# PRESERVE AREA MANAGEMENT PLAN

# MARTIN COUNTY GROWTH MANAGEMENT DEPARTMENT ENVIRONMENTAL DIVISION



# <u>Pulte Home Company, LLC</u> <u>HighPointe PUD</u>

Sections 8, 17 Township 39S, Range 41E

Unincorporated Martin County, Florida

Prepared By: EDC, Inc.

This PAMP amends the previous PAMP for Christ

Fellowship approved by the BOCC on 11/19/2013

Approved by/Date : \_\_\_\_\_

# PART I ENVIRONMENTAL ASSESSMENT

### Environmental Assessment Pulte Home Company

### I. Existing Conditions

The proposed project encompasses the 321 acre formerly known as "Martin Preserve", and recently as Christ Fellowship Stuart, and is located in Sections 8 and 17, Township 39S, Range 41E, east of South Fork High School and bounded on the west by C.R. 711. The PAMP for this former project was approved by the BOCC in 2013. The current applicant, Pulte Homes, revising this current PAMP to reflect the updated owner as part of the transfer of ownership as well as updated conservation areas.

The soils within the property have not changed and are listed in the previous EA conducted by others. See soils section of this PAMP for applicable soils information.

The habitat areas and their FLUCCS acreage delineation within the property have not changed since the 2008 approved PAMP. As stated above, those FLUCCS classifications and acreages have been incorporated into this PAMP. The habitat map has been recreated based on the 2008 habitat assessment and approved wetland jurisdictional determinations for the purpose of providing a clear and complete PAMP. Please note that the site has a valid South Florida Water Management District permit (43-01664-P) of which includes the approved jurisdictional wetland delineation.

The intent of this revised PAMP is to amend the site plan from institutional to residential development as well as update the proposed conservation areas.

#### A. Proposed Conditions

The new applicant is proposing to construct a residential development. The development is proposed to be constructed in several phases. Please see the site plan as prepared by Cotleur and Hearing.

The applicant is proposing to increase the total acreage in the previously approved PAMP. The total preserve area currently maintained is 15.89 acres of wetlands, 24.80 acres of wetland buffer, 1.62 acres of wetland buffer restoration, and 66.18 acres of upland preserve. The new applicant will be adding an additional 22.64 acres of upland preserve. Based on this, the site plan will include 88.82 acres of upland preserve and the applicant will set aside a total preserve acreage of 129.51 acres.

	Total Upland Preserve Required	53.23
1888	Wetland Preserve	15.89
<b>BEEEE</b>	Wetland Buffer	24.8
5221	Upland Preserve (Original PAMP)	66.18
	Upland Preserve (Added as Part of PUD)	22.64
	Upland Preserve (Total)	88.82
	Total Preserve Acreage (Wetlands, Wetland buffers, Upland Preserve)	129.51

Figure 1. Preserve Area tabular calculation

### B. Previous Impacts

This property has experienced minor impacts associated with historic agricultural activities. This includes creation of ditches and clearing of land for pasture.

### II. Soils

Based on a review of the USDA Soil Survey of Martin County Area, Florida, the site is composed of:

#16 Oldsmar Fine Sand – This poorly drained soil is found typically in broad areas in the flatwoods. The water table is at a depth of less than 10 inches for 1 to 3 months during the wet season. The soil is well suited for pasture and hay crops.

#17 Wabasso Sand – This soil is a nearly level, poorly drained soil in broad open areas of the flatwoods. The water table is typically as t depth of less than 10 inches for 1 to 2 months during the wet season and at a depth of 10 to 40 inches for 6 months or more.

#20 Riviera Fine Sand – This nearly level soil is poorly drained and has a surficial layer of dark gray sand about four inches thick. The water table is typically at less than 10 inches for two to four inches thick. The water table is typically at less than 10 inches for two to four months of the year. The soil is well suited for pasture and hay crops.

#21 Pineda Sand – This soil is nearly level, poorly drained soil in low grassy flats. The water table is typically at a depth of less than 10 inches for 2 to 6 months during wet seasons, and at a depth of 10 to 40 inches for the remaining time.

#49 Riviera Fine Sand, Depressional – This soil is often in depressions and it has smooth to cncave slopes that range from 0 to 2 percent. The soil is often ponded for six to nine months of the year. The soil is often a component of wetland areas.

#54 Oldsmar Fine Sand, Depressional – This nearly level soil is poorly drained. It is in wet depression in the flatwoods. This soil is ponded for six to nine months during the year and the surface layer is fourteen inches of black muck. The soil is too wet for cultivated crops in its native condition.

#62 Nettles Sand, Depressional – This nearly level soil is poorly drained. It is in depressions and drainageways in the flatwoods. Slopes are smooth and range from 0 to 2 percent. Typically, the surface

layer is about 12 inches thick. The water table is at a depth of 10 to 40 inches for 4 to 6 months or more during most years. It is a depth of less than 10 inches for 2 to 4 months during wet seasons.

# 63 – Nettles Sand – This nearly level soil is poorly drained. It is found in broad areas of flatwoods, mainly in the northeastern part of the county. Areas are generally quite large, ranging up to 2,000 acres. Slopes are smooth and range from 0 to 2 percent. The water table is at a depth of 10 to 40 inches for 4 to 6 months or more during most years. It is at a depth of 10 inches for 2 to 4 months during wet seasons.

#64 EauGallie Fine Sand – This soil is a nearly level, poorly drained soil in broad open areas of the flatwoods. The water table is typically at a depth of less than 10 inches for 2 to 4 months during wet seasons, and within a depth of 40 inches for more than 6 months.

### **III. Existing Habitat/FLUCCS**

#### A. Wetland Habitats

Per the approved Martin Preserve PAMP and SFWMD Permit, multiple wetland areas exist within the limits of the parcel. Wetland habitats and acreages are as follows: #621 Cypress (1.81 acres) #641 Freshwater Marsh (9.23 acres) #643 Wet Prairie (4.85 acres)

#### **B.** Upland Habitats

As described in the currently approved Martin Preserve PAMP, upland portions of the site are comprised of Improved Pasture, Rural Lands in Transition, Brazilian Pepper, Pine Flatwoods and Disturbed Lands. An upland preserve of  $\pm 39.12$  acres of Pine Flatwoods and  $\pm 24.8$  acres of wetland buffer was proposed as part of the Martin Preserve project. The upland preserve is totaled of 41.38 acres.

As indicated in previously approved PAMP covering this property, identified upland classifications have been previously approved as the following FLUCCS categories:

#211 Improved Pasture (54.6 acres)
#411 Pine Flatwoods (212.9 acres)
#741 Rural Lands in Transition (25.7 acres)
#422 Brazilian Pepper (1.2 acres)

These classifications remain relevant with this project.

#### **C. Other Classifications**

The previously approved PAMP additionally lists the following other land classifications:

#510 Streams and Waterways – (1.4 acres)
#524 Lakes Less Than 10 AC. (4.9 acres)
#830 Utilities (2.3 acres)

These Classifications also remain relevant today.

