



*Surfside Harbor-Hutchinson Island*

**Parcel I.D. #: 2413-501-0158-000-4**

**Wetland Delineation**

**Field Report**

**St. Lucie County, FL**

**Surfside Harbor:**  
**Block 10, Lot 14,**  
**St. Lucie County**

**P.I.N. #: 2413-501-0158-000-4**

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Aerial of Site**

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With Wetland Delineation Lines Superimposed**

**Site Photos: On Site Digital Photographs**



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**Client:** Mr. Anthony Acerra

**Location:** PIN: 2413-501-0158-000-4, Surfside Harbor,  
Block 10, Lot 14 (OR 1656-2398),  
Hutchinson Island, Highway A1A, St. Lucie County, FL

On October 11, 2006, a wetland survey was performed at the above referenced property, utilizing the wetland delineation standards set forth in 62-340 F.A.C. The findings are outlined below:

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- Property Size: 0.21 Acres
- Approximate Percentage of Wetlands: 98%
- Approximate Percentage of Uplands: 02%

**Comments:** The site consists of a dense, tidally inundated mangrove swamp with a thin fringe of uplands along the east end of the lot (due to the spoil deposition for the road construction of Highway A1A). This wetland area on the lot cannot be avoided for house construction on the site. If the wetland is to be impacted, a permit from the DEP and the ACOE will most likely be needed prior to building. Substantial mitigation will also be required for construction projects in mangrove swamps. The approximate cost of mangrove swamp mitigation credits for ACOE and DEP dual credit is close to \$10,000 per .10 acre of impact. To situate a standard single family house on this site, mitigation credit cost alone will be near \$20,000. Additional costs will be required for deep de-mucking, importing substantial amounts of fill to replace the muck, environmental consulting and engineering fees. It is important to note that state and federal agencies are usually very restrictive about the size and location of projects on sites like these in spite of the amount of mitigation proposed. A wetland line has been marked on-site using orange and white striped ribbon.

*An on-site assessment of the property revealed that the lot contains two distinct habitat types that reflect the ecologic and hydrologic conditions for this area. These two habitats are described below and are indicated on the enclosed site map.*

## Habitat Types:

(Habitats are described using D.O.T. F.L.U.C.C.S. Codes and the 10YR page of the Munsell Soil Chart)

### HABITAT #1 -WETLAND MANGROVE SWAMP

F.L.U.C.C.S. CODE # 612

#### Biological Description of Wetland Habitat:

These dense, brackish water swamps occur along low-energy shorelines and in protected, tidally influenced bays of southern Florida. This community is composed of freeze-intolerant tree species that are distributed south of a line from Cedar Key on the Gulf coast to St Augustine on the Atlantic coast. These swamp communities are usually dominated by red, black, and white mangroves that progress in a sere from seaward to landward areas, respectively, while buttonwood trees occur in areas above high tide. Openings and transitional areas in mangrove swamps sometimes contain glasswort, saltwort, and other salt marsh species. All three major species of mangroves are mapped as a single class with no effort made to differentiate these species into separate zones.

#### Facilitative Wetland Plants:

(Upper Group) Avicennia

(Ground Cover) Ruppia

Percentage of Area 100%

#### Vegetation Wetland Code:

W1

612

W1

Percentage of Area 100%

**PLANT COVERAGE OF THE WETLAND HABITAT AREA**

**Upland Plants:**

(Upper Canopy & Sub-canopy): NONE

(Ground Cover): NONE

Percentage of total habitat coverage = 0%

**Facultative Plants:**

(Upper Canopy & Sub-canopy): BRAZILIAN PEPPER, AUSTRALIAN PINE

(Ground Cover): NONE

Percentage of total habitat coverage = 5%

**Facultative Wetland Plants:**

(Upper Canopy & Sub-canopy): NONE

(Ground Cover): NONE

Percentage of total habitat coverage = 0%

**Obligate Wetland Plants:**

(Upper Canopy & Sub-canopy): RED MANGROVE, BLACK MANGROVE,  
WHITE MANGROVE

(Ground Cover): NONE

Percentage of total habitat coverage = 95%

# TYPICAL SOIL PROFILE IN THE WETLAND HABITAT AREA

(Using the 10YR page of the Munsell Soil Chart)

