000).

In addition to archeological studies, the countywide historic properties survey conducted by Sidney Johnston (ESI) in 2001 remains among the most thorough and well-researched and reported developmental history and historic structures inventory conducted to date in rural St. Johns County. This extensive study detailed the history of rural development in St. Johns County and recorded some 1,133 historic sites or structures (Johnston 2001).

<b>Table 4. Previously Conducted CRM<sup>1</sup> Surveys within the Pine Island Multifamily Project Study Region.</b>		
<b>Survey No. (Year)</b>	<b>Report Title (Author)</b>	<b>Associated Sites</b>
2040 (1989)	An Archeological Survey of the Southeast Landfill Duval and St. Johns Counties, Florida Robert E. Johnson and Keith H. Ashley	8DU5630 8SJ3223, 8SJ3224
6612 (2001)	Historic Properties Survey, St. Johns County, Florida Sidney Johnston	1133 See Report
6760 (2000)	An Intensive Cultural Resource Assessment Survey of the Nocatee Tract Duval and St. Johns Counties, Florida Brent M. Handley, Greg C. Smith, Susan R. Parker	36 See Report
7748 (2001)	Stratton Road Tower Site, St. Johns County, Florida Jonathan Napier	
12978 (2006)	An Intensive Cultural Resource Assessment Survey of the St. Johns County Animal Control Shelter and Waste Transfer Facilities, Johns County, Florida M. Bland and D. Mynatt	SJ5034
14490 (2006)	Cultural Resource Assessment Survey of the Proposed Interchange Connection Between State Road 5 (US 1) and County Road 210 St. Johns County, Florida; Elizabeth Chambless and Anne Stokes	8SJ3476, 2809, 5268, 5269, 5270, 5271, 5272
<b>1 - Cultural Resource Management</b>		

In addition, the examination of previous archeological and historical research in the vicinity of the Pine Island Multifamily project area showed that a diversity of cultural resources have been previously identified within the vicinity of the subject parcel including archeological sites and historic structures. This review revealed that the nearest archeological site to the Pine Island Multifamily APE is 8SJ5034, the Waste Transfer 1 site. This deposit is represented by a low to variable density artifact scatter which yielded Orange period and American 20<sup>th</sup> century archeological materials. This site was deemed not NR-eligible when evaluated by the SHPO. In addition to this site, the nearest previously recorded historic structure is represented by 8SJ2811, a ca. 1910 structure represented by a single family residence that has not been evaluated by SHPO. This site is located at 140 Stratton Road and is a frame vernacular structure, that is typical of such early 20<sup>th</sup> century rural residential dwellings in the county.

While a number of archeological sites have been recorded within one to two miles of the Pine Island Multifamily project area, the information generated by an examination of nearby Nocatee survey yielded significant and important information suggesting the type of sites that might be discovered on the Pine Island tract. These included Nocatee Sites 19 - 30 (8SJ3722 - SJ3730) as identified in Figure 8. In terms of cultural setting, each of these sites contained some or all of the following chronological components including the Orange period (2000 B.C. - 500 B.C.), Deptford (700 B.C. to 300 B.C.), St. Johns I (700 B.C. - 800 A.D.) and St. Johns II (800 A.D. - 1500 A.D.). Moreover, they were all classified as short-term campsites of limited archeological composition and significance. Important environmental criteria were also derived from a close examination of these sites: they all occurred on a north-south trending slightly elevated "ridge" above the 40 foot AMSL contour. While similar "ridge sets" occur in the region, none were noted on the Pine Island Multifamily project tract. Primarily based upon the environmental setting criteria such as topographic elevation, and soil drainage characteristics, the Pine Island Multifamily project tract fell into a less favorable condition/setting for containing similar archeological resources. To wit, examination of the site locations/elevations in Figure 8 revealed that the majority of sites identified therein occur above the 40 foot AMSL contour, with only two occurring at or near the 35 foot contour.

Careful evaluation of the project's background research database indicated that the majority of the Pine Island Multifamily project tract ranked as a Low Probability Zone for containing regionally significant archeological sites. However, as will be seen below, examination of the tract relative to the St. Johns County Archeological Predictive Model indicated that no High Probability Zone was present. As such, the majority of the tract was tested at the Medium to low probability (50-75 meter) surface intervals due to the complete lack of ground surface exposure. These procedures were executed based upon the findings of the project's background research, as well as the DHR's current standards and guidelines.



**Figure 8. Portion of the 1992 Durbin, Fla. USGS Topographic Map Showing the Location of the Pine Island Multifamily Project Area and Nearby Archeological and Historic Sites.**



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## FIELD AND LABORATORY METHODOLOGY

### Research Design and Field Methodology

Archeological fieldwork for the Pine Island Multifamily project was conducted during a one field-day period on March 30, 2023, following completion of the project's Archeological Site Predictive Model. Robert E. Johnson was the project's Principal Investigator (PI) and was assisted by two FAS archeological field technicians. All survey operations were completed in accordance with the DHR's *Cultural Resource Management Standards and Operations Manual, Module 3, Guidelines for Use by Historic Preservation Professionals, Section 2.0*.

During the project, survey efforts to be performed included subsurface shovel testing implemented within all upland areas of the APE, as well as intensive and general ground surface reconnaissance. As previously indicated, only 3.56 upland acres were located on the APE, indicating only 17.2% as non-wetlands property. As such, the majority of the APE (17.11 acres or 82.8%) occurred as wetlands as indicated by the tract's biological consultant (Steve Florey 2023, personal communication and Appendix A). Therefore the upland areas represented the tract's project-specific highest probability zones, albeit ranked by FAS as predominantly Low Probability.

In concert with field strategy planning, archeological field testing would occur via a single transect line running generally north to south, while other testing including judgmental testing which occurred in the tract's northeastern portion following in-field assessment during field operations. It should be noted that the placement of this transect corresponded closely with the settlement patterns indicated in Figure 8 in that testing occurred along the 35 foot AMSL contour, the highest elevation on the APE. The majority of the sites shown in this figure are at or above the 40 foot contour, a geographical feature not present on the Pine Island Multifamily project area.

Represented by poorly drained soils and the tract's dominant Low Probability zone, these tests occurred for the most part at 50 to 75 meter intervals. In contrast, one small portion of the tract deemed Medium Probability occurred in a small eastern portion of the APE. Represented by Orsino fine sand, a moderately well drained variety, this small area represented but 1.1% of the APE; it was tested at 25 meters, a High Probability strategy.

FAS field testing was implemented based on the project's archeological site predictive model or research design which included testing the tract as a Medium to Low Probability Zone, a strategy which was consistent with the St. Johns County Archeological Site Predictive Model. Although the tract ranked primarily as a Low Probability Zone, surface interval testing was implemented at 50- 75 meter intervals in most areas. Based upon the tract's poorly drained soils, coupled with its unusually wet conditions, a number of the project's subsurface tests could not be excavated to 1.0 meter or more depths due to standing water and other poor soil conditions. However, most subsurface shovel tests were terminated at the water table, or in spodic soil horizons, generally at depths of 65 cmbs to 75 cmbs. In addition to medium probability testing of the extreme eastern portion of the APE, all other areas were tested as Low Probability, but at a slightly higher tester interval due to the complete lack of ground surface exposure.

In addition to subsurface shovel testing, the uplands portion of the Pine Island project area was subjected to an intensive surface reconnaissance and pedestrian survey as a means by which to identify archeological sites with a surface expression, standing historic structures, or land modifications such as historic period dams, spillways or canals. While background research indicated that no previously recorded archeological sites were located within the project tract, the historic element of the study indicated that the Pine Island tract did not contain any previously recorded historic structures. Moreover, examination of a select number of historic maps (i.e. USGS 1918 and 1952) and early aerial photographs (USDA 1942, 1960 and 1980) revealed no evidence of historic structures or other land use modifications on the Pine Island Multifamily project area.

While the historical research centered upon pre-field documentation of historic structures and/or major land surface modifications associated with the Pine Island Multifamily project, the examination of pertinent environmental and cultural parameters focused upon the completion of a tract-specific archeological site predictive model. This element of project research helped in determining the tract's most likely location for unknown archeological resources. As such, the area of highest topographic elevation, with the tract's best drained soils was subjected to field survey operations (Figures 9 and 10).

Using these field research strategies, the APE was closely examined for the presence of archeological deposits. Moreover, no local informant was interviewed for the Pine Island Multifamily survey. This was due in part to the short fieldwork period of one day, as no one was seen or encountered during the FAS field investigation.

During the completion of the Pine Island Multifamily survey, horizontal control was maintained through the use of a handheld Suunto KB-14 compass and 50m fiberglass surveyor's tapes. In addition, GPS technology was used in order to enhance locational accuracy for the project. Moreover, subsurface shovel tests were standard 50x50 cm units excavated to a terminal depth of one meter (100 cm) when possible, however, it should be noted that all tests were terminated at shallower depths due to a spodic soil horizon or hardpan that was reached or where the soil was hydric, saturated, or contained standing water.

It should be noted, however, that no attempt was made to test the area of the tract that contained as much as three meters of organic fill materials that resulted from the deposition of past and/or recent hurricane debris. Shown in Figure 3, this debris field covered a large portion of the uplands of the tract. In addition, they occurred in Imokolee fine sands, a poorly drained variety.

During field operations, all excavated soil was screened through 1/4" (6.35 millimeter) hardware mesh mounted on portable hand-held screens. Subsequent to excavation, all soil was backfilled into each test, and all shovel tests were marked with surveyor's flagging documenting the transect and test number. Moreover, all pertinent data (shovel test, transect number, location, local environmental conditions, excavators' initials, etc.) were recorded on individual standardized FAS shovel test forms. This information was later used to generate archeological field maps showing the project's location, as well as that of each shovel test completed for the project.