#### **IV. Wildlife Observations**

The qualified biologists with EDC, Inc. have conducted multiple site visits for the purposes of conducting wildlife surveys. Site visits were conducted annually from 2012 to as recent as May 2019. During these surveys pedestrian transects were made throughout the parcel for the observation of wildlife, scat, tracks, nesting areas, dens, and burrows. Please see the enclosed wildlife transect map. As wildlife populations and nesting/breeding locations change over time and this is a large site with upland and wetland preserves capable of supporting various species of both listed and non-listed flora and fauna, additional wildlife surveys will need to be conducted prior to the construction of each phase in order to ensure adequate protection of species habitats. During Crossroads site visit in February 2013 gopher tortoise burrows, listed as threatened by the state were observed on the property. A gopher tortoise survey was conducted across 15% of the total site that contained suitable gopher tortoise habitat. Areas considered to be of suitable were determined bases on the definition as stated in the Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permitting Guidelines Issued April 2008, Revised September 2012, 2017. The 15% survey was also conducted in accordance with these same guidelines. Additional wildlife sightings include:

Reptiles:Gopher Tortoise (Gopherus polyphemus), Black Racer (Coluber constrictor<br/>priapus)Amphibians:NoneMammals:Raccoon Tracks (Procyon lotor), Feral Hog (Sus scrofa), Deer Tracks<br/>(Odocoileus virginianus), Coyote (Canis latrans), Armadillo Dens (Dasypus<br/>novemcinctus)Aves:Mocking Bird (Mimus polyglottos), Blue Heron (Ardea Herodias) Black Bird<br/>(Agelaius sp, Black Vulture (Coragyps atratus), Red Shouldered Hawk (Buteo lineatus)

### V. Protected Species

EDC, Inc. conducted a pedestrian survey throughout the property to investigate for the presence of any plant or animal listed species in March and September of 2020. Gopher tortoise burrows, listed by the state as a threatened species were observed. See the enclosed gopher tortoise map for locations of burrows and survey transects. All gopher tortoises will be protected in accordance with the Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permitting Guidelines Issued April 2008, Revised September 2012, 2017. As this is a phased project 100% surveys will be conducted within the limits of each phase prior to issuance of a land clearing permit in accordance with Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permitting Guidelines Issued April 2008, Revised September 2012, 2017 or most current supplement.

Additionally, a database search request was made to the FFWCC for any documented occurrences of listed species or critical/imperiled habitats. A database search request from FFWCC indicates no recorded species occurrence the subject property. However, the FFWCC search request letter does indicate that there are documented occurrences of the Eastern Indigo Snake and other species listed by FNAI off the property to the east of the Florida Turnpike, critical habitats for the Coopers hawk and Swallow tailed kite are located within the project area, and priority wetlands within the limits of the property. While neither the Coopers hawk nor Swallow tailed kite bird species are state or federally listed as threatened or endangered, they utilize forested cypress systems for nesting, foraging, and roosting. All cypress wetlands are proposed for preservation and enhancement through land management (exotic plant removal) as well as water quality improvements through the installation of a surface water management system. The current ecological state of the onsite cypress wetlands are good to moderate with varying infestations of Old World Climbing Fen and Brazilian pepper. Management for these exotic plant species will serve to greatly improve the existing habitat for both the Coopers hawk and swallow tailed kite. The U.S. Fish and Wildlife Information Planning, and Conservation System (IPAC) was also consulted. A list of twenty-nine (29) potential species was generated as part of this on line database search. During pedestrian transects no Federal listed species were observed. Also, specifically, no Coopers hawk or

swallow tailed kites were observed either foraging or nesting on the property. This list is included in the appendix of this document.

### VI. Restoration/Mitigation/Firewise Plan

### A. Eradication of Nuisance and Exotic Vegetation

Exotic vegetation is present inside the wetland buffer preserve areas in varying quantities ranging from minor cluster to areas of 100% spot coverage. All nuisance and exotic vegetation as listed by the Florida Exotic Pest Plant Council will be eradicated from the preserve area.

- All Brazilian pepper trees and other woody exotics will be eradicated by cutting of the trunk and treatment of the stump with an appropriately labeled herbicide. All vegetative debris will be removed from preserve areas and disposed of off-site.
- The criterion for completion of the woody exotic eradication will be 100 percent kill. If initial eradication efforts do not achieve this criterion, follow up treatment will be conducted.
- Any debris removed will be handled in accordance with the disposal specifications.
- All eradication of non-woody exotic vegetation will be through application of appropriately labeled herbicide.
- The criterion for acceptance of eradication for all non-woody exotic vegetation will be 100 percent kill. If initial eradication efforts do not achieve this criterion, follow up treatment will be conducted
- The exotic vegetation eradication in the preservation area could generate minimal vegetative debris that requires disposal. There will be a staging and storage area provided adjacent to the preservation area on the proposed project site, outside the limit of the preserve.
- Transport of vegetative debris from the preservation area to the staging area will be conducted in a fashion that minimizes the distribution and dispersal of seeds from such debris.
- No cut exotic or nuisance vegetative material will be left in the wetland preservation area.
- All vegetative debris, either whole or chipped/mulched will be hauled off site and disposed of at a landfill or other such appropriately licensed facility.

Herbicides are required for the treatment of all stumps of woody vegetation to prevent regrowth, and for eradication of non-woody exotic and nuisance vegetation.

- All herbicide application activity will be conducted under the supervision of a Florida Agriculture licensed applicator, licensed for application of aquatic herbicides.
- All herbicides applied within the wetland area must be properly labeled for application in wetlands.
- All herbicide applied must include a visible tracer dye in the mix to facilitate observation of treated vegetation.

### **B.** Replanting with Native Wetland/Transitional/Upland Vegetation

Re-vegetation - Any re-vegetation which might be necessary as a result of exotic vegetation removal shall consist of native plant species representative of the existing native plant community. This will ensure that the Preserve Areas maintain indigenous plant associations. Re-vegetation plans shall be submitted to the Martin County Environmental Planning Administrator for approval prior to implementation.

### 1. Restoration of Wetland Buffer Preserve Areas

The wetland buffer preserve contains a mixture of native and exotic vegetation. Maintenance activities will include the eradication of exotic invasive vegetation. If re-vegetation is required post exotic removal the plant material will consist of similar species currently found within the wetland buffer areas. Any re-vegetation efforts will achieve 80% coverage of native vegetation within 18 months

post restoration. The actual plant material quantities will be a site-specific decision. However, the following plant list has been established for the site and is based on observations of the on-site wetland species composition.

The quantities listed are for 0.10 acres of wetland buffer planting (if necessary). The actual quantities may vary depending on the size and nature of the area to be planted (if required).

Common Name	Scientific Name	Size	Quantity	Size
Slash Pine	Pinus ellottii	10g	3	10' O.C.
Cabbage Palm	Sabal pametto	10g	3	10' O.C
Saw Palmetto	Serenoa repens	3g	5	5' O.C
Wax Myrtle	Myrica cerifera	3g	5	3' O.C
Beauty Berry	Callicarpa americana	3g	20	3' O.C
Sand Cordgrass	Spartina bakeri	1g	15	3' O.C

#### 2. Restoration of Wetland Preserve Areas

The wetland areas within the Pulte Homes property were previously managed as part of an agricultural operation. This type of management has ceased on the property and the wetlands are currently re-vegetating with a variety of native species. Based on this, the applicant will, as part of the continued onsite monitoring, determine if supplemental planting of the wetlands is required within six (6) months of the approval of the revised PAMP.

If supplemental planting is required, the owner will utilize the following planting plan as a base. The quantities listed are for one quarter acre of wetland planting (if necessary). The actual quantities may vary depending on the size and nature of the area to be planted.

Common Name	Scientific Name	Size	Quantity
Soft Rush	Juncus spp.	br	500
Yellow Eyed Grass	Xyris spp.	br	400
Maidencane	Panicum hemitomon	br	450
Swamp Fern	Blechnum serrulatum	br	250
Broom Grass	Andropogon spp.	br	250
Spikerush	Eleocharis spp.	br	500

The vegetative success criteria for the preservation area includes the requirement for 80 percent coverage of desirable vegetation by the end of the second year, and aerial coverage of exotic vegetation at zero percent and nuisance vegetation limited to 5 percent or less. Wetland areas will be monitored as per the attached SFWMD wetland monitoring plan, and the County will be copied on the report submission.

