

PRESERVE AREA MANAGEMENT PLAN

MARTIN COUNTY GROWTH MANAGEMENT DEPARTMENT ENVIRONMENTAL DIVISION



Port Cove PUD

State Road 707

Jensen Beach, 34957

Parcel Control Number:

27-37-41-033-000-00040-2

Approved by/Date : _____

DEV2019020009

PART I

ENVIRONMENTAL ASSESSMENT

PART II

CONDITIONS

A. RECORDING

This Preserve Area Management Plan (PAMP) will be recorded by the Martin County Clerk of Courts and labeled with the appropriate O.R. Book and Page Number. One copy of the recorded document will be provided to the Martin County Environmental Planning Administrator within thirty (30) days of the Recording date. This PAMP may be altered or amended only with the agreement of the Martin County Environmental Planning Administrator and the owner/developer and with the approval of the Martin County Board of County Commissioners. If the PAMP is altered or amended, the revised document will be recorded by the Martin County Clerk of Courts and one copy of the revised document will be provided to the Martin County Environmental Planning Administrator within thirty (30) days of the Recording date.

B. COMPLIANCE

The owner(s) of the lands to be preserved/maintained by this Preserve Area Management Plan (PAMP) and the developer(s) of the property described in this PAMP, their successors and assigns, and their environmental consultants and contractors, will implement and comply with all portions of this PAMP.

C. MONITORING AND REPORTING

Compliance with the terms of this PAMP includes submittal of Monthly Monitoring Reports on PAMP compliance throughout all phases of project construction and submittal of an Annual Monitoring Report each year for a period of five years following completion of project construction, pursuant to Section 10.17 of the Martin County Land Development Regulations. The owner(s) of the lands to be preserved shall have ultimate responsibility for the submittal of all Monitoring Reports.

Annual monitoring will be conducted by a qualified environmental professional no later than November 30 of each year following issuance of a Certificate of Occupancy for development described in the PAMP. A report presenting the results of the annual monitoring will be submitted by the environmental professional to the Martin County Environmental Planning Administrator within thirty days of the completion of the monitoring. Included in the Annual Monitoring Report will be a list of any violations of the PAMP during the previous year, with recommendations for, and a schedule of, remedial actions and any enhancement activities proposed for the coming year. All Annual Monitoring Reports are due no later than December 31 of the year they are to be submitted. After the first five-year monitoring period, the Preserve Areas may be subject to further monitoring and maintenance to ensure environmental integrity and consistency with the provisions of the Plan. A copy of the suggested template for the Annual Monitoring Report is attached to this PAMP as an Appendix.

D. TRANSFER OF OWNERSHIP

The Martin County Environmental Planning Administrator shall be notified in writing within thirty (30) days of transfer of ownership of any lands preserved by this PAMP. Failure to notify will be considered as a non-compliance with the terms of this PAMP.

E. SITE PLAN

The Site Plan included as an appendix to this PAMP illustrates all preserve areas, right-of-ways and easements, proposed structures, with distances to on- and off-site upland preserves, wetlands and wetland buffers, proposed final grade of developed area, and location of permanent preserve area signs. Included on the Site Plan will be a summary of the following: total acreage of the Site; acreage of wetland habitats under preservation; acreage of native and common upland habitats under preservation; acreage of upland buffer on-site; acreage of on-site wetland mitigation areas; and total acreage under preservation. The Site Plan will contain the notation: **"PRESERVE AREAS ARE NOT TO BE ALTERED WITHOUT WRITTEN PERMISSION OF THE MARTIN COUNTY BOARD OF COUNTY COMMISSIONERS."**

F. PRESERVE AREA SURVEYING REQUIREMENTS

All Preserve Areas will be surveyed and marked with permanent monuments at each corner and at other sites necessary for locating the boundary of the Preserve Area. These permanent monuments will be constructed under the supervision of a Registered Land Surveyor and will be shown on the Site Plan. Map coordinates of each Preserve Area will be provided to the Martin County Environmental Planning Administrator in a form compatible for use in the County's GIS mapping system.

G. PRESERVE AREA SIGNAGE REQUIREMENTS

Preserve Areas will be posted with permanent signs. These signs will be at least 11 x 14 inches in size and will be posted in conspicuous locations along the Preserve Area boundary, at a frequency of no less than one (1) sign per 500 feet. Boundary Markers will be placed at the corners of residential lots abutting Preserve Areas. All signs and boundary markers will be approved by the Martin County Environmental Planning Administrator and will be in place prior to issuance of a building permit for construction on the site. An example of the Preserve Area Sign is appended to this Plan.

H. SITE CLEARING

The Land Clearing/Erosion Control Plan appended to this PAMP contains information on land clearing to be conducted, existing vegetation to be retained, location of construction barricades around preserve areas, procedures for debris removal and soil stabilization, and location of silt fences. Where clearing of vegetation is proposed (i.e. building envelope, utilities, drainage, road right-of-way, etc.), the developer will ensure that all Preserve Areas and buffers are protected with construction barricades and erosion control devices in accordance with the following guidelines.

Construction barricades will be placed at least 10 feet outside of all Upland Preserve Areas, or at the dripline of the canopy trees, whichever is greater. Barricades will be inspected by County Environmental Division staff prior to work approval. Barricades will consist of high-visibility orange safety fence extending from the ground to a height of at least 4 feet and will not be attached to vegetation. Removal of the barricades will be approved only after issuance of a Certificate of Occupancy.

All native vegetation not slated for removal as part of the development plans will be retained in its undisturbed state and will be barricaded at or outside the dripline of the trees. Wetlands will be protected from possible surface water and sediment runoff by the placement of erosion control devices (e.g., silt screens, hay bales or other turbidity control measures) at least 5 feet outside the perimeter of the wetland buffer.

All barricades, silt screens and other erosion control devices will be upright and maintained intact for the duration of construction.

The owner/developer is required to inform all contractors of site clearing requirements. Failure to comply with these requirements will be considered a violation of the Site Plan approval. Work on the project may be stopped until compliance is achieved.