**Figure 9. Subsurface Shovel Testing in the Northern Portion of the Pine Island Multifamily Tract, view to west.**



**Figure 10. Shovel Testing in Immokolee Fine Sand, a Poorly Drained Variety on the APE, note Munsell 10YR2/1 soils.**



### **Historic Structure Survey Methods**

Historical methods included the completion of background research (federal, state and local), as well as an examination of the entire survey tract in order to identify the presence of standing historic structures. At the federal level, examination of the 1995 edition of the *National Register of Historic Places* revealed that no NR-listed properties occurred on or near the project area. Supplemental examination of The Department of the Interior's website for recently listed NR properties (post 1995) also supported this finding. During background research, examination of the 1918 Palm Valley and the 1952 Durbin USGS topographic maps showed no structures on what is now the Pine Island Multifamily parcel. Moreover, the examination of historic period aerial photographs from as late as 1942, 1960, and 1980 yielded similar results.

### **Laboratory Methodology**

Following the completion of fieldwork, all field notes, shovel test forms, maps, and aerial photographs were transported to the FAS laboratory in Jacksonville in order to complete the project's analysis phase. Data pertaining to the Pine Island Multifamily project were entered into a project-specific computer database and all shovel test locations were recorded on archeological field maps generated using the ESRI ArcGIS ArcMap program. While standard archeological analysis protocols were in place to deal with prehistoric and historic period cultural materials, the lack of findings of such items precluded the need to implement any level of artifact analysis.

Report preparation was the final aspect of the project and consisted of a review of background research and survey field data, and incorporation of this information into the report. This report was authored by Robert E. Johnson with the assistance of Rob Lightfoot, who was responsible for production of several of the maps included in the report. Backup copies of all electronic files were routinely created in the event of catastrophic loss. At present, all project materials are being temporarily curated at FAS pending completion of all aspects of the project upon which the materials associated with this study will be transferred to a the client or a permanent curation facility.

## RESULTS OF SURVEY

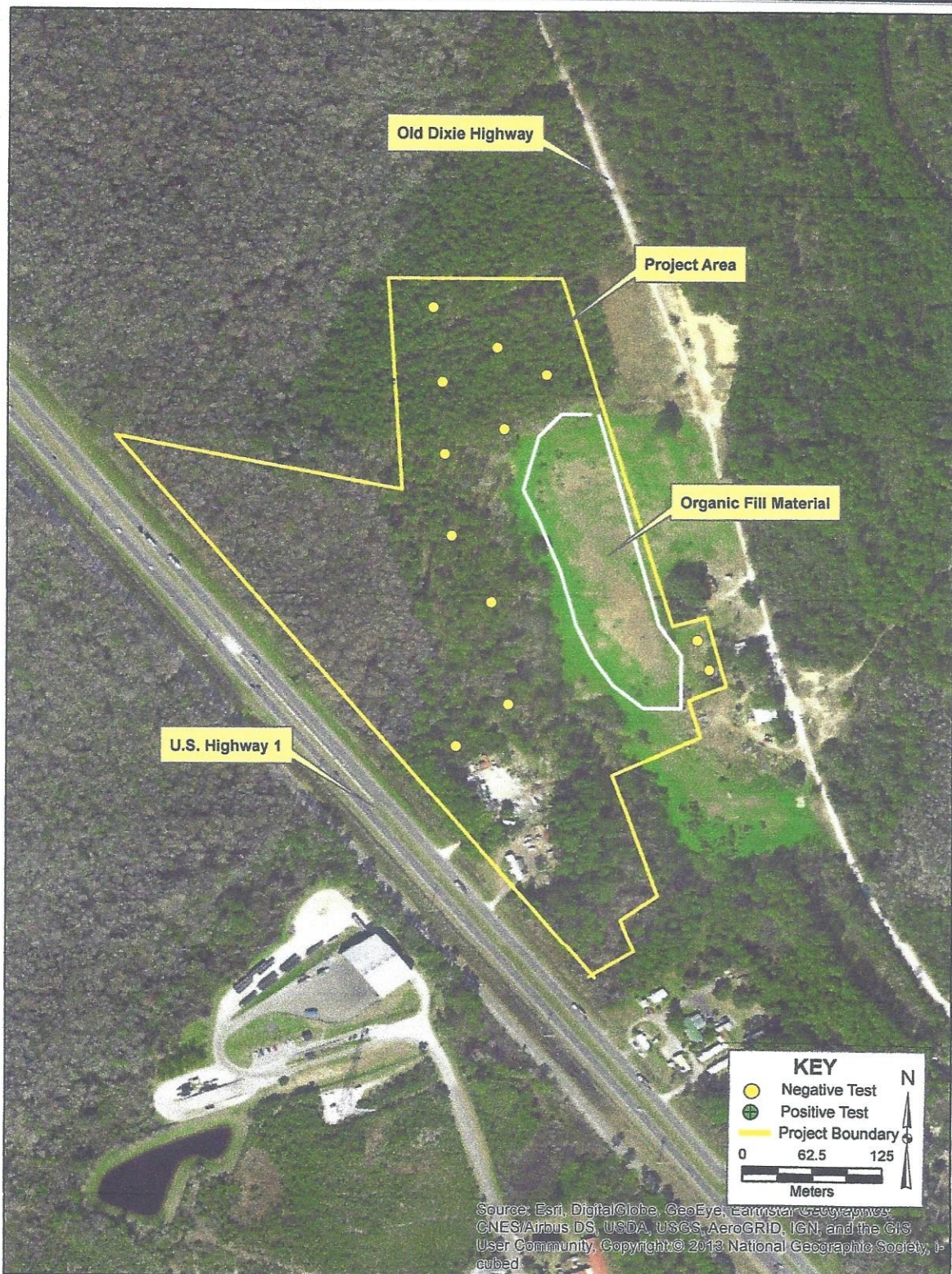
### Survey Results

Fieldwork for the Pine Island Multifamily project tract was conducted during a one-day period in March of 2023 and was oriented toward the completion of an intensive Phase I-level CRAS of the project's APE. This study resulted in the excavation of 12 shovel tests, none of which yielded cultural materials (Figure 11). This procedure resulted in a shovel test sampling ratio of one test per 1.72 acres of the parcel's total 20.67 acres. However, if using the 3.56 acre uplands only number, this survey implemented some 3.37 tests per acre. For the most part, this figure represents a somewhat high testing strategy for a medium to low probability survey area, but was implemented in order to test all available upland areas of the APE.

For the most part, the soil stratigraphy varied little across that portion of the APE subjected to subsurface testing. Within this zone, the dominant soil variety was USDA Type 7 (Immokolee fine sand), a poorly drained variety. The subsurface conditions were generally consistent across this soil type which contained some 43.3% of soil on the APE. In all cases, these soils were damp to somewhat wet in nature and became wetter as the tests units reached terminal levels. Moreover, they exhibited similar stratigraphic components with Zone A ranging from 0 - 40cmbs and consisting of Munsel 10YR2/1 black fine sands. Zone B ranged from 35-40cmbs to 65-70cmbs and consisted of Munsel 10YR7/1 light gray sands. Most of the test units contained only two strata while a few, especially those in the densely wooded area of the northeastern portion of the tract containing a third stratigraphic layer. Those units containing Zone C ranged from 60 - 75-80 cmbs and contained Munsel 10YR7/4 very pale brown sands. It appears that these areas were in a possible transition zone to the Orsino fine sands (a moderately well drained variety) that yielded archeological sites on the nearby Nocatee development parcel immediately east of the Pine Island Multifamily project area.

In addition to subsurface shovel testing, a significant portion of the APE was subjected to general and intensive ground surface reconnaissance. These procedures were hampered by the total lack of surface exposure. This procedure is often successful in locating aboriginal and historic archeological sites with a surface expression, or the presence of a standing (or ruins thereof) structure. Also, where possible, close examination of the wetland areas were also examined for the presence of prior historic period earthworks such as dams, canals, or spillways, but none were noted.

Based upon survey findings, it is the opinion of FAS that the Pine Island Multifamily tract was not occupied by aboriginal populations during Florida's prehistoric past. Moreover, as the tract contained no standing structures, or the remains thereof, it appears that the parcel was never developed as a homestead or other residential occupation during Florida's early to late historic period. Also, as previously indicated, there is no historical evidence to suggest that the Charles Grant contained in Section 41 of the parcel, was ever developed by its grantee. As such, no archeological sites or historic properties were documented or recorded during the FAS completion of the Pine Island Multifamily survey.



**Figure 11. GIS Aerial Photo Showing the Location of the FAS Shovel Test Plan Implemented on the Pine Island Project Area.**



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## **Discussion**

The CRAS of the Pine Island Multifamily tract resulted in the excavation of 12 subsurface shovel tests, none of which encountered cultural materials. Moreover, as the tract contained no standing structures, no such resources were documented or evaluated during the survey. Approached from a broader perspective, the information of the tract's lack of prehistoric deposits will enhance the regional database concerning Native American lifeways and settlement patterns, all be it on a limited basis, in the vicinity. While a number of Native American campsites and other small occupations were shown to occur immediately east of the Pine Island tract, all at or above the 40 AMSL contour, this feature, nor the moderately well drained soil characteristics, are noticeably absent on the Pine Island tract. In addition, and as indicated, such topographic elevations on the current APE were below this topographic elevation (40 feet AMSL) and may explain, to some extent, the lack of aboriginal occupation on the survey parcel. In addition, the sites shown nearby on the Nocatee development tract as shown in Figure 8 all occur on a different soil type than present on the current tract. They occur on moderately well drained soils (Orsino fine sand) as opposed to the poorly drained soils (Immokolee fine sands) that are present on the Pine Island tract. The environmental data shown herein should be considered an important site locational criteria in planning future archeological surveys in areas similar to that of the current investigation. In addition to these findings, it is hoped that the data generated by this project can also be used to aid in the formulation of regional and project-specific site archeological predictive models in nearby portions of St. Johns County. Such data may also aid in future archeological investigations in the Pine Island Multifamily region.