### C. Firewise Clearing Area

As per the approved site plan, vegetation within the firewise noted areas will be managed to reduce the threat of wildfire and create fire management areas at the exterior of the proposed preserve areas. The firewise buffers will not be cleared, however, the native vegetation will allow for access by off-road fire-fighting apparatus. Additionally, dead or storm damaged vegetation will be removed from the firewise buffer areas without required notification to the Martin County Environmental Planning Administrator for approval prior to implementation. Firewise management areas are depicted within the approved site plan. Modifications to the approved firewise management areas must be approved by the Martin County Environmental Planning Administrator prior to implementation.

### VI. Conclusion

The Pulte Homes HighPointe PUD project entails an amendment of the approved Christ Fellowship PAMP and site plan for the development of a residential neighborhood.

Pedestrian surveys were conducted across representative portions of areas proposed for development to investigate for the presence of listed flora and fauna as well as to obtain general habitat and wildlife information. Gopher tortoise burrows, listed by FFWCC as threatened were observed on the property. All gopher tortoises will be protected in accordance with the Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permitting Guidelines Issued April 2008, Revised September 2012, 2017. This will include conducting 100% surveys of all areas proposed for development prior to land clearing and the incorporation of applicable protection measures.

VII. List of Exhibits

Attachment 1: Location Map Attachment 2: Aerial Photograph Attachment 3: Soils Map Attachment 4: FLUCCS/Habitat Map Attachment 5: Previous PAMP Attachment 6: Upland Preserve Map Attachment 7: LAMP

# PART II CONDITIONS

### A. RECORDING

This modified 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, rightof-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 is 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  $11 \times 14$  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 included in the original PAMP for the project (attached).

### 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 to 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 birdwatching 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.

### 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 offroad 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.

<u>**Revegetation**</u> - 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.

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.

<u>Vegetation Removal</u> - 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 Countyapproved recycling facility.

<u>**Prescribed Burns</u>** - 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.</u>

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

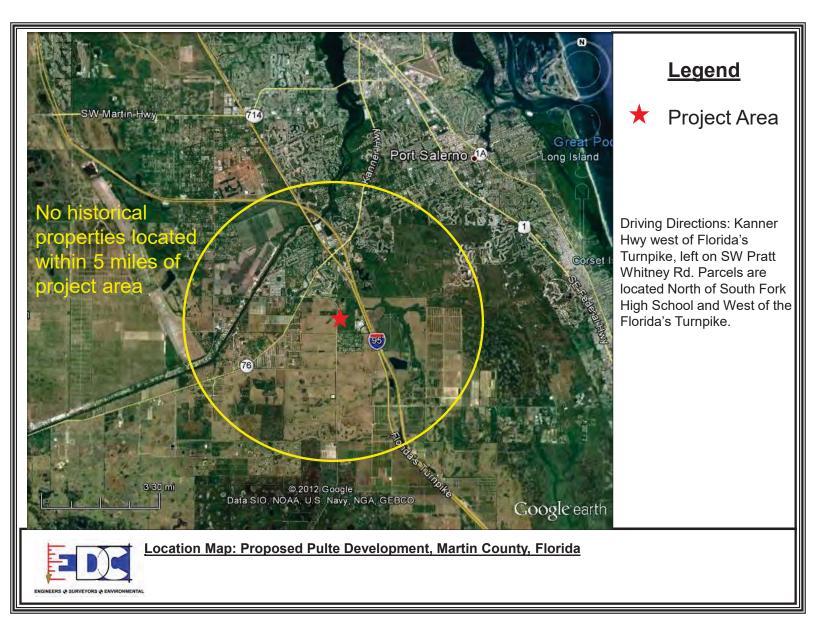
If a protected species survey conducted as part of the Environmental Assessment of the project site indicates the presence of protected plant or animal species, the Environmental Assessment will include a Protected Species Management Plan. This Plan will include the results of the protected species survey; 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.

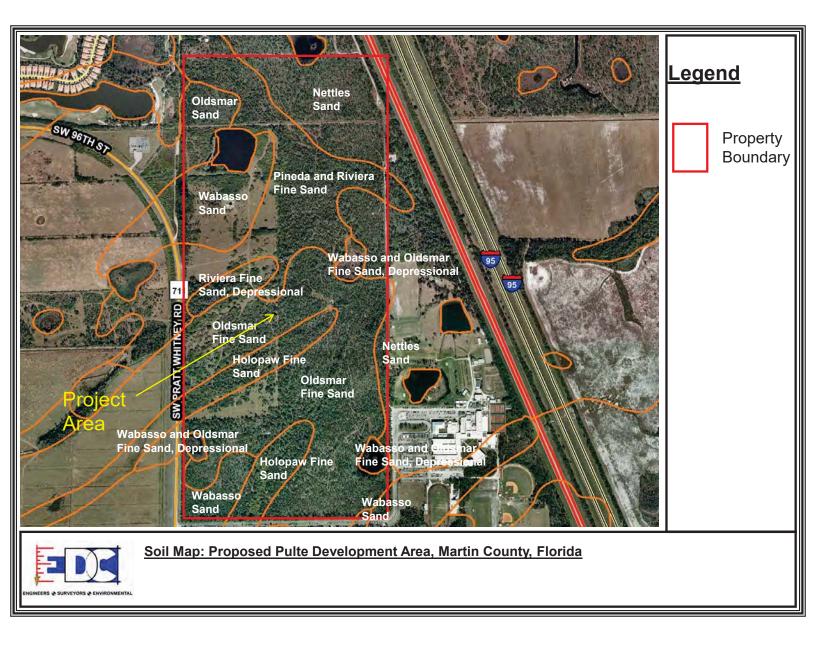
### N. INSPECTIONS AND ENFORCEMENT

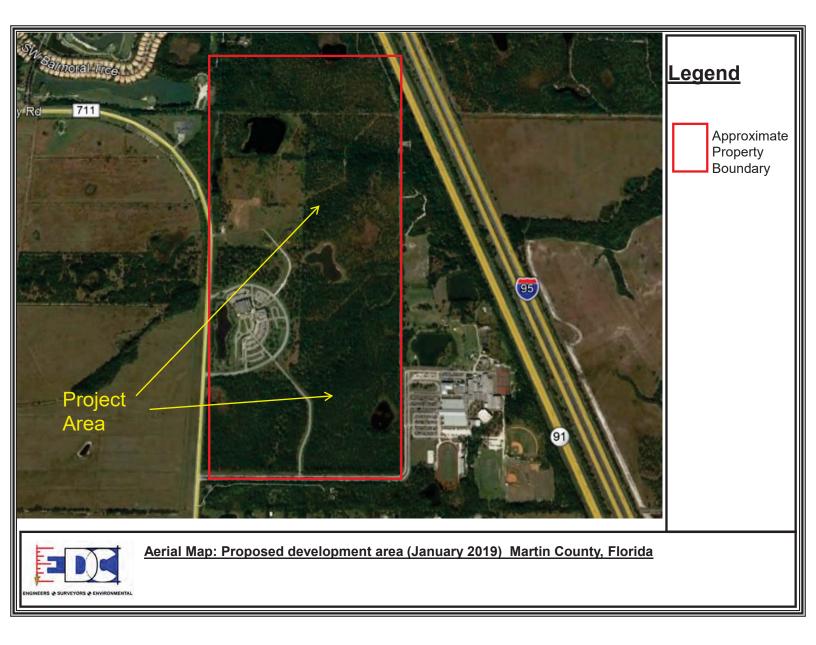
Martin County is authorized to inspect any County regulated site or appurtenance. Duly authorized representatives of Martin County may, at any time, upon presenting proper identification, enter upon and shall be given access to any premises for the purpose of such inspection. Martin County shall have 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.