Soil Type: ARENT SOIL (INUNDATED ALONG WETLAND LINE)

Hydric/Depressional: YES

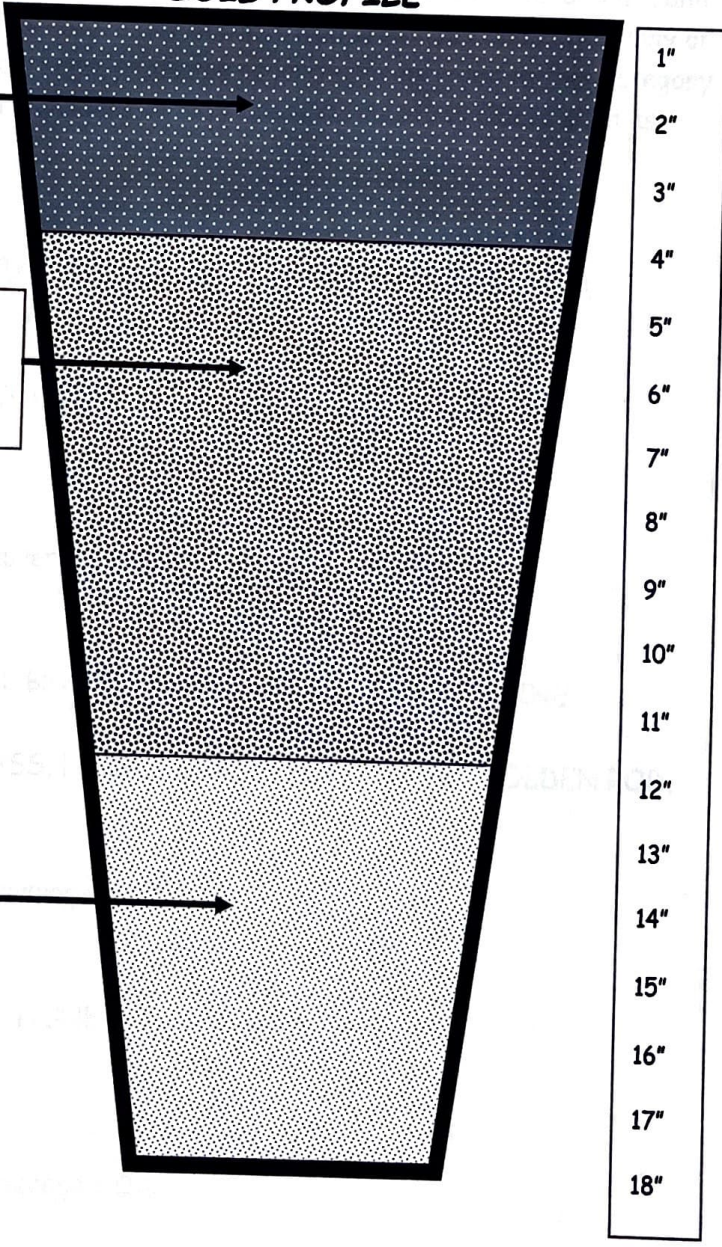
## HORIZON

## SOIL PROFILE

O: 2/1 FINE SAND WITH 40% ORGANIC CONTENT

A1: 3/1 FINE SAND MATRIX WITH 25% ORGANIC CONTENT

A2: 3/1 FINE SAND MATRIX WITH 10% ORGANIC CONTENT



Hydrologic indicators present in this habitat area: Tidally Influenced Water Levels, Water Stains, Aquatic Plants, Aquatic Fauna, Adventitious Roots, Muck, Hydrogen Sulfide In The Upper 6" Of Soil & Defined Ecotone

**HABITAT #2 - UPLAND- EXOTIC PLANT COMMUNITY**  
F.L.U.C.C.S. CODE # 422

**Biological Description of Upland Habitat:**

This community is defined by disturbed upland areas that are dominated by non-native trees that were planted or have escaped and invaded native plant communities. These exotics include melaleuca, Australian pine, Brazilian pepper, and eucalyptus. These disturbed areas usually occur within urbanized areas that may or may not have been vegetated. Some examples of land uses included in this category are lawns, golf courses, road shoulders, grassy areas surrounding places such as airports, park facilities, etc.