I. ACTIVITIES ALLOWED IN PRESERVE AREAS

Property owners are encouraged to enjoy the natural beauty of their Preserve Areas. Although development of Preserve Areas is not allowed, passive uses, such as bird-watching and other non-destructive uses of natural areas are encouraged, as long as they do not affect the hydrology or vegetative cover of a Preserve Area.

Firewise Community: Beacon 21, Phase IV is a Firewise Community and according to the Florida Forest Service (FFS) criteria for firewise landscaping, the following practices will be implemented within the 25' wide defensible space located at the edge of the upland preserve that is adjacent to all home sites in the community.

1. Thin trees so that the crowns (tree tops) are 10 to 15 feet apart.
2. Remove any "ladder fuels". Ladder fuels are vines and shrubs that can carry a ground fire up into the treetops.
3. Remove dense fuels, trim overhanging branches, and carefully plan your landscaping within 30 feet of homes.
4. Prune tree limbs so the lowest branches are 6 to 10 feet from the ground.
5. Remove any large groupings of plants like saw palmetto, yaupon, wax myrtle and gallberry, especially if the plants are close to the home, adjacent decks or porches or under eaves or overhangs.
6. Instead of flammable mulch like bark or wood chips, use lava stone or coarse gravel around any shrubbery that is within 5 feet of the structure.
ALLOW NO FLAMMABLE VEGETATION IN CONTACT WITH THE STRUCTURE.
7. Remove highly flammable plants characterized by resinous sap and waxy leaves. These include: saw palmetto, wax myrtle, yaupon, red cedar, cypress and young pine trees.
8. Locate firewood and propane gas tanks at least 50 feet from the structure.
9. Keep 100 feet of hose readily available at a faucet away from the structure.
10. Select less-flammable plant species to plant within the zone of defensible space.

If any replanting/restoration planting is required within the boundaries of the upland preserve area, then less flammable trees and shrubs should be utilized as recommended by FFS and the Firewise Landscaping program.

Native Trees	Native Shrubs
Oaks	Coontie
Maple	Beautyberry
Magnolia	
Sea grape	
Elm	
Red bay	
Green buttonwood	

See <https://www.freshfromflorida.com/Divisions-Offices/Florida-Forest-Service/For-Communities/Firewise-Communities/Firewise-Landscaping> for further details.

J. ACTIVITIES PROHIBITED IN PRESERVE AREAS

Activities prohibited in Preserve Areas or easements within Preserve Areas include, but are not limited to: construction; dumping or placing building materials, soil, garbage, trash, or dead vegetation on or above the ground; removal or destruction of native trees, shrubs or other native vegetation; excavation or dredging of soil; diking or fencing; vehicular traffic including use by non-motorized vehicles, recreational vehicles and off-road vehicles; permanent irrigation; trimming, pruning, or fertilization; and any other activities detrimental to drainage, flood control, water conservation, erosion control or fish and wildlife conservation and preservation.

No hazardous material other than fuel for refueling on-site equipment may be stored during construction. On-site fuel tanks may not be located within twenty-five (25) feet of any Preserve Areas and will be removed upon completion of construction work.

Buildings proposed to be located adjacent to Preserve Areas will be set back a minimum of ten (10) feet to allow for construction and maintenance without encroaching into the Preserve Area. All other structures (e.g. pools, sheds, decks, fences) shall be set back a minimum of five (5) feet from the Preserve Area boundary.

Development activities such as the construction of building pads for associated structures, swales, or culverts for surface water management shall not alter the hydrology of adjacent Preserve Areas. Nor shall any activities increase non-point source pollution in Preserve Areas.

Grazing of cattle and horses or other livestock in Preserve Areas, while not prohibited, is discouraged. Over-grazing can result in destruction of habitat, loss of top soils and changes in hydrology of the area as a result of the loss of ground cover material, increased fertilization from animal droppings, and contamination of surface waters. These and other effects of over-grazing will be considered violations of this PAMP and will be addressed as any other PAMP violation.

K. RESTORATION AND MAINTENANCE ACTIVITIES

Except for approved restoration and maintenance activities, Preserve Areas will be left undisturbed. All maintenance of Preserve Areas will be in accordance with this PAMP. Maintenance and management activities will be performed by or under the supervision of a qualified environmental professional and must be approved by the Martin County Environmental Planning Administrator. A description of all proposed restoration and maintenance activities to be conducted on the site will be included in the Restoration/Mitigation Planting Plan prepared as part of the EA. The following restoration and maintenance activities may be allowed within Preserve Areas with prior written approval from the Environmental Planning Administrator: exotic plant removal; revegetation with native plants; removal of plant material that is dead, diseased, or considered to be a safety hazard; and controlled burns.

Exotic Plant Removal - Exotic vegetation shall be removed from Preserve Areas by the least ecologically-damaging method available. Such methods include hand pulling, hand spading, cutting with hand or chain saws and in-situ treatment with appropriate herbicides. No debris, including dead plants, plant clippings or wood scraps, shall be allowed in Preserve Areas. In addition, all dead plant material and exotic plant debris removed from Preserve Areas shall be disposed of in a County-approved recycling facility.

Revegetation - Any revegetation which might be necessary as a result of exotic vegetation removal or site construction activities shall consist of native plant species representative of the existing native plant community. This will ensure that the Preserve Areas maintain indigenous plant associations.

Revegetation plans shall be included in the Restoration/Mitigation Planting Plan prepared as part of the EA.

Native Revegetation Plant Schedule

Common Name	Botanical Name	Size & Spacing	Habitat
Wire grass	<i>Aristida stricta</i>	1 gallon; 2' on center	Upland
Sand cord grass	<i>Spartina bakeri</i>	1 gallon; 2' on center	Upland
Saw palmetto	<i>Serenoa repens</i>	1 gallon; 2' on center	Upland
American beautyberry	<i>Callicarpa Americana</i>	1 gallon; 2' on center	Upland
Myrsine	<i>Rapanea punctata</i>	1 gallon; 2' on center	Upland
Dahoon holly	<i>Ilex cassine</i>	3 gallon; 5' on center	Upland
Slash pine	<i>Pinus elliotti</i> var.densa	3 gallon; 5' on center	Upland

All monitoring provisions necessary to assure the survivorship and maintenance responsibility for the reclamation areas of littoral and upland transition zone buffer areas around lakes constructed on the site managed by this PAMP shall be identified in the Restoration/Mitigation Planting Plan included in the EA for this site.