## SUMMARY AND RECOMMENDATIONS

### Summary

During a one field-day period on March 30, 2023, Florida Archeological Services, Inc. (FAS) of Jacksonville, conducted an intensive Cultural Resources Assessment Survey (CRAS) of the proposed 20.67 +/- acre Pine Island Multifamily project area located in northern St. Johns County, Florida. This survey, which was conducted in accordance with Chapters 267 and 373 *Florida Statutes* and Florida's Coastal Management Program, was designed to locate, define and evaluate all cultural resources on the project's APE. At the local level, this work is also intended to comply with Section 3.01.00 of the St. Johns County Land Development Code (LDC). As is standard for such investigations, this study was completed as a means by which to assess the proposed development project's potential to affect historic properties listed or eligible for listing in the *National Register of Historic Places*, or otherwise of archeological, historical, or architectural significance.

Archeological and historical research completed for the Pine Island Multifamily project was designed to comply with current state and local historic preservation mandates, as well as the *Historic Preservation Compliance Review Program Manual*, subsequently known as DHR's *Cultural Resource Management Standards and Operations Manual, Module 3, Guidelines for Use by Historic Preservation Professionals, Section 2.0*, which is maintained by the Florida Division of Historical Resources at the office of the SHPO in Tallahassee. Moreover, the resulting survey report was designed to comply with Chapter 1A-46 *Florida Administrative Code* (FAC).

The Pine Island Multifamily archeological survey resulted in the excavation of 12 subsurface shovel tests, or approximately 3.4 tests per acre of the tract's upland areas. It should be noted that while the majority of the tract ranked as a Low Probability Zone for containing regionally significant archeological resources, the tract was sampled using both medium probability standards (i.e. 50-75 meter intervals), as well as high probability standards (i.e. 25m intervals), in order to assure adequate coverage of the parcel. In addition, other archeological procedures such as intensive ground surface reconnaissance, judgmental testing, etc. were also used during this investigation. In addition to these procedures, an examination of the tract's wetlands and their margins revealed no evidence of dikes, dams, spillways or other manmade facilities similar to those that have been found in some areas of St. Johns County. It should also be noted that due to fact that those areas subjected to subsurface testing were totally devoid of any ground surface exposure, subsurface testing intervals were reduced to account for this fact.

Had any archeological or historic sites been documented, they would have been evaluated in terms of *National Register Criteria* (36CFR60.4). However, as the Pine Island Multifamily tract survey project failed to yield evidence of past Native American or other human occupation, no such evaluation occurred in association with the Pine Island project. Based upon these findings, a CRM evaluation was generated in accordance with 36CFR800, *Procedures for the Protection and Enhancement of Historic and Cultural Properties*. The resulting recommendation is presented below.

While no cultural resources were documented on the Pine Island Multifamily tract, the presence of two linear resources immediately adjacent to the tract's western boundary require a statement relative to potential impact or effect. As such, when taking into consideration the physical or aesthetic effect to US Highway 1 (Site 8SJ5271, a non-eligible cultural resource), a finding of No Effect is presented. In addition, when assessing similar effects to the Florida East Coast Railroad (8SJ5272-a NR-eligible resource), a similar No Effect finding was also determined. In view of these findings, completion of the Pine Island Multifamily investigation has deemed that the project will cause No Effect upon cultural resources considered eligible or potentially eligible for listing in the *National Register of Historic Places*, or otherwise of archeological, historical, or architectural value.

### **Recommendations**

Based upon the results of this study, it is the opinion of FAS that the Pine Island Multifamily development project tract does not contain significant or potentially significant aboriginal deposits related to Florida's prehistoric past. Moreover, the Pine Island Multifamily tract does not contain any historic structures, or remains thereof. In view of this finding, it is the opinion of Florida Archeological Services that completion of the Pine Island Multifamily development project will have No Effect upon sites listed in or eligible for listing in the *National Register of Historic Places*, or otherwise of local, regional, or national significance.

The Pine Island Multifamily survey resulted in the thorough examination of the project's Area of Potential Effect. However, in view of the fact that no cultural resources (archeological or historic sites) were identified, assessed, or evaluated during the project, no further work is recommended for this project pending completion of local (St. Johns County) and state (DHR) Historic Preservation Compliance Review processes. Moreover, it is the opinion of Florida Archeological Services that this development project will have no effect on historic properties listed or eligible for listing in the *National Register of Historic Places*, or otherwise of archeological, historical, or architectural value. Therefore, it is the recommendation of FAS that the Pine Island Multifamily project be allowed to proceed as planned following completion of the pertinent compliance/review procedures. No further historic preservation activities, except those stated, are recommended for this project.

On a final note, the project's sponsor has been notified that in the event that an unexpected discovery of significant archeological or historic materials occurs during the construction phase of the project, that work activities in the immediate vicinity of the find are to be suspended pending notification of the St. Johns County Historic Resources Coordinator, and/or the Florida Division of Historical Resources in Tallahassee (1-800-847-7278). Should such discovery be made, the County and DHR will advise the land owner of the Cultural Resource Management strategies necessary at the time of discovery. Moreover, our client has also been made aware that this finding also applies to unmarked human remains in accordance with Chapter 872 *Florida Statutes*. The formal notification procedures are included in Appendix C, Client Notification Form. And finally, the project's DHR Survey Log is presented in Appendix D.

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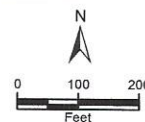
**Appendix A:**

ECT Wetlands Survey of the Pine Island Multifamily Project Area  
(courtesy of Steve Florey)



**Legend**

- Project Boundary
- Upland
- Wetland



**Figure 3  
Wetlands**  
South Nocatee  
St Johns County, Florida



Sources: FDOT Imagery, 2021; ECT, 2022.

**Appendix B:**

Custom Soil Report  
Pine Island Multifamily Project  
(Hart Resources US 1 Tract)



United States  
Department of  
Agriculture

NRCS

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

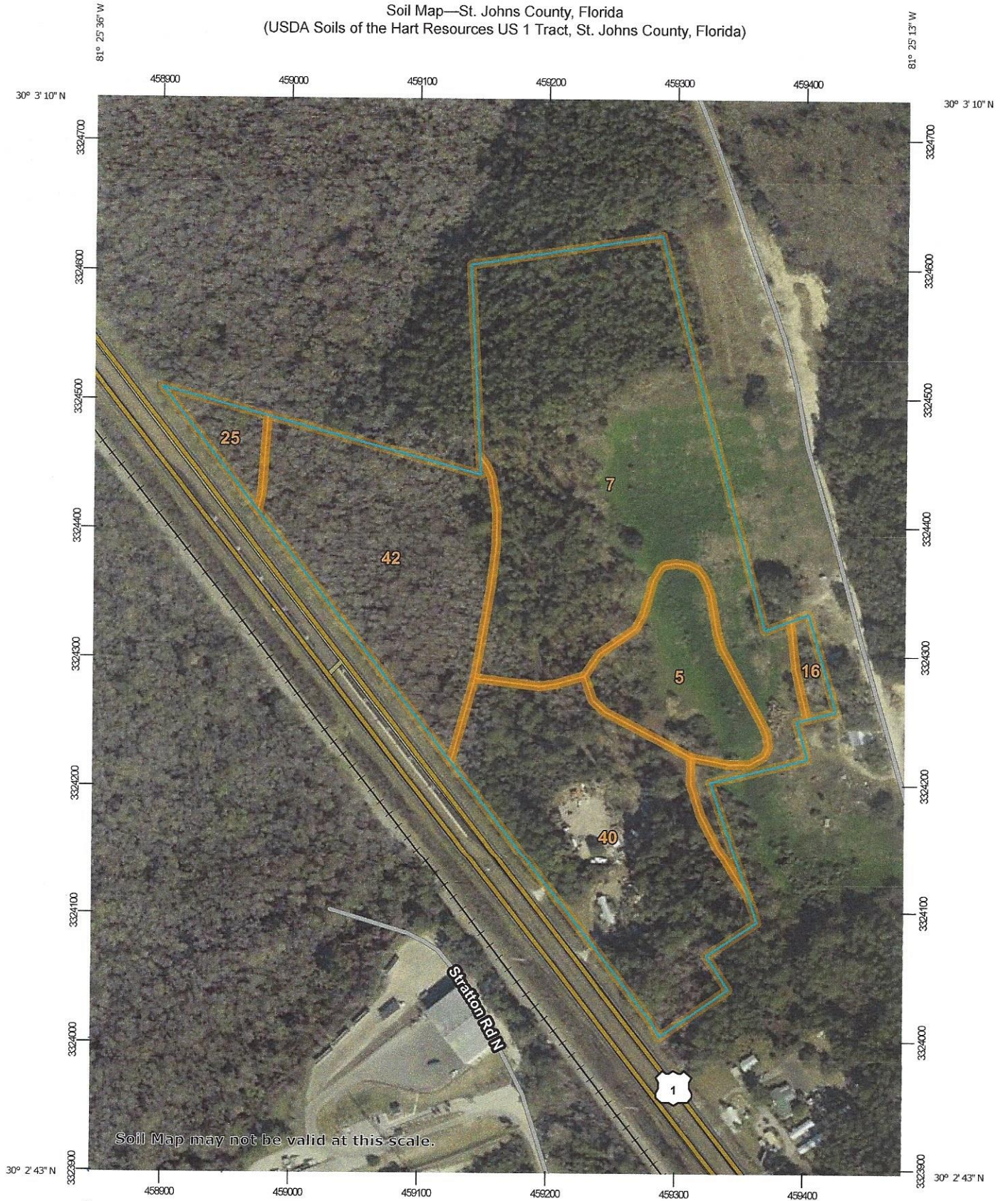
# Custom Soil Resource Report for St. Johns County, Florida

## Soils of the Hart Resources US 1 Tract, St. Johns County, Florida

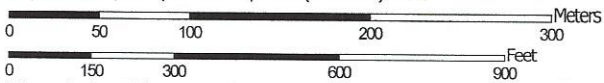


March 20, 2023

Soil Map—St. Johns County, Florida  
 (USDA Soils of the Hart Resources US 1 Tract, St. Johns County, Florida)