**PLANT COVERAGE OF THE UPLAND HABITAT AREA**

**Upland Plants:**

(Upper Canopy & Sub-canopy): NONE

(Ground Cover): NONE

Percentage of total habitat coverage = 0%

**Facultative Plants:**

(Upper Canopy & Sub-canopy): BRAZILIAN PEPPER, AUSTRALIAN PINE

(Ground Cover): CARPET GRASS, FINGER GRASS, FLAT-TOPPED GOLDEN ROD, WEDILIA

Percentage of total habitat coverage = 100%

**Facultative Wetland Plants:**

(Upper Canopy & Sub-canopy): NONE

(Ground Cover): NONE

Percentage of total habitat coverage = 0%

**Obligate Wetland Plants:**

(Upper Canopy & Sub-canopy): NONE

(Ground Cover): NONE

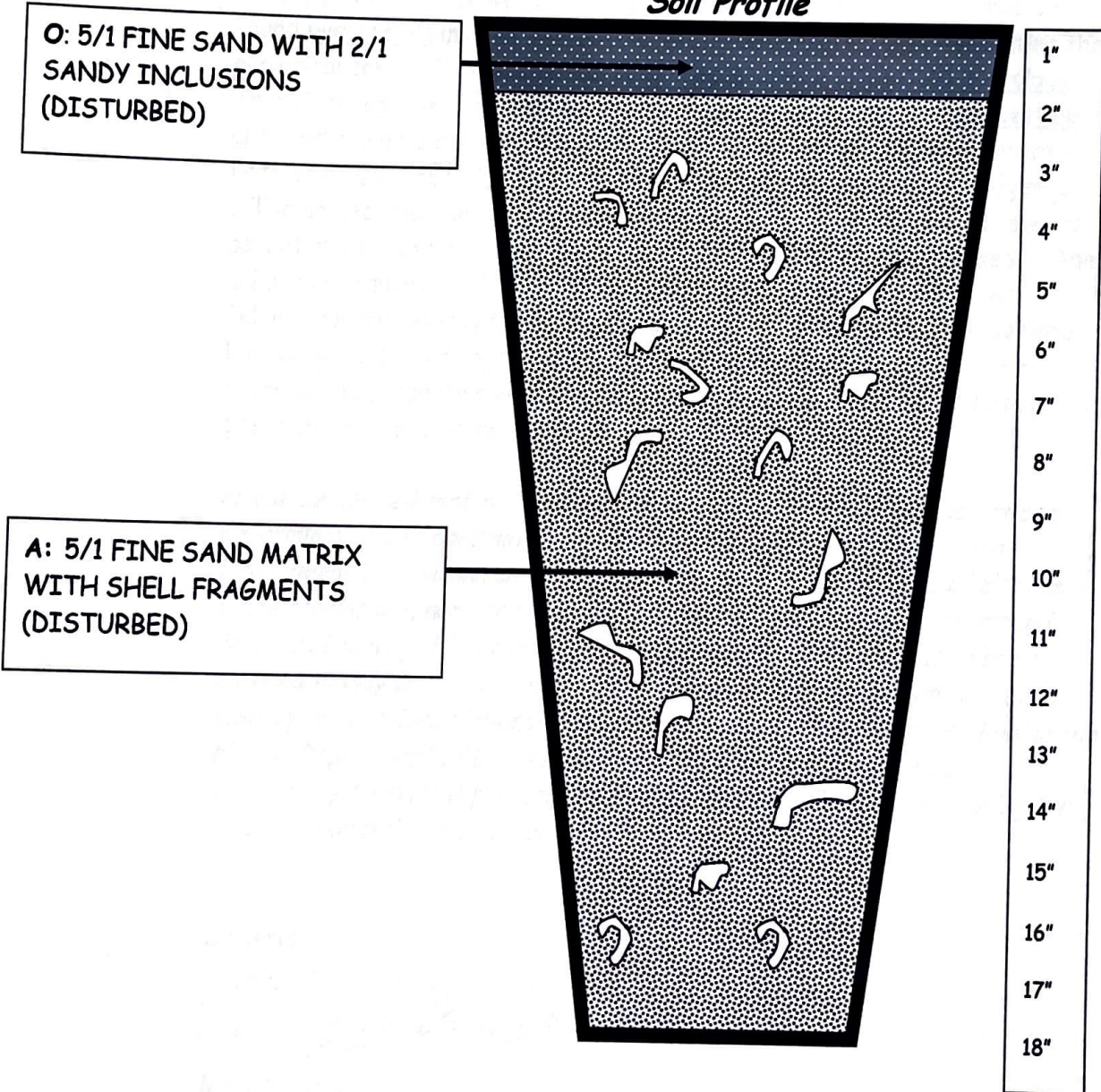
Percentage of total habitat coverage = 0%