Vegetation Removal - Dead or diseased plant material shall be removed from Preserve Areas upon approval by the Martin County Environmental Planning Administrator. Revegetation may be required for any removed plant material. No debris, including dead plants, plant clippings or wood scraps, shall be allowed in Preserve Areas. All dead plant material and debris removed from Preserve Areas shall be disposed of in a County-approved recycling facility.

Prescribed Burns - Martin County considers prescribed burns an acceptable habitat management tool. When approved by the Martin County Environmental Planning Administrator, prescribed burns may be conducted by a certified burn manager who will be responsible for obtaining all appropriate permits from State and local agencies.

Other Restoration and Maintenance Activities – Alternative and innovative management techniques, which may provide for the long-term viability and habitat value of the Preserve Areas and for protection against imminent threats to public health and safety, may be approved by the Martin County Environmental Planning Administrator.

L. SITE HYDROLOGY

Previous or potential drainage impacts will be corrected to the extent technically feasible. Water quality and the rate, timing, and volume of run-off shall recreate natural conditions for the benefit of onsite wetlands and other waterbodies. Wetlands and waterbodies on adjacent properties shall be protected from adverse impacts.

M. PROTECTED SPECIES

If a protected species survey conducted as part of the Environmental Assessment of the project site indicates the presence of protected plant or animal species, the Environmental Assessment will include a Protected Species Management Plan. This Plan will include the results of the protected species survey; a listing and description of protected species occurring on, or utilizing, the site; documentation of the protection status of each species; a map of active and inactive burrows, nests, cavity trees, etc. found as part of the survey; a description of the protective measures being provided for each listed species found on the site; and copies of all correspondence with applicable state and federal agencies regarding the protection of listed species.

N. INSPECTIONS AND ENFORCEMENT

Martin County is authorized to inspect any County regulated site or appurtenance. Duly authorized representatives of Martin County may, at any time, upon presenting proper identification, enter upon and shall be given access to any premises for the purpose of such inspection. Martin County shall have the right to enforce the provisions of this PAMP through any available administrative or civil proceeding, which may result in penalties. Restoration of habitat and other remedies, such as fines and fees covering staff time, may be required of any person, corporation or other entity found in violation of any of the provisions of this PAMP or of Article 10 of the Martin County Land Development Regulations.

APPENDICES

Annual Monitoring Report Template

Example of Preserve Area Sign

Environmental Assessment

Site Plan

Florida Wildfire Risk Assessment Scoresheet

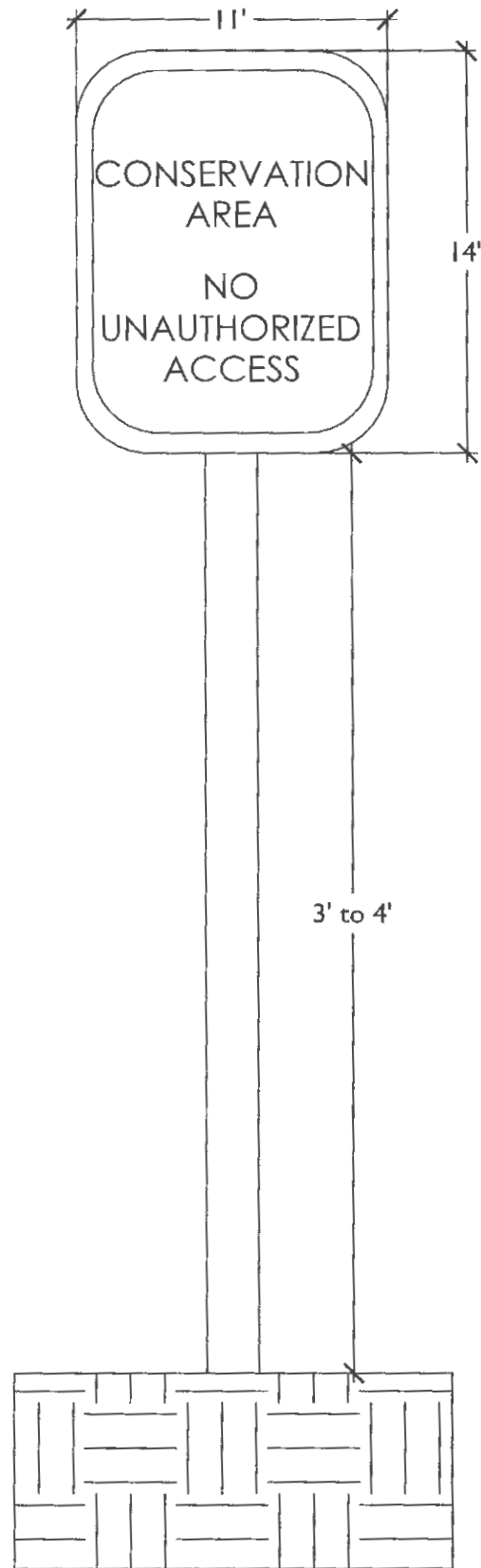
Land Clearing/Erosion Control Plan

Restoration/Mitigation Planting Plan

Protected Species Management Plan

Listed Species Survey

TYPICAL SIGNAGE DETAIL



*Note: Sign to be installed 500' on center around preservation and conservation areas unless otherwise shown.



Beacon 21, Phase IV Martin County Environmental Assessment

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**Beacon 21, Phase IV
Environmental Assessment
Martin County – Section 33, Township 41S, Range 37E
Updated September 13, 2019**

INTRODUCTION

The intent of this Environmental Assessment report is to provide a preliminary assessment of natural features located within the boundaries of the subject property (assessment area) including wetlands, upland habitat, protected trees and other vegetation, and potential for listed species (flora and fauna).