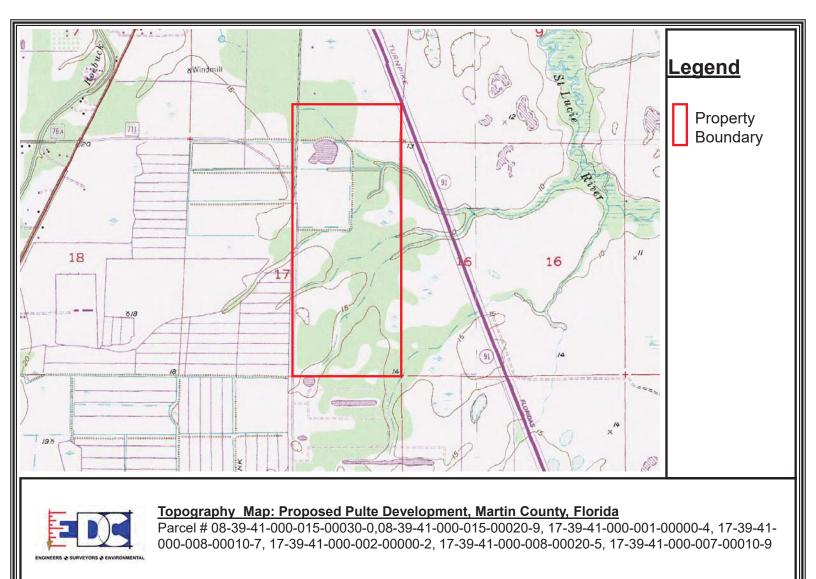
# **APPENDICES**

# UPDATED LOCATION MAPS











## **Natural Resources of Concern**

### This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

SOUTH FLORIDA ECOLOGICAL SERVICES FIELD OFFICE 1339 20TH STREET VERO BEACH, FL 32960 (772) 562-3909 http://fws.gov/verobeach

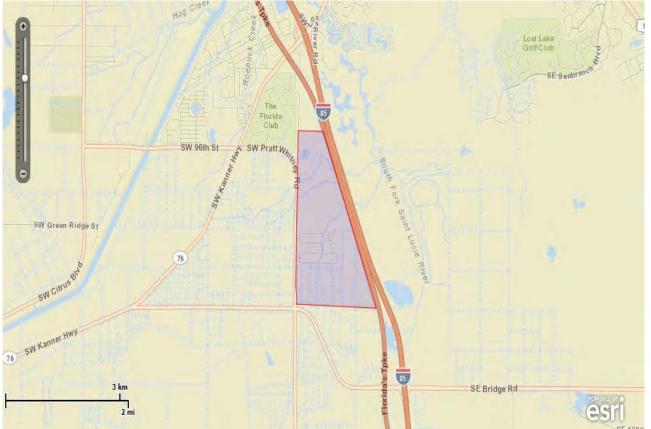
### **Project Name:**

Christ Fellowship



## **Natural Resources of Concern**

### **Project Location Map:**



### **Project Counties:**

Martin, FL

### Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-80.2623032 27.0911345, -80.2556084 27.0909816, -80.2417038 27.0585852, -80.2628181 27.0593419, -80.2626551 27.0607253, -80.2629898 27.0625598, -80.2623032 27.0911345)))

## Project Type:

Development



## **Natural Resources of Concern**

### Endangered Species Act Species List (<u>USFWS Endangered Species Program</u>).

There are a total of **29** threatened, endangered, or candidate species, and/or designated critical habitat on your species list. Species on this list are the species that may be affected by your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species. Please contact the designated FWS office if you have questions.

### Species that may be affected by your project:

Birds	Status	Species Profile	Contact
Audubon's Crested caracara ( <i>Polyborus plancus audubonii</i> ) Population: FL pop.	Threatened	species info	South Florida Ecological Services Field Office
Everglade Snail kite ( <i>Rostrhamus sociabilis plumbeus</i> ) Population: FL pop.	Endangered	species info	South Florida Ecological Services Field Office
Florida scrub-jay (Aphelocoma coerulescens)	Threatened	species info	South Florida Ecological Services Field Office
Ivory-Billed woodpecker ( <i>Campephilus principalis</i> ) Population: entire	Endangered	species info	South Florida Ecological Services Field Office
Kirtland's Warbler (Dendroica kirtlandii)	Endangered	species info	South Florida Ecological Services Field Office
Piping Plover ( <i>Charadrius melodus</i> ) Population: except Great Lakes watershed	Threatened	species info	South Florida Ecological Services Field Office
Red Knot (Calidris canutus ssp. rufa)	Candidate	species info	South Florida Ecological Services Field Office
Red-Cockaded woodpecker ( <i>Picoides borealis</i> )	Endangered	species info	South Florida Ecological Services Field Office



## **Natural Resources of Concern**

Whooping crane ( <i>Grus americana</i> ) Population: U.S.A. (CO, ID, FL, NM, UT, and the western half of Wyoming)	Experimental Population, Non- Essential	species info	South Florida Ecological Services Field Office
Wood stork ( <i>Mycteria americana</i> ) Population: AL, FL, GA, SC	Endangered	species info	South Florida Ecological Services Field Office
Fishes			
Smalltooth sawfish (Pristis pectinata)	Endangered	species info	South Florida Ecological Services Field Office
Flowering Plants			
Beach jacquemontia ( <i>Jacquemontia reclinata</i> )	Endangered	species info	South Florida Ecological Services Field Office
Four-Petal pawpaw (Asimina tetramera)	Endangered	species info	South Florida Ecological Services Field Office
Johnson's seagrass (Halophila johnsonii)	Threatened	species info	South Florida Ecological Services Field Office
Lakela's mint (Dicerandra immaculata)	Endangered	species info	South Florida Ecological Services Field Office
Tiny polygala (Polygala smallii)	Endangered	species info	South Florida Ecological Services Field Office
Insects			
Florida Leafwing Butterfly (Anaea troglodyta floridalis)	Candidate	species info	South Florida Ecological Services Field Office
Miami Blue Butterfly (Cyclargus thomasi bethunebakeri)	Endangered	species info	South Florida Ecological Services Field Office



## **Natural Resources of Concern**

Lichens			
Florida Perforate cladonia ( <i>Cladonia perforata</i> )	Endangered	species info	South Florida Ecological Services Field Office
Mammals			
Florida panther (Puma concolor coryi)	Endangered	<u>species info</u>	South Florida Ecological Services Field Office
puma ( <i>Puma concolor</i> ) Population: FL	Similarity of Appearance (Threatened)	<u>species info</u>	South Florida Ecological Services Field Office
Southeastern Beach mouse (Peromyscus polionotus niveiventris)	Threatened	<u>species info</u>	South Florida Ecological Services Field Office
West Indian Manatee (Trichechus manatus)	Endangered	species info	South Florida Ecological Services Field Office
Reptiles			
American alligator (Alligator mississippiensis)	Similarity of Appearance (Threatened)	species info	South Florida Ecological Services Field Office
American crocodile ( <i>Crocodylus acutus</i> ) Population: FL pop.	Threatened	species info	South Florida Ecological Services Field Office
Eastern Indigo snake (Drymarchon corais couperi)	Threatened	species info	South Florida Ecological Services Field Office
Green sea turtle ( <i>Chelonia mydas</i> ) Population: FL, Mexico nesting pops.	Endangered	species info	South Florida Ecological Services Field Office
Hawksbill sea turtle (Eretmochelys imbricata)	Endangered	species info	South Florida Ecological Services Field Office