# TYPICAL SOIL PROFILE IN THE UPLAND HABITAT AREA

(Using the 10YR page of the Munsell Soil Chart)

Soil Type: ARENT (Disturbed- soil deposited during adjacent road construction)  
Hydric/Depressional: N/A

Soil Profile



Hydrologic indicators present in this habitat area: None

**Conclusion:**

After careful review of aerial photographs, St. Lucie County soil maps, on-site soil samples, hydrologic conditions and botanical observations, it is my professional opinion, based on reasonable scientific judgment that Habitat #1 of this lot lies within the State of Florida's wetland regulatory jurisdiction. This opinion is based on the fact that the site characteristics of Habitat #1 satisfy all of the four wetland tests (A, B, C & D). In this habitat area I have found hydric soils in all of the sample locations, obligate plants dominating the ecological community and there is convincing evidence of wetland hydrology. Therefore, approximately 98% of this lot lies within a jurisdictional wetland area and could be claimed by both the Florida Department of Environmental Protection and the U.S. Army Corps of Engineers. Any proposed dredging or filling projects within wetland areas should require an environmental resource permit from these agencies. Fines of \$10,000 per day may be imposed by the D.E.P. for unauthorized activities in wetland areas; additional fines and/or felony prosecution may be imposed by the federal government. The wetland boundary has been flagged with orange and white stripped ribbons. The approximate property corners along the roadside have been flagged using pink, green and orange fluorescent tape.

*Please be advised that this assessment is an informal wetland jurisdictional determination and does not in any way bind the consultant, the Florida Department of Environmental Protection or the U.S. Army Corps of Engineers to its conclusions, nor does it convey any legal rights, expressed or implied. Persons obtaining this informal wetland jurisdictional determination are not entitled to rely upon it for purposes of compliance with provisions of law. A binding wetland jurisdictional determination can be obtained by petitioning the Florida Department of Environmental Protection for a jurisdictional declaratory statement pursuant to Rule 62-340.300, FAC, or by applying for an environmental resource permit.*