The subject property is 4.84 acres in size and is comprised of vacant land that was part of a previous master plan approval in 2007. The subject property is bound on the north by NE Dixie Highway, to the east by single family residences, to the south by Warner Creek, and to the west by the recreational tract and clubhouse for Beacon 21 Phase III. The subject property is located in the Rio Subdivision, Jensen Beach, Martin County (Section 33, Township 41S, Range 37E).

METHODOLOGY

This Environmental Assessment report is based on aerial (2018) photographic interpretation, review of Soil Survey of Martin County Area (USDA, Natural Resource Conservation Service, (Web Soil Survey) and field investigations. Ecotone Services, Inc. (ESI) staff performed several site visits between May 2018 and March 2019. An aerial photograph (Scale: 1" = 400') was used to attain a general indication of the natural features of the parcel and to indicate specific points of interest. An on-site review of the subject property conditions was performed by walking transects through the site while noting plant species, ecosystems and habitats, and potential use by listed animal and plant species.

SITE CONDITIONS

The 4.84 acre subject property is comprised of vacant land that is significantly vegetated with mostly native trees, palms, and understory, but also has distinctive man-made impacts from previous site development during the Beacon 21 Phase III construction. A portion of the parking lot of the Phase III recreation tract and clubhouse parcel is located on the extreme north-west corner of the subject property. Construction of an access road and additional site clearing has occurred within the north-central and north-western sections of the subject property as part of the Phase III site development (apparently). There appears to be current off-road vehicular use in the northern half of the subject property that has further degraded the natural condition of the site.

The vast majority of the remaining native vegetation and habitat is located on the north-eastern and southern ½ of the subject property. In addition, there is a steep gradient change in topographic elevation from the crown of SR 707 to the extreme southern portion of the subject property that is adjacent to Warner Creek. There are 3 distinctly different vegetated habitats on the subject property including a sand pine scrub habitat along the northern section (north-east quadrant), a mesic flatwood habitat that runs along the southern half of the subject property, and



a narrow mangrove swamp that runs along the length of the shoreline of Warner Creek. The balance of the project site is developed with open, cleared and level lands currently used as a parking lot for the adjacent tennis courts.

Please refer to the Florida Natural Areas Inventory Map (FNAI) map included with this report.

UPLAND ECOSYSTEM

Nearly the entire property is upland in nature and is estimated to account for 4.77 acres of the overall 4.84 acre property. The upland portion of the property is comprised of 3 distinct habitat types as discussed above. Approximately 3.18 acres of the overall 4.84 acres is covered with mostly native vegetation and is part of an upland habitat, either sand pine scrub community or a mesic flatwood community. The remainder of the upland area of the subject property (1.59 acres) is developed, as part of construction and site clearing activities associated with Phase III site development several years ago.

The following descriptions reference the FNAI natural communities guide (2010).

Sand Pine Scrub (1.41 acres)

This FNAI assessment areas consists of land that is part of the remnant coastal ridge and has high ground elevations compared to more typical land elevations throughout the surrounding coastal region. According to FNAI, this assessment area is consider rare, unique, or endangered habitat. The dominant vegetation is sand pine, with an understory of scrub hickory, myrtle oak, and saw palmetto. This FNAI area is located in the more central portions of the subject property. The western edge of this assessment area was impacted during development activities from the Phase III, and today some off-road vehicle usage is evident in these cleared areas.

The following is a list of the dominant native and non-native plant species identified on the subject property located within this assessment area:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Designation</u>
Sand pine	<i>Pinus clausa</i>	Native
Scrub hickory	<i>Carya floridana</i>	Native
Myrtle oak	<i>Quercus myrtifolia</i>	Native
Runner oak	<i>Quercus pumila</i>	Native
Spanish bayonette	<i>Yucca aloifolia</i>	Native
Pricklypear	<i>Opuntia humifosa</i>	Native
Brazilian pepper	<i>Schinus terebinthifolius</i>	Non-native
Earleaf acacia	<i>Acacia auriculiformis</i>	Non-native

Mesic Hammock (0.61 acres)

This FNAI assessment areas consists of land that is associated with a mixed evergreen, live oak, and cabbage palm canopy. The understory includes saw palmetto and often a fern groundcover. According to FNAI, this assessment area is consider rare, unique, or endangered habitat. This



FNAI area is located in the south-east section of the project site and abuts the mangrove fringe along its south border.

The following is a list of the dominant native and non-native plant species identified on the subject property located within this assessment area:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Designation</u>
Sand pine	<i>Pinus clausa</i>	Native
Slash pine	<i>Pinus elliotti</i> var.densa	Native
Live oak	<i>Quercus virginiana</i>	Native
Cabbage palm	<i>Sabal palmetto</i>	Native
Saw palmetto	<i>Serenoa repens</i>	Native
Myrsine	<i>Rpanea punctata</i>	Native
Swamp fern	<i>Blechnum serrulatum</i>	Native
Coin vine	<i>Dalbergia escastaphyllum</i>	Non-native
Brazilian pepper	<i>Schinus terebinthifolius</i>	Non-native
Carrotwood	<i>Cupaniopsis anacardioides</i>	Non-native

Mesic flatwoods (1.20 acres)

This FNAI assessment is very common in the region and constitutes the largest acreage of habitat on the subject property. The majority of the southern section of the property is defined as a pine flatwood community. The dominant species include slash pine, cabbage palm, live oak, saw palmetto, and swamp fern. There are numerous exotic plant species that have infested this assessment area including Brazilian pepper, earleaf acacia, and carrotwood, among others.