## **Natural Resources of Concern**

Leatherback sea turtle	Endangered	species info	South Florida
(Dermochelys coriacea)			Ecological Services
			Field Office

### FWS National Wildlife Refuges (<u>USFWS National Wildlife Refuges Program</u>).

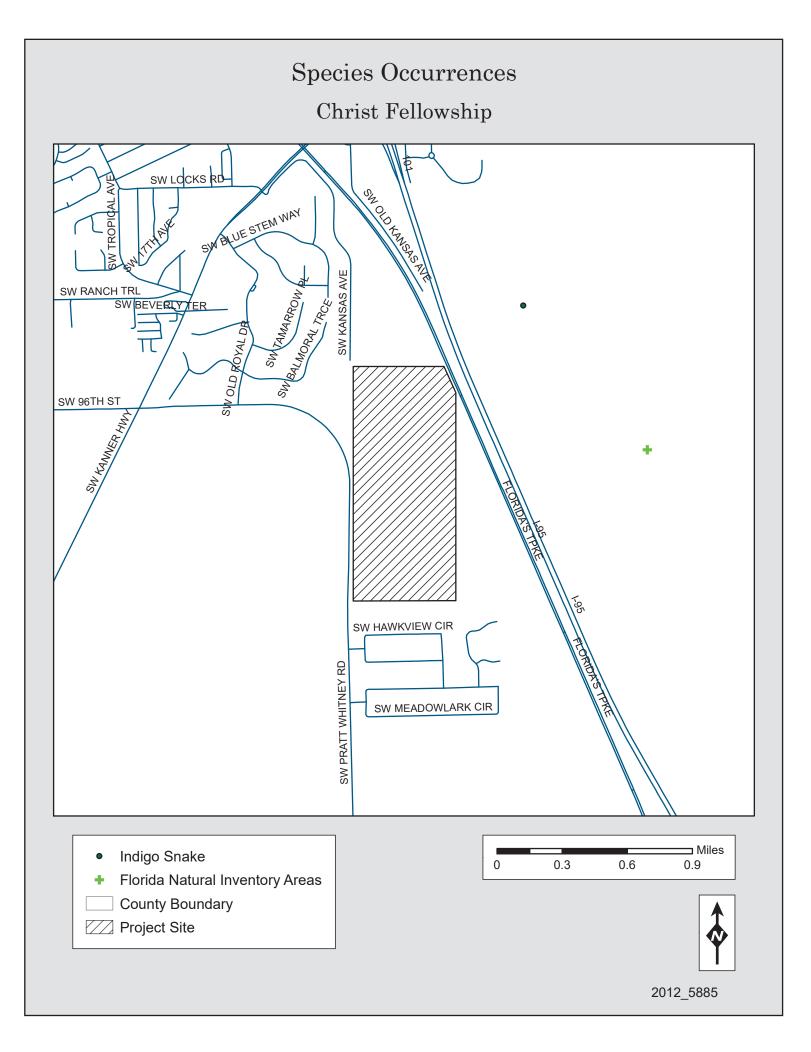
There are no refuges found within the vicinity of your project.

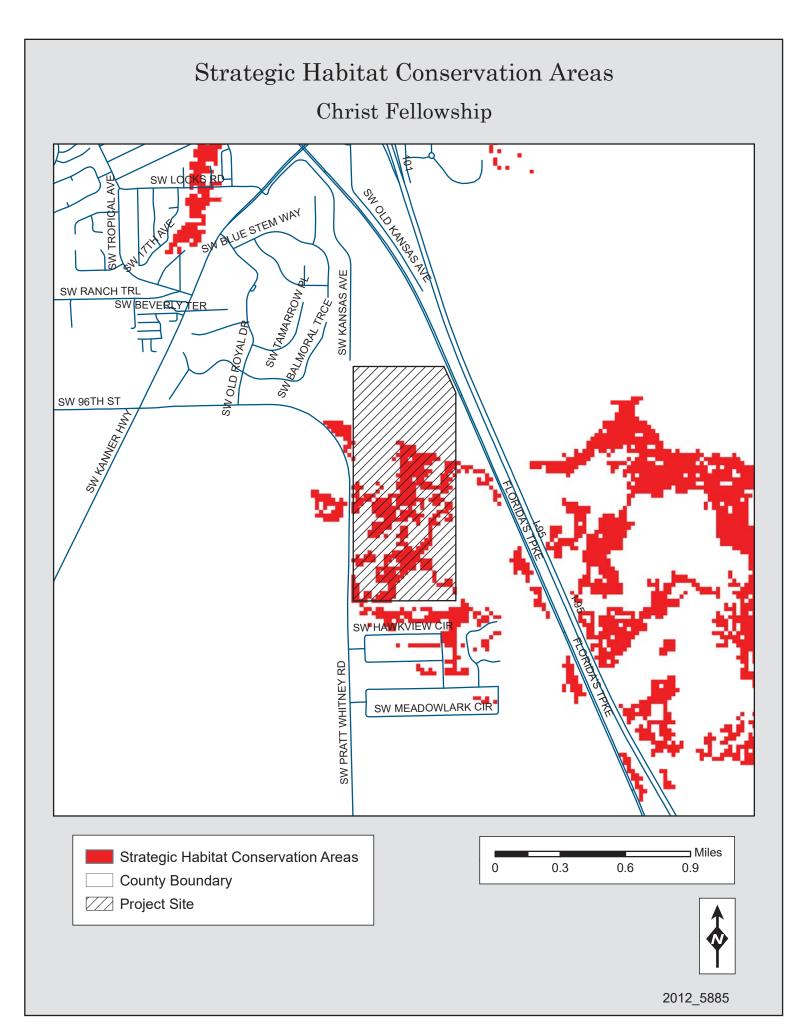
### FWS Migratory Birds (<u>USFWS Migratory Bird Program</u>).