Sincerely,

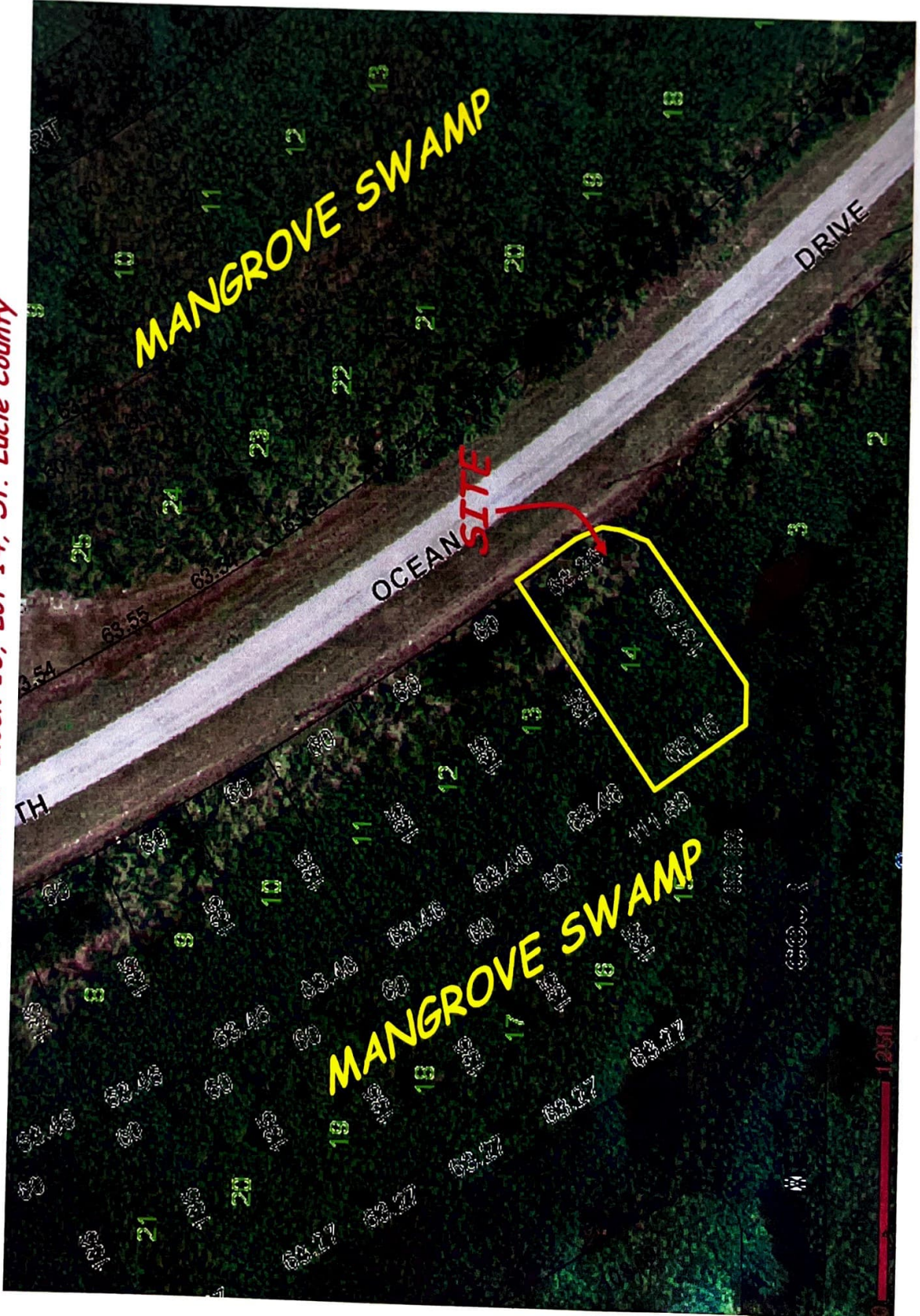


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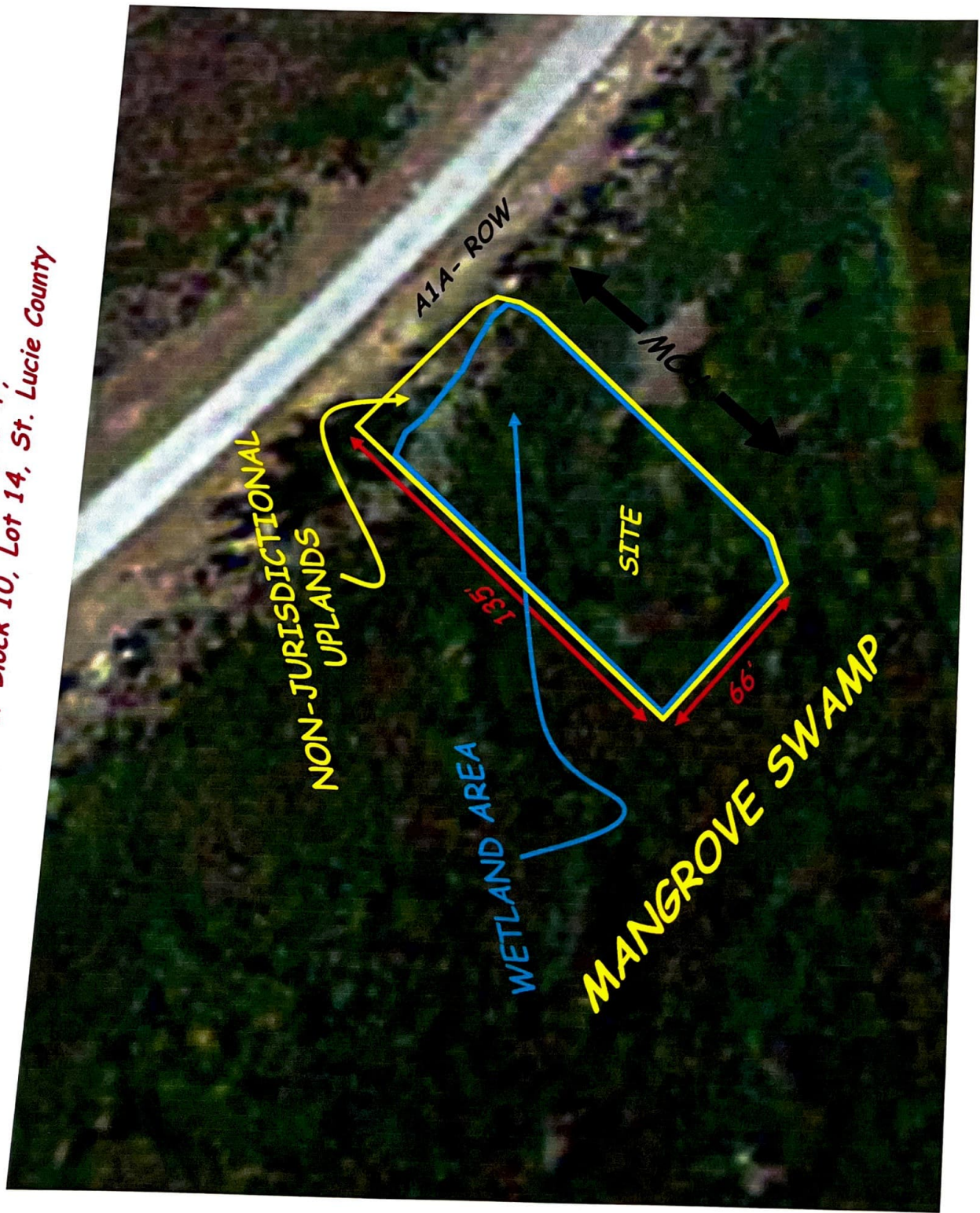
# AERIAL MAP

PIN: 2413-501-0158-000-4,  
Surfside Harbor Block 10, Lot 14, St. Lucie County





0158-000-4,  
Harbor Block 10, Lot 14, St. Lucie County



# ***SITE PHOTO'S***

***PIN: 2413-501-0158-000-4,  
Surfside Harbor Block 10, Lot 14, St. Lucie County***

***October 11, 2006***



***WETLAND  
BOUNDARY  
LOOKING  
WEST***



***UPLAND FRINGE  
LOOKING NORTH  
ALONG THE ROAD  
R.O.W.***