The following is a list of the dominant native and non-native plant species identified on the subject property located within this assessment area:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Designation</u>
Slash pine	<i>Pinus elliotti</i> var. densa	Native
Live oak	<i>Quercus virginiana</i>	Native
Cabbage palm	<i>Sabal palmetto</i>	Native
Saw palmetto	<i>Serenoa repens</i>	Native
Grape vine	<i>Vitis rotundifolia</i>	Native
Catbrier	<i>Smylax</i> spp.	Native
Brazilian pepper	<i>Schinus terebinthifolius</i>	Non-native
Earleaf acacia	<i>Acacia auriculiformis</i>	Non-native
Carrotwood	<i>Cupaniopsis anacardioides</i>	Non-native

Developed (1.45 acres)

This FNAI assessment consists of land that has been altered due to human activities from the Phase III site development activities including construction parking lot, access road, and other land clearing activities that removed the existing vegetation. This resulted in open, cleared areas



void of vegetation, allowing for infestation of exotic plant species. This FNAI area is limited to the north-west and north-central sections of the subject property.

The following is a list of the dominant native and non-native plant species identified on the subject property located within this assessment area:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Designation</u>
Pricklypear	<i>Opuntia humifosa</i>	Native
Brazilian pepper	<i>Schinus terebinthifolius</i>	Non-native
Earleaf acacia	<i>Acacia auriculiformis</i>	Non-native
Guinea grass	<i>Panicum maximum</i>	Non-native
Ragweed	<i>Ambrosia ssp.</i>	Non-native
Oxeye daisy	<i>Wedelia trilobata</i>	Non-native

WETLAND ECOSYSTEM

Wetland protection is mandated under both federal and state regulations. The U. S. Army Corps of Engineers (USACE) regulates activities in Waters of the United States pursuant to the Clean Water Act (PL92-500, Section 404) as further defined in the ACOE regulatory program (33 CFR 320-330).

The State of Florida Department of Environmental Protection (FDEP) has established wetland identification and permitting processes at Chapter 62-330, and 62-340, and 62-312 of the Florida Administrative Code (FAC). Current federal and state wetland definitions are derived from the original definition found in 33 CFR 328.3, identifying wetlands as “those areas that are inundated, or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions”.

Delineation of federally regulated jurisdictional wetlands is determined by the *Corps of Engineers Wetlands Delineation Manual* (USACE Waterways Experiment Station Environmental Laboratory, 1987). Delineation of wetlands regulated by FDEP and South Florida Water Management District (SFWMD) is done according to Chapter 62-340 FAC, Delineation of the Landward Extent of Wetlands and Surface Waters. The *Florida Wetlands Delineation Manual* (Gilbert et al, 1995) serves as a guide to Chapter 62-340. Both manuals, which emphasize the identification of hydric soils, hydrophytic vegetation, and wetland hydrologic conditions in making wetland determinations, were used as a general guide in this investigation.

The only wetland associated with the project site is the adjacent Warner Creek that is a tidally influenced water body located along the southern shoreline of the subject property. The creek itself is open water, and the immediate shoreline is heavily vegetated with red mangrove trees with a heavy understory of exotic and non-native vegetation including Brazilian pepper, coin vine, carrotwood, and other species.



A March 13, 2019 site visit with SFWMD staff confirmed the wetland jurisdictional boundary. Please see the March 28, 2019 letter from SFWMD for detail (Exhibit E).

No impacts to this shoreline and wetland system will occur for the project development, and is not allowed according to the Martin County Comprehensive Plan. In addition, a 75' wide wetland buffer will be required between the creek and the development portion of the project as a protective measure.

The following descriptions reference the FNAI natural communities guide (2010).

Mangrove swamp (0.17 acres)

This FNAI assessment area is comprised of a narrow mangrove shoreline of the subject property adjacent to Warner Creek. This is a tidally influenced water body that is directly connected to the north fork of the St. Lucie River and Intracoastal Waterway. This is a highly sensitive and protected water body. The dominant vegetation is red mangrove, as it sharply aligns this narrow strip of shoreline. An immediate and distinct rise in elevation occurs just landward of the mangrove fringe turning into uplands.

The following is a list of the dominant plant species identified as part of this assessment area:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Designation</u>
Red mangrove	<i>Rhizophora mangle</i>	Native
Coin vine	<i>Dalbergia ecastaphyllum</i>	Non-native
Brazilian pepper	<i>Schinus terbinthifolius</i>	Non-native

RESTORATION/MITIGATION PLANTING PLAN

Any revegetation which might be necessary as a result of exotic vegetation removal or site construction activities shall consist of native plant species representative of the existing native plant community. This will ensure that the Preserve Areas maintain indigenous plant associations. Revegetation plans shall be included in the Restoration/Mitigation Planting Plan prepared as part of the EA.

Native Revegetation Plant Schedule

Common Name	Botanical Name	Size & Spacing	Habitat
Wire grass	<i>Aristida stricta</i>	1 gallon; 2' on center	Upland
Sand cord grass	<i>Spartina bakeri</i>	1 gallon; 2' on center	Upland
Saw palmetto	<i>Serenoa repens</i>	1 gallon; 2' on center	Upland
American beautyberry	<i>Callicarpa Americana</i>	1 gallon; 2' on center	Upland
Myrsine	<i>Rapanea punctata</i>	1 gallon; 2' on center	Upland
Dahoon holly	<i>Ilex cassine</i>	3 gallon; 5' on center	Upland
Slash pine	<i>Pinus elliotti</i> var.densa	3 gallon; 5' on center	Upland



SOILS

The following are the soils and their descriptions found throughout the project site according to the Martin County Soil Survey. Please see attached Exhibit C, Soil Survey.

7 – Paola and St. Lucie sands: This is a nearly level to sloping soil that is excessively drained. It is common on the coastal ridge and in isolated knolls in the coastal area. The water table is below a depth of 72 inches throughout the year and permeability is very rapid. Natural vegetation associated with this soil type include sand pine, scrub oak, rosemary, saw palmetto, running oak, cacti, mosses and lichens.

THREATENED AND ENGANGERED SPECIES

The State of Florida Fish and Wildlife Conservation Commission (FWC) regulates protected species according to Rule 68A-27.001(3), Florida Administrative Code (FAC). The plant and animal species regulated by FWC are managed according to the federal Endangered Species Act of 1973. On the federal level, the U. S. Fish and Wildlife Service (FWS) is the regulatory agency that oversees this program.