Map Scale: 1:4,070 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84



Natural Resources  
 Conservation Service

Web Soil Survey  
 National Cooperative Soil Survey

3/20/2023  
 Page 1 of 3

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5	St. Johns fine sand, depressional	3.1	8.9%
7	Immokalee fine sand	15.1	43.3%
16	Orsino fine sand, 0 to 5 percent slopes	0.4	1.1%
25	Parkwood fine sandy loam, frequently flooded	0.8	2.3%
40	Pottsburg fine sand	8.6	24.6%
42	Bluff sandy clay loam, frequently flooded	6.9	19.9%
<b>Totals for Area of Interest</b>		<b>34.9</b>	<b>100.0%</b>



**Appendix C:**

Client Notification Form

## **CLIENT NOTIFICATION FORM:**

### **UNANTICIPATED DISCOVERY OF ARCHEOLOGICAL OR HISTORIC SITES UNANTICIPATED DISCOVERY OF UNMARKED HUMAN REMAINS**

The following information serves as Client Notification procedures necessary in the event that the unanticipated discovery of archeological or historic sites or unmarked human remains occurs on the development project. The following steps and procedures should be closely followed:

#### **Archeological or Historic Sites**

1. All work in immediate vicinity of find are to be suspended pending notification of the Florida Division of Historical Resources at which time Cultural Resource Management recommendations will be provided based upon the potential significance of such finds.
2. The Client must provide a Statement of Significance from a qualified Professional Archeologist to the DHR regarding the find in order to assist with the evaluation and the preparation of CRM recommendations.
3. In the event that such discovery is deemed Significant, Client must take necessary steps to mitigate the discovery under direction from DHR in full compliance with the procedures contained in 36CFR800, *Procedures for the Protection and Enhancement of Historic and Cultural Properties*.

#### **Unmarked Human Remains**

1. In the event that UNMARKED HUMAN REMAINS are discovered during any construction or land modifications on a given project, the stipulations contained in Chapter 872.05 (*Offenses Concerning Dead Bodies and Graves*) must be carefully followed in order to insure protection from adverse effect or further disturbance pending notification and receipt of direction from the District Medical Examiner (for remains less than 75-years of age), or the State Archaeologist at the Bureau of Archaeological Research, Division of Historical Resources (for Native American or remains considered over 75-years of age). Failure to comply with this statute may be punishable under felony charges.
2. The Client must provide a Statement of Significance or Plan of Action from a qualified Professional Archeologist to the District Medical Examiner, State Archaeologist and DHR regarding the find in order to assist with the evaluation and the preparation of CRM recommendations. Such recommendations must be implemented to assure compliance with Chapter 872 *Florida Statutes*.

**DHR Contact Information:** Ms. Alissa Lotane, SHPO, or Dr. Mary Glowacki, State Archaeologist  
Florida Division of Historical Resources  
R.A. Gray Building  
550 S. Bronough Street  
Tallahassee, FL 32399-0250  
850-245-6319 or 1-800-847-7278

**Appendix D:**

DHR Survey Log

Ent D (FMSF only) \_\_\_\_\_



# Survey Log Sheet

Florida Master Site File  
Version 5.0 3/19

Survey # (FMSF only) \_\_\_\_\_

Consult *Guide to the Survey Log Sheet* for detailed instructions.

## Manuscript Information

### Survey Project (name and project phase)

A Cultural Resource Assessment Survey of the Pine Island Multifamily Tract, St. Johns County, Florida

### Report Title (exactly as on title page)

same

### Report Authors (as on title page)

1. Robert E. Johnson

3. \_\_\_\_\_

2. \_\_\_\_\_

4. \_\_\_\_\_

Publication Year 2023

Number of Pages in Report (do not include site forms) 53

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)

Supervisors of Fieldwork (even if same as author) Names R.E. Johnson

Affiliation of Fieldworkers: Organization Robert Johnson - Florida Archeological Services City Jacksonville

Key Words/Phrases (Don't use county name, or common words like *archaeology, structure, survey, architecture, etc.*)

- |                                |                       |                              |          |
|--------------------------------|-----------------------|------------------------------|----------|
| 1. <u>poorly drained soils</u> | 3. <u>US 1</u>        | 5. <u>extensive wetlands</u> | 7. _____ |
| 2. <u>hurricane debris</u>     | 4. <u>Pine Island</u> | 6. _____                     | 8. _____ |

### Survey Sponsors (corporation, government unit, organization, or person funding fieldwork)

Name Hart Resources, LLC

Organization \_\_\_\_\_

Address/Phone/E-mail 8051 Tara Lane, Jacksonville, Fl 32216

Recorder of Log Sheet R.E. Johnson

Date Log Sheet Completed 4-11-2023

Is this survey or project a continuation of a previous project?  No  Yes: Previous survey #s (FMSF only) \_\_\_\_\_

## Project Area Mapping

Counties (select every county in which field survey was done; attach additional sheet if necessary)

- |                     |          |          |
|---------------------|----------|----------|
| 1. <u>St. Johns</u> | 3. _____ | 5. _____ |
| 2. _____            | 4. _____ | 6. _____ |

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)

- |                       |                  |               |            |
|-----------------------|------------------|---------------|------------|
| 1. Name <u>DURBIN</u> | Year <u>1992</u> | 4. Name _____ | Year _____ |
| 2. Name _____         | Year _____       | 5. Name _____ | Year _____ |
| 3. Name _____         | Year _____       | 6. Name _____ | Year _____ |

## Field Dates and Project Area Description

Fieldwork Dates: Start 3-30-2023 End 3-30-2023 Total Area Surveyed (fill in one) \_\_\_\_\_ hectares 20.67 acres

Number of Distinct Tracts or Areas Surveyed 1

If Corridor (fill in one for each) Width: \_\_\_\_\_ meters \_\_\_\_\_ feet Length: \_\_\_\_\_ kilometers \_\_\_\_\_ miles

Research and Field Methods

Types of Survey (select all that apply): archaeological architectural historical/archival underwater
damage assessment monitoring report other(describe): \_\_\_\_\_

Scope/Intensity/Procedures

standard Phase I CRAS

Preliminary Methods (select as many as apply to the project as a whole)

Florida Archives (Gray Building) library research- local public local property or tax records other historic maps LIDAR
Florida Photo Archives (Gray Building) library-special collection newspaper files soils maps or data other remote sensing
Site File property search Public Lands Survey (maps at DEP) literature search windshield survey
Site File survey search local informant(s) Sanborn Insurance maps aerial photography
other (describe): \_\_\_\_\_

Archaeological Methods (select as many as apply to the project as a whole)

Check here if NO archaeological methods were used.
surface collection, controlled shovel test-other screen size block excavation (at least 2x2 m) metal detector
surface collection, uncontrolled water screen soil resistivity other remote sensing
shovel test-1/4" screen posthole tests magnetometer pedestrian survey
shovel test-1/8" screen auger tests side scan sonar unknown
shovel test 1/16" screen coring ground penetrating radar (GPR)
shovel test-unscreened test excavation (at least 1x2 m) LIDAR
other (describe): \_\_\_\_\_

Historical/Architectural Methods (select as many as apply to the project as a whole)

Check here if NO historical/architectural methods were used.
building permits demolition permits neighbor interview subdivision maps
commercial permits windshield survey occupant interview tax records
interior documentation local property records occupation permits unknown
other (describe): \_\_\_\_\_

Survey Results

Resource Significance Evaluated? Yes No

Count of Previously Recorded Resources 0 Count of Newly Recorded Resources 0

List Previously Recorded Site ID#s with Site File Forms Completed (attach additional pages if necessary)

[Empty box for listing previously recorded site IDs]

List Newly Recorded Site ID#s (attach additional pages if necessary)

[Empty box for listing newly recorded site IDs]

Site Forms Used: Site File Paper Forms Site File PDF Forms

REQUIRED: Attach Map of Survey or Project Area Boundary

SHPO USE ONLY SHPO USE ONLY SHPO USE ONLY
Origin of Report: 872 Public Lands UW 1A32 # \_\_\_\_\_ Academic Contract Avocational
Grant Project # \_\_\_\_\_ Compliance Review: CRAT # \_\_\_\_\_
Type of Document: Archaeological Survey Historical/Architectural Survey Marine Survey Cell Tower CRAS Monitoring Report
Overview Excavation Report Multi-Site Excavation Report Structure Detailed Report Library, Hist. or Archival Doc
Desktop Analysis MPS MRA TG Other: \_\_\_\_\_
Document Destination: Plottable Projects Plotability: \_\_\_\_\_