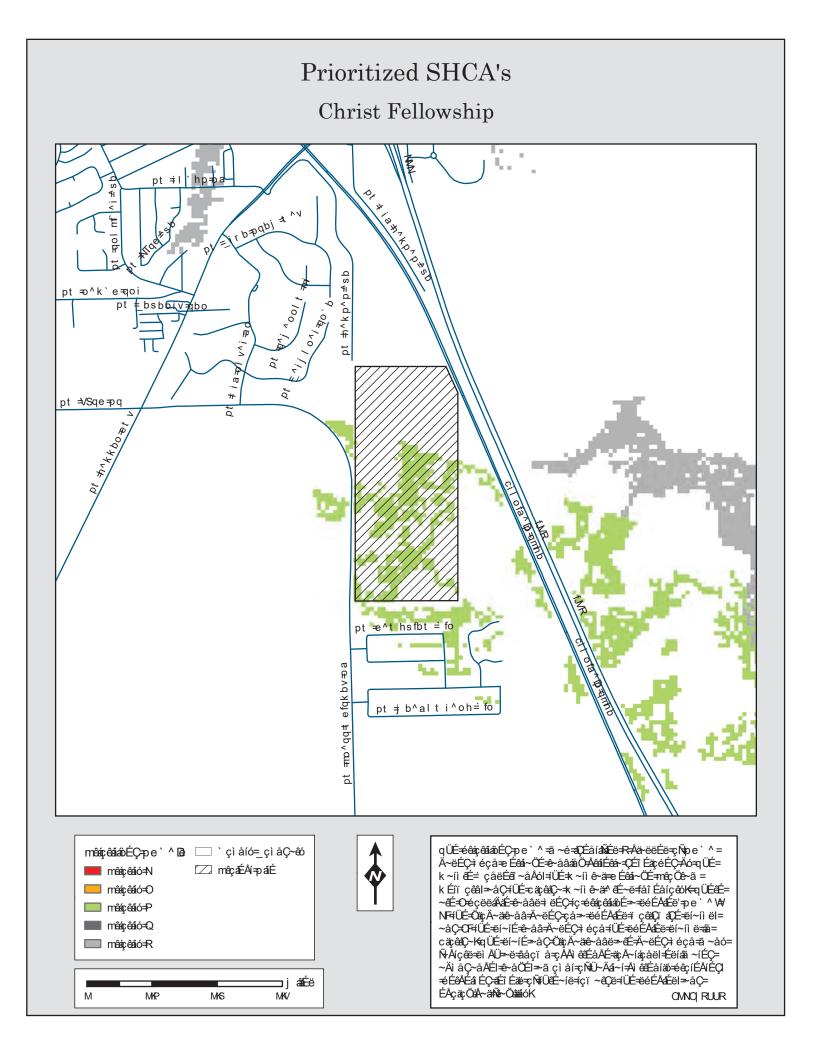
Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the <u>Bald and Golden Eagle Protection Act</u> (16 U.S.C. 668). The Service's <u>Birds of Conservation Concern (2008)</u> report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

### NWI Wetlands (<u>USFWS National Wetlands Inventory</u>).

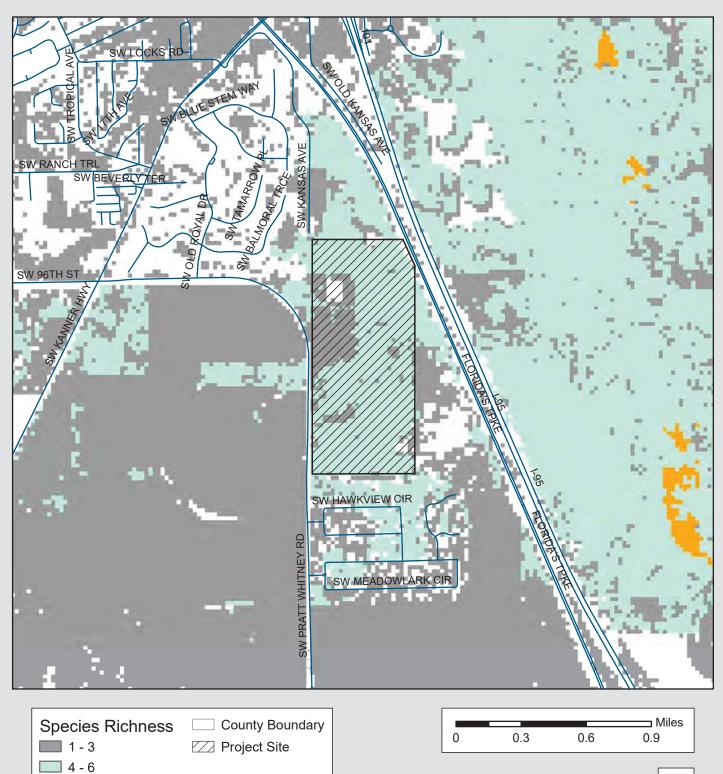
The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.







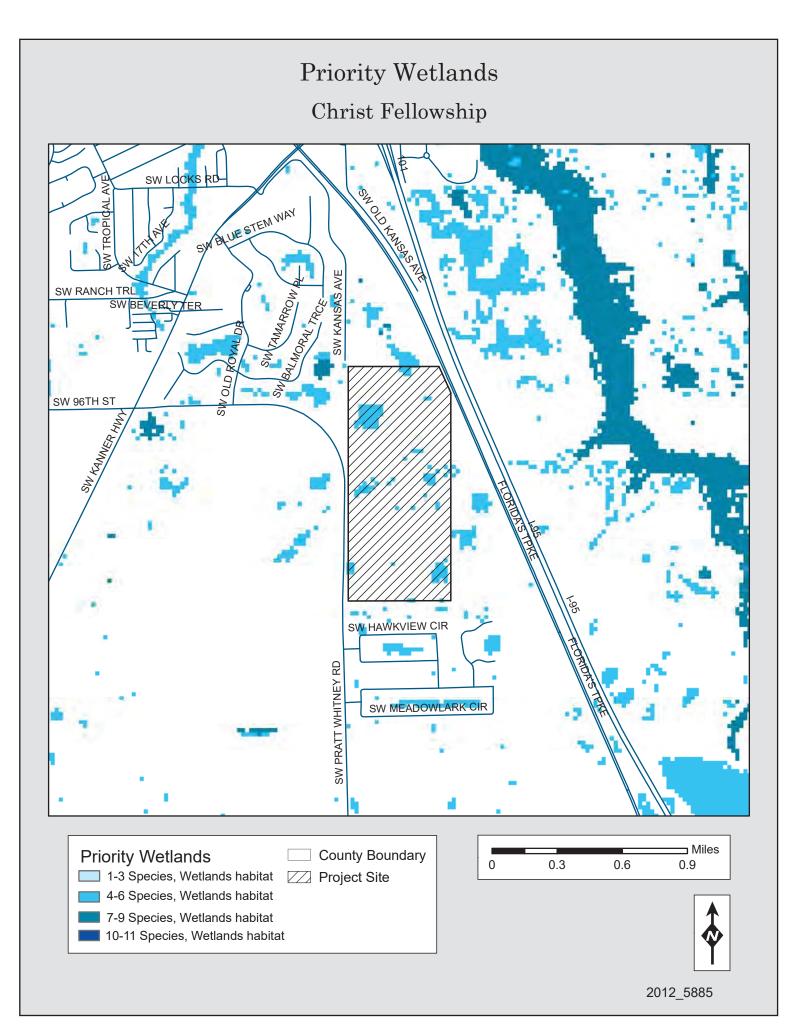
## Species Richness Christ Fellowship



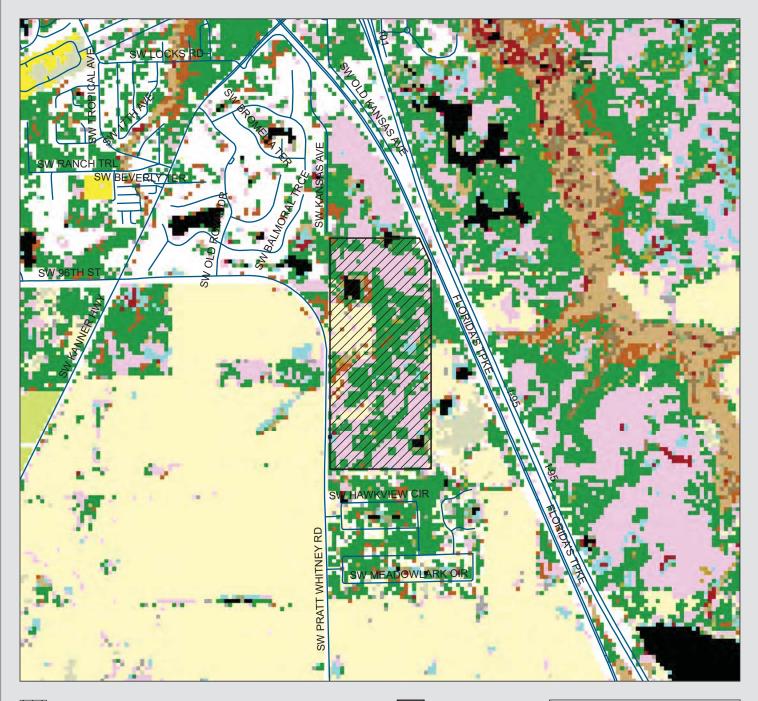
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## Florida Land Cover - 2003 Christ Fellowship