According to the FWS Information for Planning and Consultation (IPaC) web database (<https://ecos.fws.gov/ipac/>), the following table is a list of potential species that may inhabit the region that the subject property is located, but do not necessarily inhabit the subject property due to historic land alterations, current site conditions, and the surrounding environment and adjacent property conditions.

The following table is a list of potential species that may inhabit the region that the subject property is located, but do not necessarily inhabit the subject property due to historic land alterations, current site conditions, and the surrounding environment and adjacent property conditions.

A. Amphibian

Common Name	Scientific Name	Protected Species	
		State	Federal
Not applicable			

B. Birds

Common Name	Scientific Name	Protected Species	
		State	Federal
Southeastern American Kestrel	<i>Falco sparverius paulus</i>	ST	
Bald eagle	<i>Haliaeetus leucocephalus</i>		
Red-cockaded woodpecker	<i>Picoides borealis</i>	FE	E
Scrub jay	<i>Aphelocoma coerulescens</i>	T	T



C. Mammals

Common Name	Scientific Name	Protected Species	
		State	Federal
Not applicable			

D. Reptiles

Common Name	Scientific Name	Protected Species	
		State	Federal
Florida pine snake Eastern indigo snake Gopher tortoise	<i>Pituophis melanoleucus mugitus</i> <i>Drymarchon corais couperi</i> <i>Gopherus polyphemus</i>	SSC FT ST	T

E. Plants

Common Name	Scientific Name	Protected Species	
		State	Federal
Four-petal pawpaw	<i>Asimina tetramera</i>	FE	E

*: Observed on site

FT: Federally-designated Threatened

FE: Federally-designated Endangered

FT(S/A) Federally-designated Threatened species due to similarity of appearance

ST: State-designated Threatened

SSC: Species of Special Concern

Due to the location of the subject property as part of the historic coastal ridge, and the type of habitats associated with it, there are potentially both state and federal listed species that may be impacted by proposed development.

Approximately, 3 gopher tortoise burrows (both active and inactive) were identified on the subject property during this investigation. The burrows were identified in the northern section of the subject property east of the access road in the sand pine scrub habitat assessment area. A gopher tortoise burrow survey will be provided prior to final site plan approval.

Scrub jay is an avian species that is unique to Florida and receives a high level of protection due to its dwindling population. Ideal habitat for the scrub jay includes large areas of scrub oak that have an average height of 3 ½ to 6 ½ feet with significant (10 to 50 percent) open sandy areas and sand pine coverage of less than 20 percent. The subject property is not considered prime habitat for the scrub jay as it is heavily overgrown with tall, mature sand pine trees and scrub hickory. The survey season is limited to March 1 through October 31 according to FWS protocol which includes am or pm surveys for at least 5 consecutive days.

Another terrestrial avian species that may garner some attention is the red-cockaded woodpecker (RCW). RCW habitat is typically comprised of mature longleaf or slash pine forests with wide



spacing between the trees and limited understory plants. The pine flatwood habitat on the subject property is small in size, closely spaced, and has a very dense understory including exotic and nuisance plant species. It is not anticipated that RCW will be identified to inhabit the subject property, or have an impact on site plan approval and site development.

Eastern Indigo Snake (EIS) is a federally listed species that is known to be a commensal species of the gopher tortoise, often occupying the tortoise burrows. FWS has enhanced its protective protocol in the last couple of years and has required monetary contribution as mitigation for impacts to habitat on tracts of land 25 acres or greater in size. It is anticipated that FWS will require standard protection measures prior to and during the construction process.

Water dependent species such as manatees, wood stork, snail kite, among others will not be of concern for this subject property and future project development as no wetlands will be impacted and a 75' wetland buffer is required by Martin County Growth Management Department to protect Warren Creek.

CONCLUSION

Due to the location of the subject property as part of the historic coastal ridge, it includes unique, endangered, threatened, and rare upland native habitat. Specifically, the sand pine scrub habitat located at the more eastern section of the subject property encompasses approximately 1.16 acres. In addition, there is approximately 2.02 acres of mesic flatwoods. According to Martin County Land Development Regulations, 25% of the total site acreage may be required to be preserved on-site if unique, endangered, threatened, or rare upland native habitat exists. As a result, a 75' wide wetland buffer will be provided adjacent to Warner Creek, as well as preserving the sand pine scrub habitat along the east property boundary.

A wetland jurisdictional determination has been issued by SFWMD, and no wetland impacts will occur in order to develop this project and no wetland mitigation will be required.

Prior to site development, a gopher tortoise burrow survey will be performed for the subject property in order to determine if the proposed development will impact individual tortoises. If burrows are identified in the proposed development area of the subject property then an Incidental Taking Permit will be required from FWC, and may require off-site relocation to an approved recipient site.







SITE DATA:

Mesic Flatwood (1.20 acres)

Mesic Hammock (0.61 acres)

Sand Pine Scrub (1.41 acres)

Mangrove Swamp (0.17 acres)

Developed (1.45 acres)