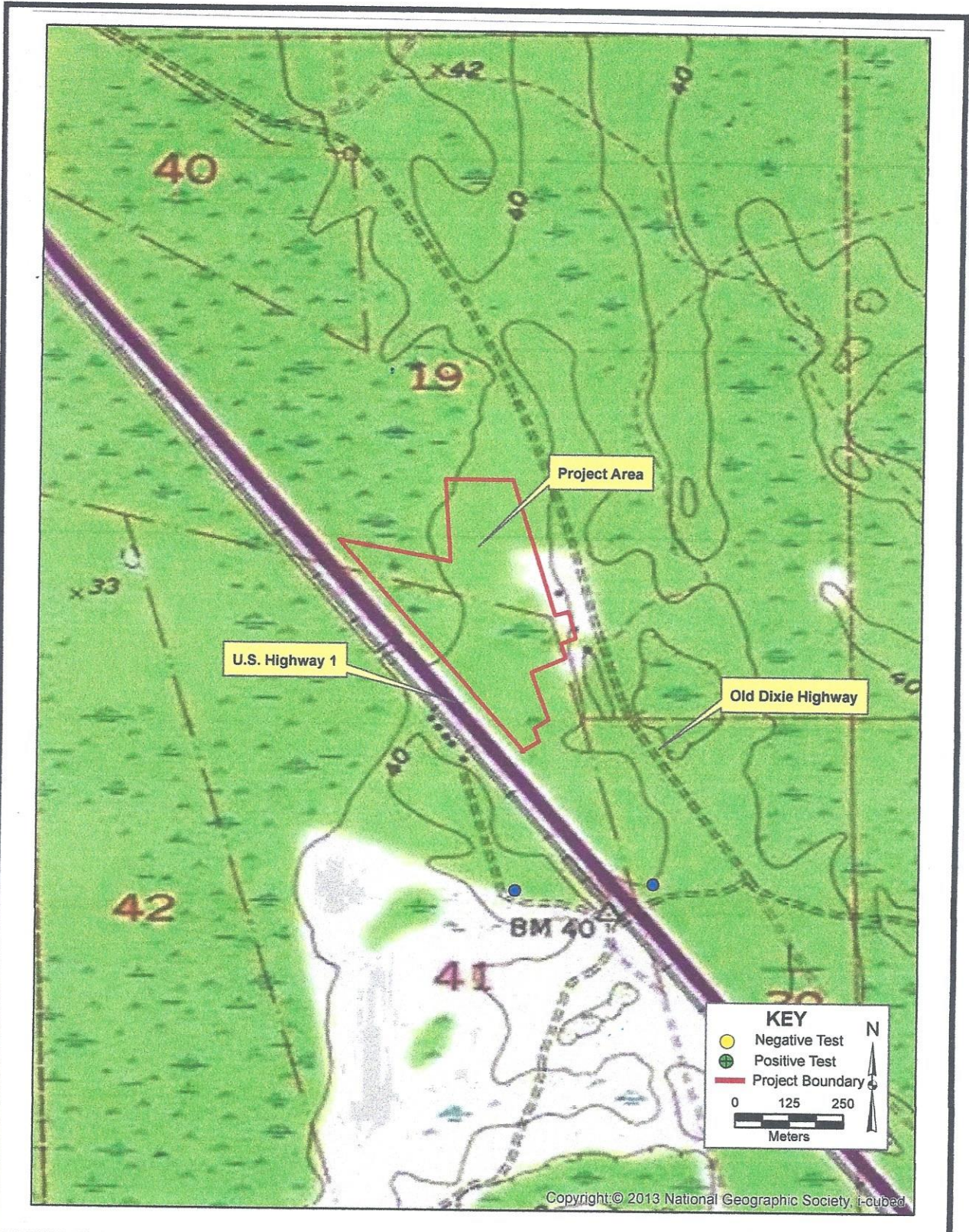
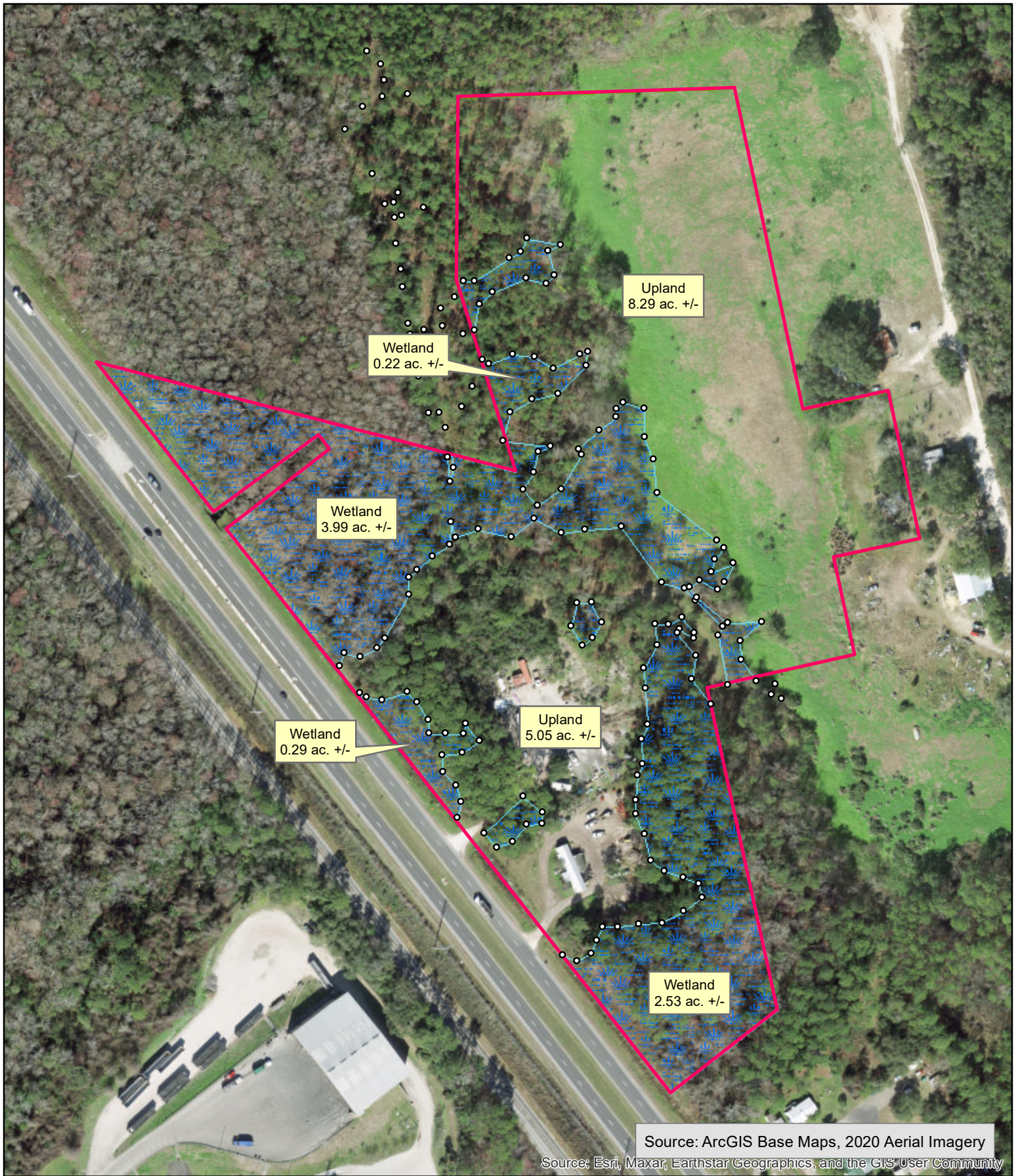


Figure 1. Portion of the 1992 Durbin, Fla. USGS Topographic Map Showing the Location of the Pine Island Multifamily Project Area, St. Johns County, Florida.



Florida  
Archeological  
Services, Inc.



**PEACOCK CONSULTING GROUP, LLC**



# Old Dixie Highway

St. Johns County

*Recent Aerial and Wetland Limits*

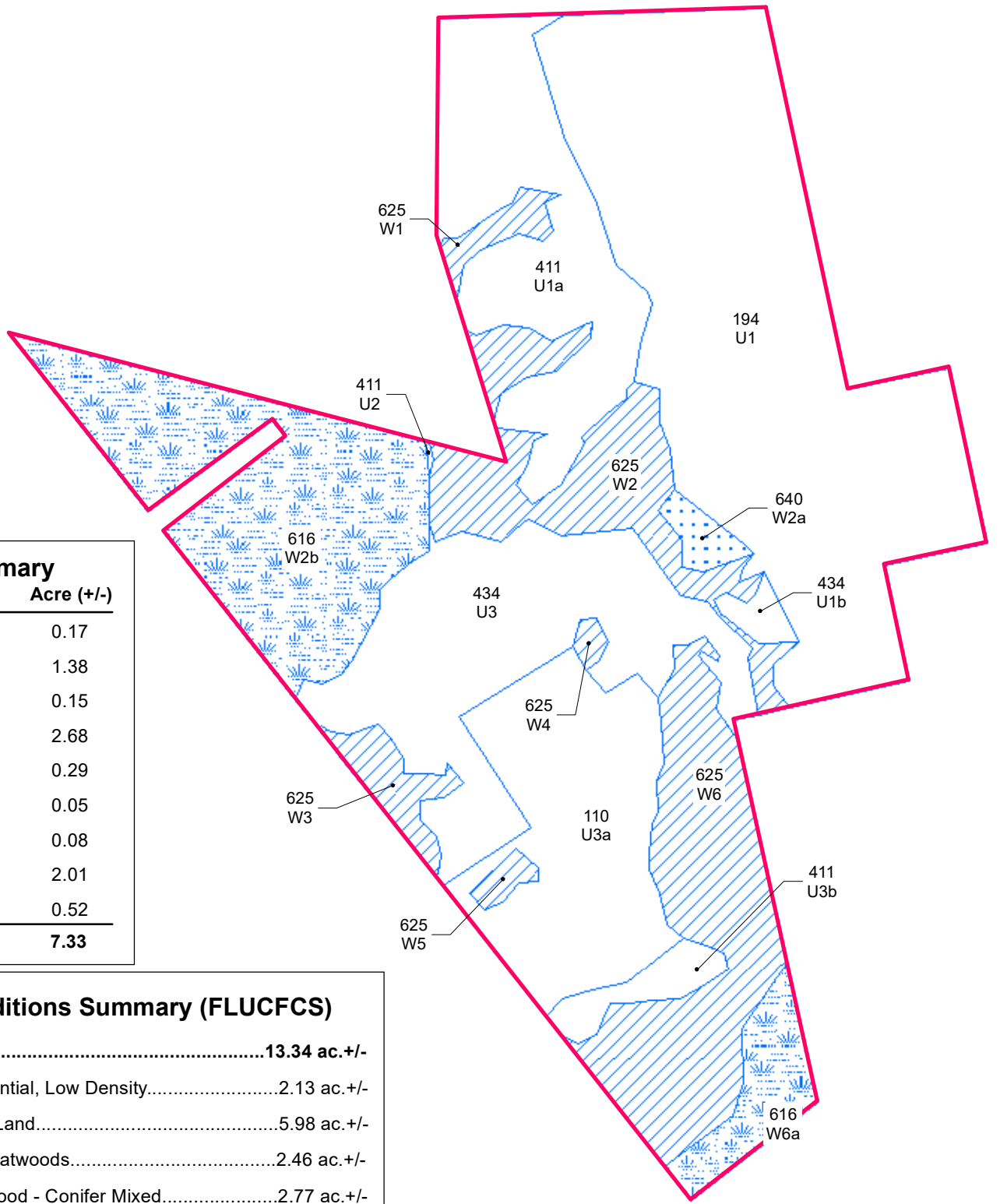


FIGURE 4

3/6/2023

Scale: 1 in = 200 ft





### Wetland Summary

Area	FLUCFCS	Acre (+/-)
W1	625	0.17
W2	625	1.38
W2a	640	0.15
W2b	616	2.68
W3	625	0.29
W4	625	0.05
W5	625	0.08
W6	625	2.01
W6a	616	0.52
<b>Total</b>		<b>7.33</b>