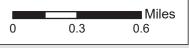
# Project Site







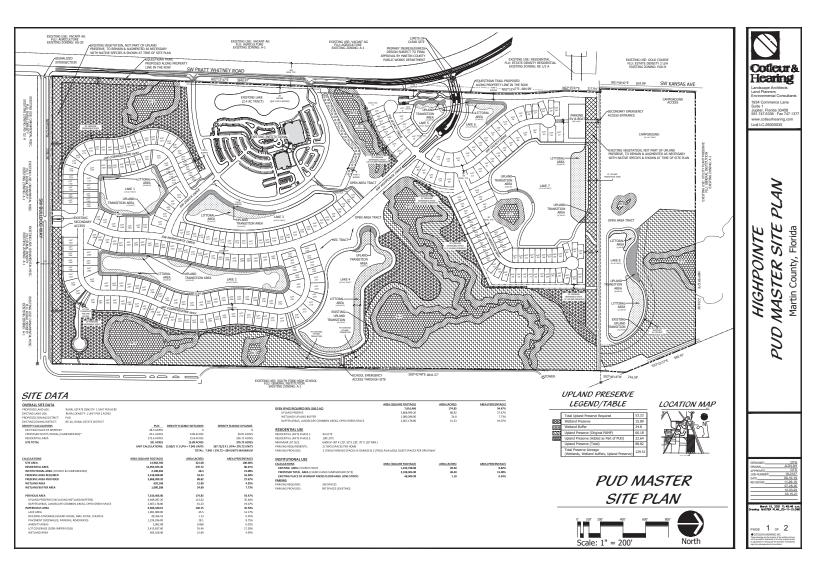
- County Boundary
- Tidal Flat Open Water Shrub and Brushland Grassland Bare Soil/Clearcut Improved Pasture Unimproved Pasture Other Agriculture Citrus Exotic Plants High and Low Impact Urban Extractive





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# PROPOSED UPLAND PRESERVE MAP





ALL OF TRACTS 1, 2, 7, 8, 9, 10 AND THE NORTH THR MARTIN COUNTY), FLORIDA. THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 6, PUBLIC RECORDS OF PALM BEACH COUNTY (NOW

R WITH THE SOUTH 834.49 FEET OF THAT PART OF TRACTS 15 AND 16. SECTION 8. TOWNSHIP 39 SOUTH. RANGE 41 EAST. OF SAID PLAT OF TROPICAL FRUIT FARMS. LYING WEST TERLY OF THE RIGHT-OF-WAY FOR FLORIDA'S TURNPIKE.

ALSO EXCEPTING THE 40 FOOT POSTED AND VIEWED RIGHT OF WAY (KANSAS AVENUE) BY DECLARATION OF THE COUNTY COMMISSIONERS OF PALM BEACH COUNTY SEPTEMBER 5, 1923.

L OF THE ABOVE LANDS BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

TH A PORTION OF TRACTS

ING AT THE SOUT RTH 0215/97 EAST (AS A BASIS OF BEJARINGS) ALONG THE WEST LINE OF THE EAST ONE HALF (E 1/2) OF SAID SECTION 17, A DISTANCE OF 461.64 FEET TO A POINT BEING ON THE NORTH LINE OF THE 130 FOOT ORIDA, AS MENTIONED IN THAT CERTAIN WARRANTY DEED RECORDED IN OFFICIAL RECORD BOOK 494, PAGE 2683 OF THE FUBLIC RECORDS OF MARTIN COUNTY, FLORIDA;

EAST ALONG SAID NORTH LINE, A DISTANCE OF 100.08 FEET TO A POINT BEING ON A LINE LYING 100.00 FEET EAST OF AND PARALLEL WITH (AS MEASURED AT RIGHT AN ES) THE WEST LINE OF THE EAST ONE-HALF (E 1/2) OF SAID SECTION 17 AND

TANKE OF 2 940 97 FEET TO THE POINT OF CURWATURE OF A CIRCUMAR CURVE TO THE LEFT

WESTERLY ALONG THE ARC OF SAID CURVE HAVING A RADIUS OF 4,683.75 FEET, A CENTRAL ANGLE OF 68\*22\*46\* FOR A DISTANCE OF 684.99 FEE HALF (E 1/2) OF SAID SECTION 17; THERE NOTH 02'150" EAST ALONG SAID MAULEL LINE, A DISTANCE OF 13/24 FEET TO A ROIT BEING ON THE NORTH LINE OF THE NORTH-BAST ONE-QUARTER (RE 140) OF SAID SECTION 12, ALSO BEING THE SOUTH-LINE OF THE SOUTH-BAST ONE QUARTER (SE 141) OF SECTION 8, TOWNOOF 90 SOUTH, SAME 41 BAST, MAUTH COART, ROBING THE MERICINA THERE (D) COARDS AND OSTANCES BEING CONCERNITIVITI HE BAST BAST OF ANY LINE FOR MAIT TA WHTTNEY ADDA AS DESCRIBED IN OFFICIAL RECORD BOOK 111, MAE 556, OFFICIAL

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INE OF THE SOUTHEAST ONE-QUARTER (SE 1/4) OF SAID SECTION 8; PIKE) AS DEPICTED ON THE RIGHT-OF-WAY MAP FOR THE SUNSHINE STATE PAR THENCE NORTH 89/99/32" EAST ALONG SAID PARALLEL LINE, A DISTANCE OF 2,218.93 FEET TO A POINT BEING ON THE WESTERLY RIGHT-OF-WAY LINE FOR THE SUNSHINE STATE REPARED BY SMITH & GILLEPHIE CONTRACT MUMBER 5.1. SHEET 4.0F.6. DATED JUNE 15, 1955

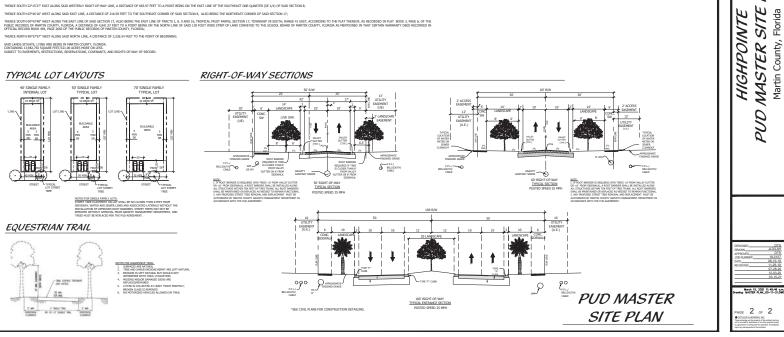
HENCE SOUTH 22°15'27" EAST ALONG SAID WESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 665.97 INT BEING ON THE EAST LINE OF THE SO AST ONE-OUARTER (SE 1/4) OF SAID SECTION 8:

THENCE SOUTH 03%6'16' WEST ALONG SAID EAST LINE. A DISTANCE OF 218.59 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 8. ALSO BEING THE NORTHEAST CORNER OF SAID SECTION 17:

THERE SOUTH UP-VEY WEST ALONG THE EAST LIKE OF SUID SECTION 12, ALD BERING THE EAST LIKE OF THAT'S 1, 4, PAD 16, TROYICAL PRUIT FAMPS, SECTION 17, TOWINGHP 39 SOUTH, RAWEE 41 EXT, ACCORDING TO THE PAT THEREOF, KS RECORDED IN PLAT EXOC 1, PAGE 6, OF THE MILLIE RECORDS OF MAITIN COMPT, REGINAL, ADSTACE OF 4, ALST STATT TO A HOME EASTON ON THE OWNTH LINE OF SADD 18 POOT WIDE STITIP OF LAND COMPLYED TO THE SOLON, BANDO OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STAT DATA (STATISTICAL PROVIDED) THAT EXPONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITAN WARANTY CHED RECORDED IN UP A STATUS OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITANTING IN THAT EXITANT WARANTY CHED RECORDED IN THE SCHOOL BARDON OF MAITIN COMPT, ROBINA S MENTIONED IN THAT EXITANT WARANTY CHED RECORDED IN THE SCHOOL BARDON OF MAITIN COMPT, ROBINA S MENTIONED IN THE SCHOOL BARDON OF MAITIN COMPT, ROBINA S MENTIONED IN THE SCHOOL BARDON OF MAITIN COMPT, ROBINA S MENTIONED IN THE SCHOOL BARDON OF MAITIN COMPT, ROBINA S MENTIONED IN THE SCHOOL BARDON OF MAITIN COMPT, ROBINA S MENTIONED IN THAT

IENCE NORTH 89°5757" WEST ALONG SAID NORTH LINE, A DISTANCE OF 2,536.54 FEET TO THE POINT OF B

SAID LANDS SITUATE, LYING AND BEING IN MARTIN COUNTY, FLORIDA. CONTAINING 13,982,792 SQUARE FEET/321.00 ACRES MORE OR LESS. 9 IRIFCT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, COVENANTS, AND RIGHTS-OF-WAY OF RECORD



Colleur& Hearing

Suite 1 Jupiter, Florida 33458 561.747.6336 · Fax 747.1

PLAN

## Lake Area Management Plan

Prepared For:

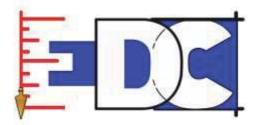
Pulte Homes

Sections 8 and 17, Township 39S, Range 41E

&

Martin County Growth Management

Prepared By:



ENGINEERS @ SURVEYORS @ ENVIRONMENTAL

10250 SW Village Parkway Suite 201 Port St. Lucie, FL 34987

> ©EDC, Inc. March 2021

The following Lake Area Maintenance Plan (LAMP) is provided as an appendix to the PAMP for the Pulte Homes HighPointe PUD project in southern Stuart, Martin County, Florida. It is provided to augment the littoral and the upland transition zone planting plan associated with the onsite lake improvements within the Pulte Homes project. All littoral shelf and transitional zone locations are depicted on the site plan. The following table also appears within the landscape plans for the PUD.

### Table 1: Highpointe PUD Littoral areas.

Lake	Linear Footage	Min Required SF	Provided Littoral Zone SF	Provided Upland Transitional Zone SF	Additional (LZ SF Provided)	Additional (UTZ Provided)
1	1,634	16,340	28,500	17,310	12,160	970
2	3,621	36,210	70,978	36,370	34,768	160
3	2,914	29,140	51,361	29,140	22,221	0
4	3,197	31,970	103,246	93,076	71,276	0
5	848	8,480	9,071	8,480	591	0
6	1,130	11,300	18,363	14,075	7,063	2,775
7	3,267	32,670	92,000	62,700	59,330	0
8	2,375	23,750	51,500	118,295	27,750	2,250
TOTAL	15,719	189,860	425,019	379,446	235,159	6,155

### <u> Plant Material –</u>

The upland transitional zone and littoral planting zone within and adjacent to the constructed lakes will be planted with native material in accordance with the planting plan on the approved site plans and associated detail sheets. Modifications to proposed plant installation material can be completed only after receiving written permission from the Martin County Growth Management Department or their assigns. Plants will be installed in accordance with spacing and hydrological zone reference as depicted on the approved final site plan. Planting of the littoral and upland transitional zone will be done in accordance with the approved South Florida Water Management District (SFWMD) project schedule. Temporary irrigation will be installed for 45 days after the initial planting, if necessary, in order to ensure survival of the plantings. Monitoring will be conducted by an Environmental Professional with experience in restoration ecology. An Environmental Professional familiar with littoral and upland transition zone plant installation shall oversee the installation activity. Please note, specific planting plans for the littoral zone and upland transitional zone are depicted within the landscape plans for the Highpointe PUD project.

### Maintenance of Littoral and Upland Transition Zone Areas -

Littoral and upland transition zone planting areas as shown on the approved final site plan will be kept free of nuisance and exotic vegetation as listed by the Florida Exotic Pest Plant Council. Exotic removal will be conducted through manual removal or the application of appropriate herbicides. All manual eradication will be conducted through hand clearing and non-native material will be disposed of off-site. The criterion for eradication will be the 100% removal of viable exotic vegetation after maintenance activities. If initial activity is not successful in achieving this criterion, additional treatment will be required. Transportation of exotic vegetation out of the maintenance area will be conducted in a fashion to minimize the distribution of seeds. All herbicide application will be conducted under the supervision of a Florida Department of Agriculture (FDA) licensed applicator, licensed for the application of aquatic herbicides. All herbicides applied within the lake system must be properly labeled for such use in accordance with FDA regulations. All herbicide applied in the maintenance area must contain a visible tracer dye in the mix to facilitate observation of treated vegetation.

The vegetative success criteria for the littoral and upland transition zone areas include the requirement for 80 percent coverage of desirable vegetation by the end of the second year (after installation), aerial coverage of exotic vegetation at zero percent, and aerial coverage of nuisance species limited to five percent. After five years, the littoral and upland transition zones will meet the vegetative success criteria of 80 percent coverage of desirable vegetation.

### Littoral and Upland Transition Zone Alteration Provision –

It shall be prohibited to alter the approved slopes, contours, or cross-sections of the upland transition zone or littoral zone after initial planting has occurred without the

permission of the Growth Management Director or his assigns and a modified SFWMD permit (as it pertains to littoral zones). Regular maintenance as outlined above is allowed within the upland transition zone and littoral zone. However, it is the responsibility of the owner, developer, property owners association, it successors or assigns to maintain the required survivorship and native plant coverage of the upland transitional zone and the littoral shelf.

### Littoral and Upland Transition Zone Monitoring -

The littoral and upland transition zones will be monitored in conjunction with the approved SFWMD permit. SFWMD monitoring reports will be submitted to the County within 30 days of completion of monitoring activities.

Martin County is authorized to inspect any County regulated site or appurtenance. Duly authorized representatives of Martin County may, at any time, and upon proper identification, enter upon and shall be given access to any premises for the purpose of such inspection.

### Water Management Procedures -

To ensure the continued viability and health of the littoral and transitional area plantings the lake will be held at or near the prescribed control level elevation in accordance with the approved SFWMD permit. In order to avoid siltation and/or eutrophication, practices such as pumping and the discharge of turbid waste will be avoided. As per Florida's Storm Water Regulatory Program, Best Management Practices (BMPs) will be used both during and after construction to minimize erosion and sedimentation and to properly manage runoff for both storm water quality and quantity. Additionally, the littoral and transitional area plantings will act to stabilize the area, limiting siltation and the probability of eutrophication. Areas of the lake without littoral or transitional plantings with stabilized with sod or grass seed. The system will be operated and maintained in perpetuity in accordance with the approved SFWMD permit.

### **END OF DOCUMENT**