Total Site = 4.84 acres



Ecotone Services
13945 89th Street
Fellsmere, FL
32948
(772) 453-3339

Exhibit B

FNAI Map

Beacon 21 Phase IV
Jensen Beach, Florida

ES Project No: 300.01

Date: 06/28/2019

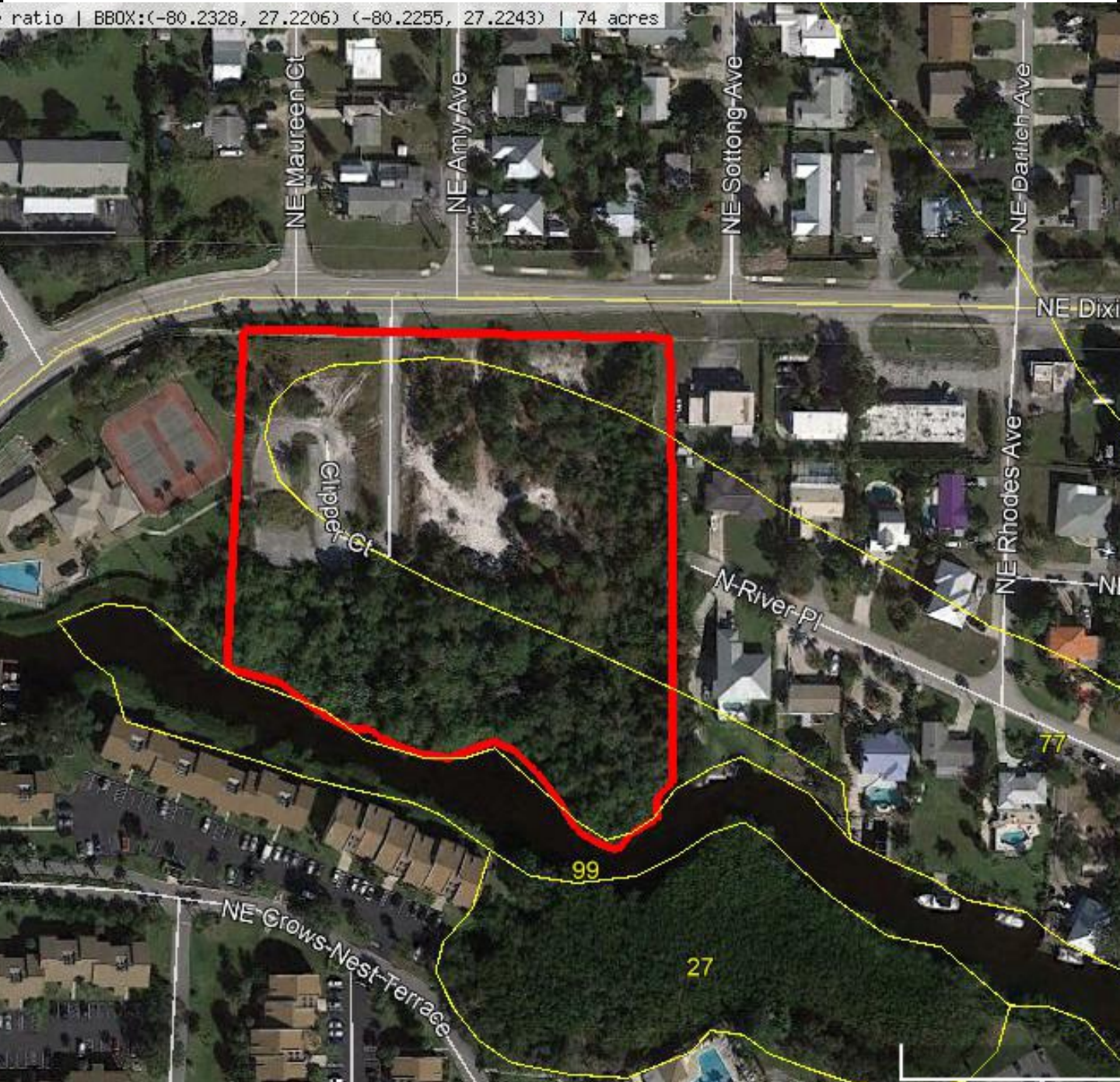
Drawn by: JR
Checked by:

Date: 06/28/2019

Scale: Not To Scale



ratio | BBOX:(-80.2328, 27.2206) (-80.2255, 27.2243) | 74 acres



Ecotone Services
13945 89th Street
Fellsmere, FL
32948
(772) 453-3339

Exhibit C

Soils Map

Beacon 21 Phase IV
Jensen Beach, Florida

ES Project No: 300.01

Date: 01/27/2019

Drawn by: JR
Checked by: TR
Date: 01/27/2019

Scale: Not To Scale



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

March 28, 2019

** Delivered via email*

Abhinov Singh *
OKSJM Jensen, LLC
1890 S Ocean Blvd
Manalapan, FL 33462

Subject: Beacon 21, Phase IV
Application No. 190213-1172
Informal Wetland Determination No. 43-101141-P
Martin County

Dear Mr. Singh:

The District reviewed your request for an informal determination of the jurisdictional wetland and other surface water boundaries within the subject property, which is located as shown on the attached Exhibit 1.0. A joint site inspection was conducted on March 13, 2019.

Based on the information provided and the results of the site inspection, jurisdictional wetlands as defined in Chapter 62-340, Florida Administrative Code, exist on the property. Exhibit 2.0, attached, identifies the boundaries of the property inspected and the approximate landward limits of the wetlands.

This correspondence is an informal jurisdictional wetland determination pursuant to Section 373.421(6), Florida Statutes, and Section 7.3 of Environmental Resource Permit Applicant's Handbook Volume I. It does not bind the District, its agents or employees, nor does it convey any legal rights, expressed or implied. Persons obtaining this informal jurisdictional determination are not entitled to rely upon it for purposes of compliance with provision of law or District rules.

Sincerely,

A handwritten signature in black ink that reads "Barbara Conmy".

Barbara Conmy
Section Leader

c: Jerry Renick, Ecotone Services, Inc *

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website (<http://my.sfwmd.gov/ePermitting>) and searching under this application number 190213-1172.