### Existing Conditions Summary (FLUCFCS)

<b>UPLAND</b> .....	<b>13.34 ac. +/-</b>
110: Residential, Low Density.....	2.13 ac. +/-
194: Open Land.....	5.98 ac. +/-
411: Pine Flatwoods.....	2.46 ac. +/-
434: Hardwood - Conifer Mixed.....	2.77 ac. +/-
<b>WETLAND</b> .....	<b>7.33 ac. +/-</b>
616: Inland Ponds and Sloughs.....	3.19 ac. +/-
625: Hydric Pine Flatwoods.....	3.99 ac. +/-
640: Vegetated Non-Forested Wetlands.....	0.15 ac. +/-

PEACOCK CONSULTING GROUP, LLC



Old Dixie Highway

St. Johns County

Existing Conditions Map



FIGURE 5

3/6/2023

Scale: 1 in = 200 ft





## Memorandum

**To:** St. Johns County

**From:** Jack Hulsberg, P.E.  
Kimley-Horn and Associates, Inc.

**Date:** January 3, 2024

**Subject:** US 1 Mixed Use Site Trip Generation Analysis

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Per conversations with County Growth Management staff, a trip generation comparison was conducted between the trips associated with the existing platted lots on site and the proposed apartments. On the property in which the residential apartment development is proposed, there are 177 existing full platted lots that could be developed with one single-family residence on each lot. The proposed residential development includes 202 apartment units (4 stories). The following table shows a trip generation comparison between the proposed 202 apartments and 177 single-family dwelling units. As shown in the table, the proposed apartment development generates less trips than 177 single-family units.

A trip generation table was also prepared for the potential non-residential development. There are currently no plans for the non-residential development, but the applicant believes that the most intense (highest trip-generating) non-residential development could include up to 50,000 square feet of general retail. A trip generation table has been prepared for 50,000 square feet of retail use. The trip generation for the non-residential use is informational, as the non-residential use is exempt from concurrency. There are existing platted lots on the non-residential portion of the project as well, but these were ignored in the trip calculations per County recommendation with the non-residential development being exempt.



## Trip Generation Comparison of Existing Platted Lots to Proposed Residential Development

LAND USE	INTENSITY	DAILY	AM PEAK HOUR			PM PEAK HOUR		
		TOTAL	TOTAL	IN	OUT	TOTAL	IN	OUT
<b>Existing Platted Lots</b>								
Single-Family Detached Housing	177 units	1706	125	33	92	170	107	63
<b>Proposed Development</b>								
Multifamily Housing (Mid-Rise)	202 units	917	77	18	59	79	48	31
<b>Difference (Proposed Minus Existing)</b>		<b>-789</b>	<b>-48</b>	<b>-15</b>	<b>-33</b>	<b>-91</b>	<b>-59</b>	<b>-32</b>
Trip Generation Rates: (From ITE Trip Generation Manual, 11th Edition)								
<b>Daily</b>								
Single-Family Detached Housing		[ITE 210]	$\ln(T) = 0.92 \ln(X) + 2.68$					
Multifamily Housing (Mid-Rise)		[ITE 221]	$T = 4.77(X) - 46.46$					
<b>AM Peak Hour</b>								
Single-Family Detached Housing		[ITE 210]	$\ln(T) = 0.91 \ln(X) + 0.12$ (26% in, 74% out)					
Multifamily Housing (Mid-Rise)		[ITE 221]	$T = 0.44(X) - 11.61$ (23% in, 77% out)					
<b>PM Peak Hour</b>								
Single-Family Detached Housing		[ITE 210]	$\ln(T) = 0.94 \ln(X) + 0.27$ (63% in, 37% out)					
Multifamily Housing (Mid-Rise)		[ITE 221]	$T = 0.39(X) + 0.34$ (61% in, 39% out)					

## Trip Generation for Proposed Non-Residential Development (Exempt from Concurrency)

LAND USE	INTENSITY	DAILY	AM PEAK HOUR			PM PEAK HOUR		
		TOTAL	TOTAL	IN	OUT	TOTAL	IN	OUT
<b>Potential Development Gross Trips</b>								
Shopping Plaza (40-150k)	50 ksf	3,376	87	54	33	260	127	133
<b>Pass-by Trips</b>								
Shopping Plaza (40-150k)	40%	1,350	35	22	13	104	51	53
<b>New Trips (Gross Trips Minus Pass-by)</b>		<b>2,026</b>	<b>52</b>	<b>32</b>	<b>20</b>	<b>156</b>	<b>76</b>	<b>80</b>
Trip Generation Rates: (From ITE Trip Generation Manual, 11th Edition)								
<b>Daily</b>								
Shopping Plaza (40-150k)		[ITE 821]	$T = 67.52(X)$					
<b>AM Peak Hour</b>								
Shopping Plaza (40-150k)		[ITE 821]	$T = 1.73(X)$ (62% in, 38% out)					
<b>PM Peak Hour</b>								
Shopping Plaza (40-150k)		[ITE 821]	$T = 5.19(X)$ (49% in, 51% out)					



Florida Department of Transportation

RON DESANTIS GOVERNOR

3600 DOT Road St. Augustine, FL 32084

KEVIN THIBAUT SECRETARY

St. Augustine Maintenance Pre-Application Meeting Notes

Table with project details: Date: 3/15/2023, Project Name: SR 5 - 9880 US 1 @ Pine Is Multi Family, SR: 5, Section: 78020, Parcel #: 0708300001

Pre-application findings are not binding on the Department or the permittee. An application must be submitted and approved prior to construction.

Thank you for meeting with the Department to discuss your project, 9880 US 1 @ Pine Is Multi Family, located on SR 5.

Below is a summary of our discussion:

Access/Driveway:

- List of 18 bullet points detailing access and driveway requirements, including design speed, parcel count, wetland impacts, traffic study, and median modifications.

Drainage:

- List of 6 bullet points detailing drainage requirements, including existing easements, calculations, and potential DBI requirements.

- Full plans, drainage report & Calcs, etc. required.

Utility:

- N/A

Permits are submitted through **One Stop Permitting (OSP)** at <https://osp.fdot.gov>.

Access/driveway:

The department has developed standards, guidelines, policies and recommended practices for corridor access management and site access planning. These standards are provided in the Florida Administrative Code Rule (FAC) Chapters: 14-94 (LOS standards), 14-96 (Driveway permits) and 14-97 (Access Management standards).

The Permit Application is generated from the information entered in OSP. It is not necessary to complete and upload a paper application. This fee is due at the time of application and is non-refundable, as required by Section 335.183, Florida Statutes. The fee may be paid online by credit card. The fee may also be paid to the local maintenance unit by cashier's check, certified check, personal or business check, cash, or money order, and shall be made payable to: The State of Florida Department of Transportation. If you elect to make payment by a method other than credit card, the application is submitted in saved, pending payment status and will not be considered "submitted" until the fee is received and recorded by the local maintenance unit. If the fee is not received and recorded within 30 days, the permit application will automatically void.

The applicant must be the property owner at the time of application, produce a contract to purchase the property, or have a letter of authorization from the property owner designating the applicant as the authorized representative.

Plans should include the following:

- Key sheet with current area site map and legend.
- Neighboring connection plan inclusive of the location and type of connections on both sides of the roadway, all median openings in area, closest intersecting side streets/intersections and traffic signals within the following distances from the proposed site property lines:
  - 660 ft. for roadways with a posted speed of 45 mph or less
  - 1320 ft. for roadways with a posted speed of greater than 45 mph.

Site plan must include the following:

- Physical features (existing and proposed);
- Onsite parking with traffic circulation plan;
- All right-of-way and property lines clearly defined; including any easements.
- Any existing and/or proposed joint access or cross-access connection features;

Access connection location and design information must include the following:

- Demolition plan of existing features located in the department's right-of-way being removed.
- Connection Details:
  - Location
  - Width
  - Ingress/egress radii and angle of connection to the State Road.
  - Profile of connection from edge of pavement to right-of-way line depicting elevations, lengths and slope of connection in its entirety. A maximum ADA slope of 2% must be maintained through crosswalk area of proposed connection(s).
- Design and cross-section (to the right-of-way line) of auxiliary lanes and pavement serving the proposed access connection. Include depiction of the required clear recovery zone based upon the design speed limit (posted speed may be used as default criteria for areas where the design speed is not published) and average daily traffic of the roadway.
- Location and type of traffic control devices proposed (if applicable including all design calculations for mast-arms and footers).

- Pavement marking and signage on a separate sheet or detail.
- Show posted speed limit and any roadway signs.
- Location and type of existing/proposed drainage features within the department's right-of-way (separate permit may be needed along with drainage design calculations);
- Median opening design and cross section for any new or modified median opening;
- Identify existing and proposed utilities (separate permit may be required for any new installations);
- Pavement material and design;
- A maintenance of traffic plan for all work being performed within the department's right-of-way.
- Horizontal and vertical curvature of abutting roadways (if necessary where severe topography or sight distances warrant).
- ADA design information for sidewalk facilities. Including the appropriate curb ramp number (as applicable) and including references to the standard index 304 and 310;
- In areas where new sidewalk is to be added to the right-of-way where none currently exists a section must be included in the plans that clearly depict the profile (elevations and distances) from the edge of roadway to the right-of-way line. The proposed sidewalk must meet all slope, drop-off and clear-zone requirements.
- All work performed within the department's right-of-way shall conform to the most current edition of the following publications:
  - Standard Specifications for Road and Bridge Construction (English).
  - FDOT Standards Index (English)
  - FDOT Plans Prep Manual
  - FDOT Flexible Pavement Design Manual for New Construction and Pavement Rehabilitation  
(Should a conflict arise between the details shown in the plans and the Department of Transportation Standards the Engineer/Applicant shall immediately confer with the department's engineer to resolve the discrepancy.)
- All traffic striping and markings are to be lead-free, non-solvent based thermoplastic.
- Removal of existing striping shall be accomplished using the "hydro-blast" method. If this process damages/scars pavement, then the pavement shall be milled and resurfaced per FDOT Standards.
- All directional arrows shall be placed as one segment.
- Alignment of proposed pavement markings shall match existing pavement markings at pavement marking limits of construction.
- All curb and gutter and sidewalk will be removed and replaced joint to joint.
- All broken/cracked driveways must be fully removed and replaced.
- All disturbed area with the department's right-of-way will be restored to original or better condition by grading and sodding the area disturbed (Bermuda in rural, centipede in utility strips).
- Burning of any material or debris is prohibited in FDOT right-of-way.
- All lanes must be opened for traffic during an evacuation notice of a hurricane or other catastrophic event and shall remain open for the duration of the evacuation or event.

For Category C, D, E, F, and G applications, or any application requesting or requiring a new traffic signal, new median opening, auxiliary lane, or modified median opening, a traffic impact study (TIS) will be required. Any TIS (except a cursory analysis, such as an indication of peak hour movements from the applicant's site) must be signed, dated, and sealed by a Professional Engineer registered in the State of Florida. It is highly encouraged prior to submitting any formal study to discuss the traffic methodology. The local maintenance office will facilitate this conversation with the Traffic Operations Office. The specific detail and content of the TIS will vary depending upon the existing and projected traffic volumes, highway capacity, levels of service, and safety concerns.

Any traffic software analysis (HCS, Synchro, CORSIM, etc.) that is submitted will require a letter signed and sealed by an engineer. The letter should state that the engineer has verified that the existing/base year model reflects the geometric/operational characteristics he has observed in the field. Also, the letter should state what default parameters were modified, why they were modified and the reason they were modified to the selected value. If no parameters were modified, the letter should state such.

Issues the Applicant should be prepared to discuss are as follows:

- Location of site
- Aerial photo showing the site
- Size of the development
- ITE Land use codes for the development
- Estimated numbers of trips according to the ITE Trip Generation Manual
- Estimated directional splits to and from the proposed site
- Location of nearest traffic signals upstream and downstream of site
- Location of nearest median openings upstream and downstream of site (also specify by type—i.e. full or directional)
- Location of nearest drives within 660' upstream and downstream of site
- Posted speed limit (and design speed of roadway if available)
- Present Access Classification of roadway
- Other pertinent info necessary to help identify TIS issues

A cost estimate will be required after plans are deemed acceptable. Cost estimates must be signed, sealed, and dated by a Professional Engineer at the time of submittal. Unit cost information should be obtained from the most up to date master pay item list using the Current 12 month Moving Area Averages.

<https://www.fdot.gov/programmanagement/estimates/historicalcostinformation/historicalcost.shtm>

Plan sheets should clearly identify and delineate all work within the right-of-way. Estimates should be in tabular form and organized by their corresponding subsections e.g. Pavement, Striping, Signalization, Signage, etc. Include as a minimum pay item number, description of work, unit of measure, estimated quantity, unit price, extended price of each work item, total sum of all work. Contingency, MOT, Mobilization, and other incidental costs not covered by existing pay items can be individually lump summed into a percentage of the overall cost (For example: XX% Contingency, XX%, Mobilization, XX% MOT, XX% Erosion Control).

Assurance of performance pursuant to Section 334.187, Florida Statutes, will be required if the permit requires extensive work within the right of way, such as auxiliary lanes, median modifications, relocation of structures, or traffic signals. Prior to the issuance of a permit, the applicant shall provide a security instrument (performance bond, letter of credit, or cash bond) in the estimated dollar amount of the improvements in the right of way. The Department shall be named as the beneficiary. The security instrument shall be provided to the Department before the permit is issued. The security instrument shall be valid for a sufficient time to cover the construction and inspection of the permitted work.

If your project requires a right of way donation, easement, exchange or other real estate transaction or a maintenance agreement, all documents must be completed and recorded prior to issuance of the permit.

#### Drainage:

The Department's jurisdiction for Drainage Connection Permits is defined in Florida Administrative Code (FAC) Rule Chapter 14-86. The purpose of Rule Chapter 14-86 is to ensure safe conditions and the integrity of the Department's transportation facilities and to prevent an unreasonable burden on lower properties by providing standards and procedures for drainage connections from the properties adjacent to the Department's right of way. Rule Chapter 14-86 requires demonstration that there is no increase of run-off discharge to the Department's right of way from the proposed improvements. Therefore, the allowable discharge to the Department's right of way is based on the approach known as pre-development versus post-development. Any site abutting the Department's right of way or easement, undergoing development or changing grades is subject to this rule unless the improvement qualifies for an exception.

The Department's Drainage Connection Permit Handbook is available for review. This handbook is prepared to assist applicants in complying with the Florida Department of Transportation Rule 14-86, F.A.C. As a secondary feature, some of the reasoning and logic behind the Rule and its requirements are explained.

<http://www.fdot.gov/roadway/Drainage/files/DrConnPermitHB.pdf>

A permit application is not required for projects that qualify for an exception. There are four (4) categories of exceptions - improvements to property that does not drain, either directly or indirectly, to the Department's right of way, single family residential homes, agricultural and silvicultural improvements, and minor improvements. To receive written verification of the exception, a completed Drainage Connection Permit Application (check exception) and appropriate back up materials are required. The following should be submitted with your exception request:

- Recent survey plans, certified by a Professional Land Surveyor Certified in the State of Florida.
- Scaled paving, grading and drainage plans reflecting pre-development and post-development conditions. The plans shall be signed and sealed by a Professional Engineer certified by the State of Florida.
- Land-use area calculations.

The following information is required when submitting a Drainage Connection Permit (check permit).

- Soils report supporting the drainage design. The report shall be signed and sealed by a Professional Engineer certified by the State of Florida representing the laboratory performing the testing.
- Existing site photographs in hard copy format. A file with digital photographs is helpful. Each photograph shall be labeled with a description. The required photos follow.
  1. A view of the site in each direction (North, East, South and West).
  2. A view of the State Road both upstream and downstream from the proposed driveway connection(s), if applicable.
  3. Existing drainage facilities directly connected to the Department's drainage system, if applicable.
  4. Existing drainage facilities with the Department's right of way adjacent to the site, if applicable.
- Vicinity map reflecting the location of the site. This map shall include latitude and longitude as well as section, township and range information. This map shall reflect all adjacent local streets as well as at least one major street or highway both upstream and downstream of the site.
- Recent survey plan and legal description, certified by a Professional Land Surveyor Certified in the State of Florida.
- Scaled paving, grading and drainage plans reflecting pre-development and post-development conditions. Each set of plans shall be signed and sealed by a Professional Engineer certified by the State of Florida.
- On-site drainage report reflecting pre-development and post-development drainage analysis. Each drainage report shall be signed and sealed by a Professional Engineer certified by the State of Florida.
- Department's right of way impacts report reflecting all work proposed on the Department's right of way. Each report shall be signed and sealed by a Professional Engineer certified by the State of Florida. The Drainage Connection Permit does NOT authorize work within the Department's right of way.
- Proof of ownership (i.e. warranty deed or long-term lease)

#### Utility:

The department has developed standards, guidelines, policies and recommended practices for utility placement within the department's right of way. These standards were established to regulate the location and manner for installation and adjustment of utility facilities on any Florida Department of Transportation (FDOT) right of way. FDOT will issue permits for the construction, alteration, operation, relocation, removal, and maintenance of utilities upon the right of way in conformity with the FDOT Utility Accommodation Manual (UAM), July 2017 edition.

Others may prepare and process permit applications for the UAO, however the UAO shall, in all cases, be the permit applicant before the permit is approved. Once the permit is approved the UAO is the permittee and shall not deviate from the approved permit without approval from the Local Maintenance Engineer. The UAO shall have a complete copy of the approved permit at the jobsite when crews are present.

City or county utility owners, who do not have contractual control over the builder of their utilities, may elect to have the builder become a joint utility permit applicant with the city or county. In these cases, the utility builder and the city or county shall be severally liable such that the utility builder shall be required to comply with all the permit requirements applicable to the construction of the city or county utilities and the city or county shall be required to comply with permit requirements post construction, including, but not limited to those applicable to operation and maintenance.

The UAO may perform work on the UAO's previously permitted utilities without applying for a new permit for only the work types listed below and when the work constraints in **UAM Section 2.3.2** are followed:

- 1) Placement of mid-span poles, replacement of existing poles, or removal of existing poles. All of these poles must be part of the existing pole line, and installed as close to the alignment of the existing pole line as possible. For existing poles that do not comply with the utility offsets in **UAM Section 3.14.4**, the new pole shall not reduce the existing pole's offset from the edge of lane along non-restricted roadsides or from the face of curb along restricted roadsides. For existing poles that do comply with the utility offsets in **UAM Section 3.14.4**, the new pole shall also comply with the utility offsets in **UAM Section 3.14.4**.
- 2) Placement of service poles as long as these poles are in compliance with the utility offsets in **UAM Section 3.14.4**.
- 3) Placement of underground service lines in compliance with **UAM Section 3.16.7** provided they are perpendicular to the roadway.
- 4) Temporary utility work approved by the FDOT Resident/Project Engineer during FDOT construction projects in accordance with an approved utility work schedule.
- 5) Maintenance, replacement, alterations or additions of aerial components on existing pole lines.
- 6) Maintenance, alterations, but not the replacement, of existing underground utilities.
- 7) Placing and/or removing utilities within existing conduits, provided no additional pull-boxes or other utility appurtenances are installed.
- 8) Installation of technology to solely operate, measure, maintain, and/or monitor the permitted utility provided no excavation is performed. This provision shall not be interpreted to allow other entities to attach to the UAO's facility without obtaining a new permit and/or modifying the UAO's existing permit if the technology does not solely operate, measure, maintain, and/or monitor the permitted utility.
- 9) Vegetation control in compliance with **UAM Section 3.18**.
- 10) Potholing for physical exposure of underground utilities in accordance with **UAM Section 2.1(9)**.
- 11) Replacement of existing permitted lines, as long as the new line is as close to the original alignment as possible and is in compliance with the utility offset in **UAM Section 3.14.4**.