[Exhibit 1.0 Location Map](#)

[Exhibit 2.0 Wetland Map](#)

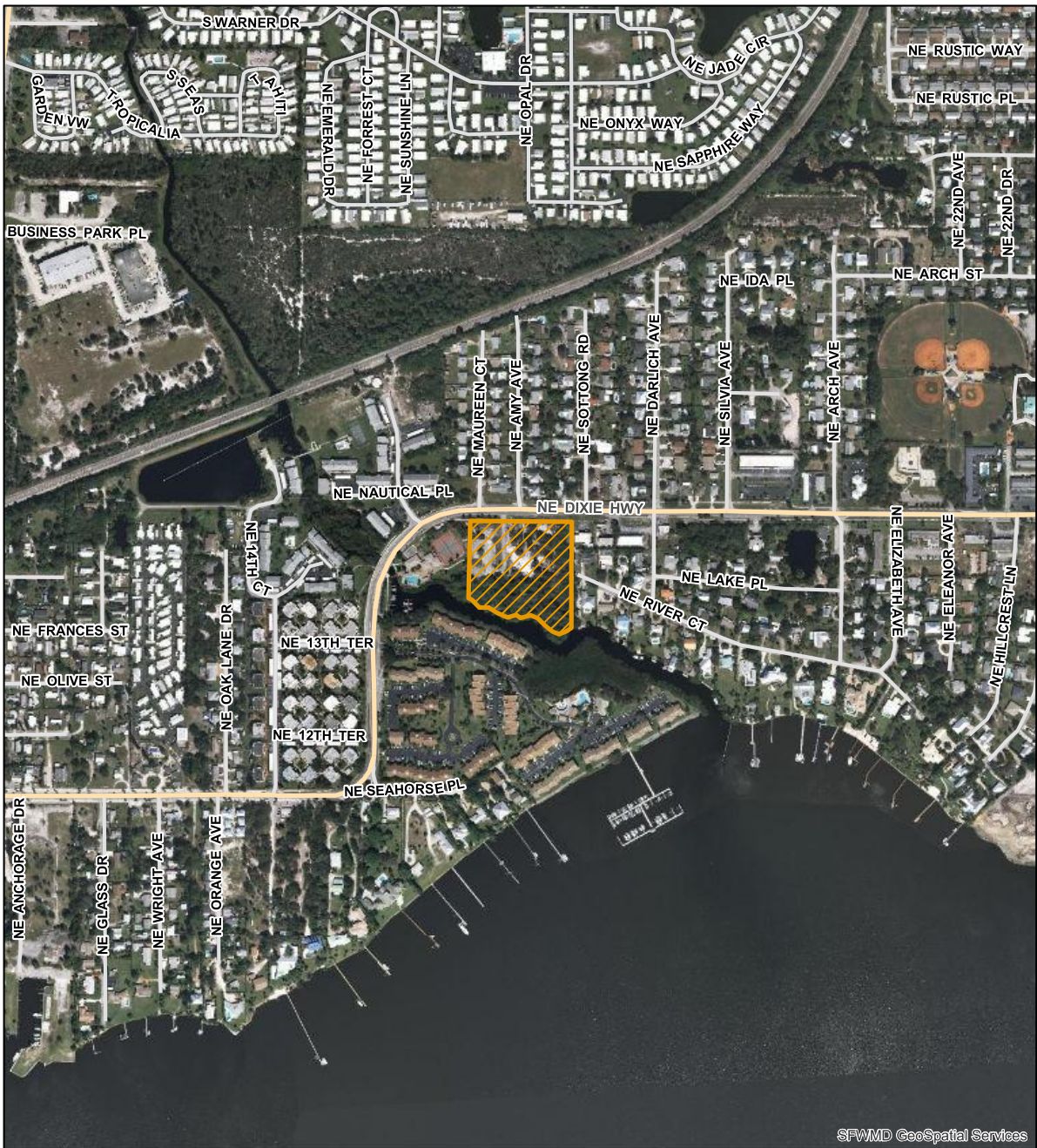







Exhibit No: 1	Exhibit Created On: 2019-02-13	MARTIN COUNTY, FL	<div> Application</div> <div></div>
<div>REGULATION DIVISION</div> <div>Project Name: Beacon 21, Phase IV</div> <div><div><div>05501,100</div><div><div></div></div>Feet</div><div></div></div>			<div>Application Number: 190213-1172</div> <div><div></div><div>Created by IT GIS Section</div><div>South Florida Water Management District</div></div>



Wetland Boundary Line



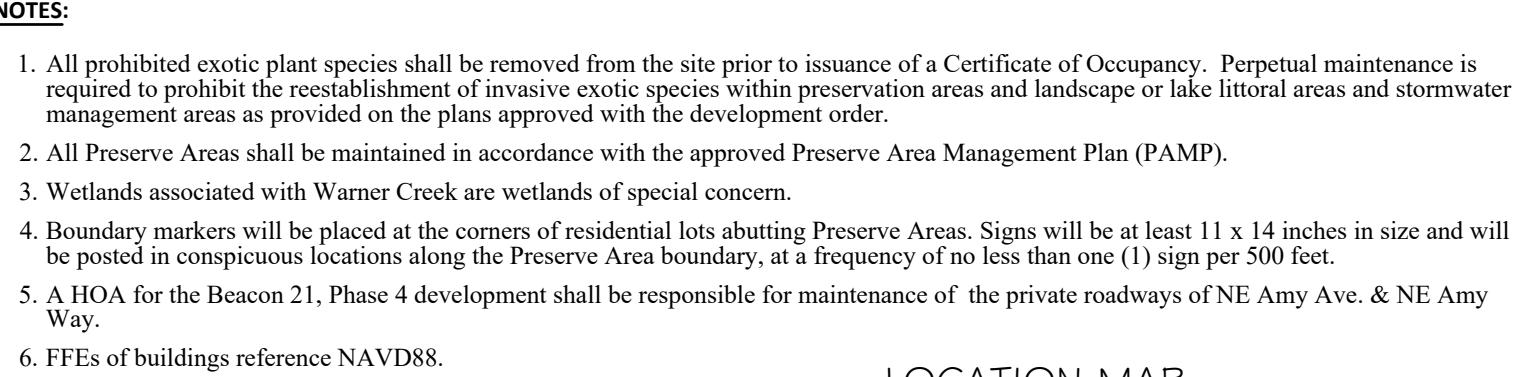
Ecotone Services
13945 89th Street
Fellsemere, FL
32948

Exhibit B Wetland Boundary Map (updated)

Beacon 21 Phase IV
Jensen Beach, Florida

Drawn by: JR
Checked by: TR
Date: 03/25/2019

Scale: Not To Scale



PORT COVE
Martin County, Florida

Drawn By:	SMT
Drawing #:	1022
Date:	04/20/2021
<p align="center">MASTER & FINAL SITE PLAN</p>	

SHEET # SP.1