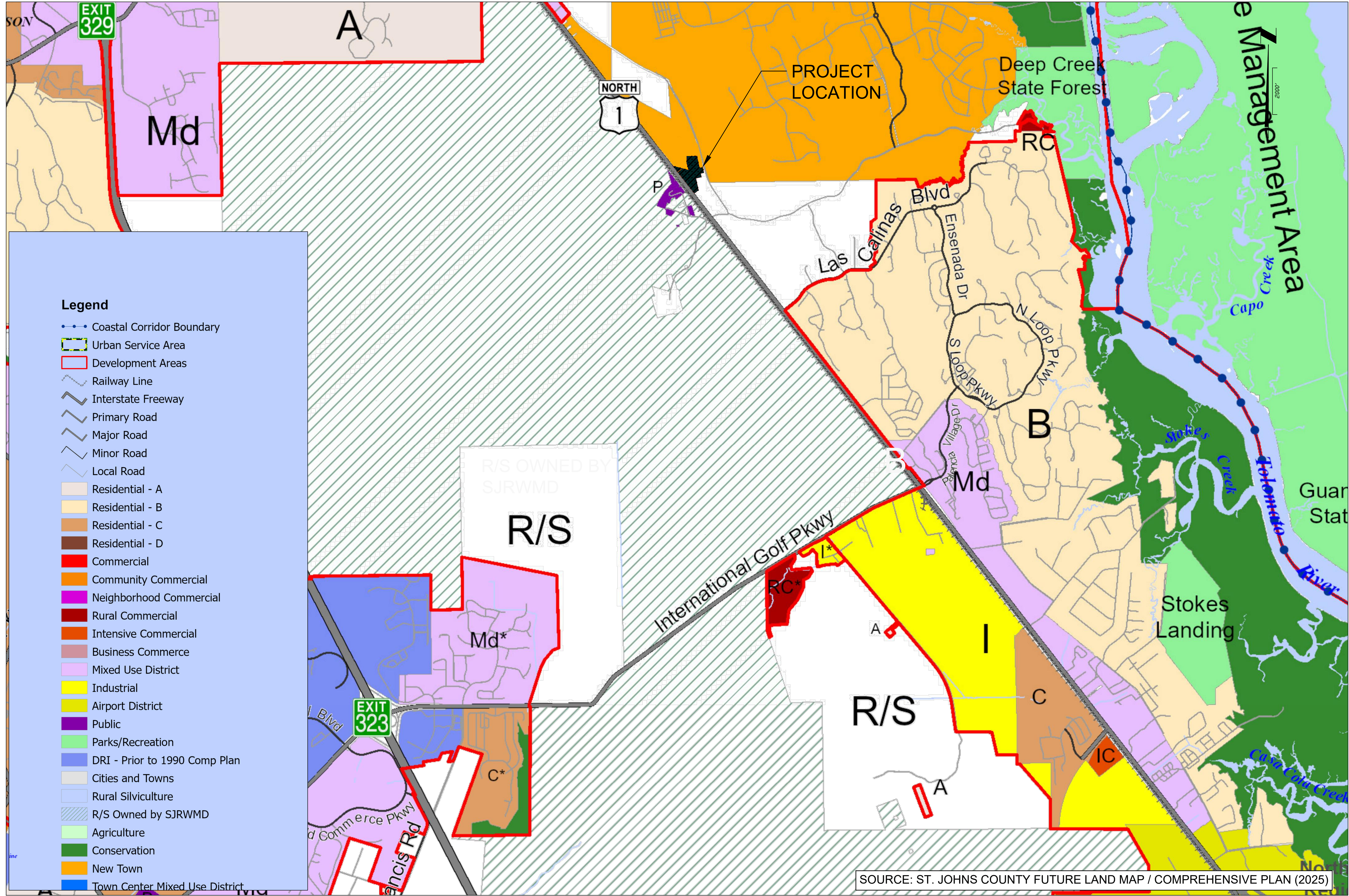
In addition to the information required for the One-Stop Permitting website and the utility permit in **UAM Section 8**, the UAO shall attach and incorporate as part of the utility permit application the following if applicable:

- 1) Key map showing the proposed installation's location and the approximate distance and direction from the proposed work area to the nearest town, major road intersection, bridge, or railroad crossing.
- 2) Plan view drawings (preferably to scale) showing all of the following:
  - a) The R/W Lines, limited access lines, and the UAO's easement lines within the FDOT R/W.
  - b) The proposed utility and proposed utility appurtenances (except for utility appurtenances mounted at least fifteen (15) feet above the ground and less than eight (8) cubic feet).
  - c) The horizontal distance from the proposed utility to a well-defined feature of the transportation facility (such as the edge of travel lane).
  - d) When work is within an FDOT project, a tie to project stationing, otherwise a tie to roadway mileposts.
  - e) The limits of the work area (including staging areas, access points, or other areas to be used).



- f) For trenchless installations, the proposed method of installation, materials, function, type, size of proposed installation, and bore diameter.
  - g) Maximum allowable operating pressures of proposed gas mains and the locations of proposed shut-off valves.
  - h) Aboveground features such as existing utility poles within the work area.
  - i) Underground features such as utilities, drainage pipes, or Intelligent Transportation System (ITS) lines within the proposed work area as can reasonably be obtained by a review of existing records and a topographical survey of above ground features.
  - j) Significant physical features such as vegetation, wetlands or bodies of water.
- 3) When installing underground utilities, the UAO shall provide profile view drawings showing all of the following:
- a) The location of the proposed utility and proposed appurtenances larger than eight (8) cubic feet.
  - b) Benchmark information.
  - c) Horizontal and vertical location of all existing underground facilities such as utilities, drainage pipes, or ITS lines within the proposed work area as can reasonably be obtained by a review of existing records and a topographical survey of above ground features.
  - d) The proposed utility's depth below the top of the pavement or existing unpaved ground.
  - e) Top of water table or confining layer when required per **UAM Section 3.16.9.1**.
  - f) Cross-sectional view showing one (1) or more typical cross sections to adequately reflect the proposed installation's location.
- 4) Manufacturer's certifications of proposed underground appurtenances manufactured offsite such as manholes, splice boxes or vaults that are greater than eighty (80) cubic feet in accordance with **UAM Section 3.16.3.1**.
- 5) Signed and sealed plans and specifications for proposed attachments to structures including a bridge load rating analysis where attachments affect the bridge's carrying capacity.
- 6) Not more than six (6) photographs documenting work area conditions prior to the utility work as requested by the Local Maintenance Engineer. The Local Maintenance Engineer shall waive the requirement for photographs when unnecessary.
- 7) Justification and drawings showing proper replacement of the roadway for any open trenching, pavement cuts, or water supply line conflicts.
- 8) For aboveground crossings of an operational LA R/W between interchanges, a list of any other anticipated crossings.
- 9) A completed standard railroad application package when within FDOT rail corridors.
- 10) A landscaped vegetation replacement plan as required by **UAM Section 3.17.2**.
- 11) Any required approvals, waivers, or variances necessary for the permit to be approved.
- 12) Any known provisions of the UAM or the utility permit that are modified, or made unenforceable by existing easements, subordination agreements, or other legal requirements.
- 13) FDEP Certification document in accordance with **UAM Section 2.5**.
- 14) A traffic control plan in accordance with **UAM Section 2.4.2**.
- 15) Copies of any existing applicable permits for erosion control.





**Legend**

- Coastal Corridor Boundary
- ▭ Urban Service Area
- ▭ Development Areas
- ▭ Railway Line
- ▭ Interstate Freeway
- ▭ Primary Road
- ▭ Major Road
- ▭ Minor Road
- ▭ Local Road
- ▭ Residential - A
- ▭ Residential - B
- ▭ Residential - C
- ▭ Residential - D
- ▭ Commercial
- ▭ Community Commercial
- ▭ Neighborhood Commercial
- ▭ Rural Commercial
- ▭ Intensive Commercial
- ▭ Business Commerce
- ▭ Mixed Use District
- ▭ Industrial
- ▭ Airport District
- ▭ Public
- ▭ Parks/Recreation
- ▭ DRI - Prior to 1990 Comp Plan
- ▭ Cities and Towns
- ▭ Rural Silviculture
- ▭ R/S Owned by SJRWMD
- ▭ Agriculture
- ▭ Conservation
- ▭ New Town
- ▭ Town Center Mixed Use District

SOURCE: ST. JOHNS COUNTY FUTURE LAND MAP / COMPREHENSIVE PLAN (2025)

**Connelly & Wicker Inc.**  
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 Florida Registry 3630 L.A. Number: LC26000311

No.	Date	Revision

**FUTURE LAND USE MAP**

**PINE ISLAND PUD**  
**ST. JOHNS COUNTY**  
 PREPARED FOR  
**BRIAN FERLIN**

ERIC EVANS, PE  
 P.E. NUMBER: 93585  
 Reg. Engineer

Project No.: 23-01-0044  
 Designed: EDE  
 Checked: JEJ  
 Date: JUNE 2023  
 Scale: 1" = 2000'

Sheet **EX 5**

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