

# PRESERVE AREA MANAGEMENT PLAN

## MARTIN COUNTY GROWTH MANAGEMENT DEPARTMENT ENVIRONMENTAL DIVISION



Paddock of Palm City

Palm City, FL 34990

24-38-40-000-013-00012-0, 24-38-40-000-013-00000-9, 24-38-40-000-004-00010-6

Approved by/Record number: \_\_\_\_\_

# PART I

## ENVIRONMENTAL ASSESSMENT

### 1. Introduction

The Paddock of Palm City project is 8.62 acres located at 3779 Sw 30<sup>th</sup> Ave, Palm City (Parcel ID 24-38-40-000-013-00012-0, 24-38-40-000-013-00000-9, 24-38-40-000-004-00010-6). There is currently a residence on one of the three parcels. The parcels to the east serve as a stormwater treatment area, and west has residences and light commercial.

### 2. Property Description

The property is mostly cleared on the south with dense pine flatwoods making up the north part of the project area. There is an existing residence in the SE corner of the project area, and the southern boundary has Danforth ditch going along it from west to east. There is a retention pond to the east of the site and Martin Hwy to the north.

### 3. Wetlands on and off site.

The site has a ditch going along the southern end of it, no other surface waters or wetlands areas on site. None of the surrounding parcels have any wetlands on site.

### 4. Soil Survey.

Nettles Sand- This is a poorly drained, nearly level soil found in areas of broad flatwoods. Typically the surface layer is 11 inches thick. Black sand comprises the upper 5 inches, very dark gray sand in the next three inches and dark gray sand in the lower 3 inches. Subsurface layer is light gray sand 22 inches thick. The water table is typically at a depth of 10 inches for 2 to 4 months during wet seasons, and at a depth of 10 to 40 inches for 6 months or longer in most years. Natural vegetation includes slash pine, cabbage palm, saw palmetto, wax myrtle, inkberry, fetterbush, creeping bluestem, chalky bluestem, Florida threeawn, and pineland threeawn. This soil has severe limitations for cultivated crops unless water control and other food management practices are provided. This soil has potential for improved pasture grasses and high potential for dwellings without basements, small commercial buildings, and roads.

### 5. Habitat Mapping

1311- Pine Flatwoods (4.22 acres 20% Exotic Coverage)  
Slash Pine (*Pinus densa*)      Saw Palmetto (*Serenoa repens*)

110- Residential (4.40 acres 90% exotic coverage)  
Brazilian Pepper (*Schinus terebinthifolia*) Bahia Grass (*Paspalum notatum*)

## **6. Potential Listed Species.**

### **IPAC Search Results:**

*Florida Panther -Not likely to be found due to fragmented and isolated habitat*

*SE Beach Mouse-N/A*

*Everglades Snail Kite- No Viable Forage*

*Crested Caracara- Few cabbage palms on site to support nesting*

*Florida Grasshopper Sparrow- No viable hábitat*

*Red-cockaded Woodpecker- No Old Growth pine on site to support nesting*

*Whooping Crane- Little viable forage*

*Woodstork- Low potential due to dense vegetation in ditch*

*American Alligator- Low potential due to minimal amount of water found in ditch*

*Eastern Indigo Snake- No tortoise burrows or activity found on site to help support denning*

*Hawksbill, Green, Leatherback sea turtles- N/A*

*Florida Leafwing/Miami Blue/Monarch- Low potential of wildflowers found on site from mowing*

*Beach Jacquemontia- N/A*

*Four-petal Pawpaw- Not found on site, not likely to be found due to mowing*

*Lakela's Mint- No viable habitat on site plus regular mowing prevents recruitment*

*Florida Perforated Cladonia- Not found on site, density of pine flatwoods prevents recruitment*

## **7. Listed Species Survey.**

*A listed species survey was done on December 22<sup>nd</sup>, 2021 using transects to cover 100% of the parcel (See map). No listed species were observed on site, likely due to the clearing and regular mowing in the south and the density of the pine flatwoods to the north. There is relative little forage for wading bird species and wood storks which would be the most likely to use the site given the characteristics of the property. No gopher tortoise burrows or activity was observed, and it is unlikely due to the high water table tortoise usage would be common here. A bald eagle search was done via the FWC nesting GIS raster data as well (See Map). Also included is an IPAC report, please see individual species comments above.*

## **8. Preserve Layout.**

The best quality habitat on the site is located on the western and northern portions of the pine flatwoods on site. The eastern edges were impacted when the retention pond to the east was dug, allowing for exotic concentrations to develop and reduce the quality of the overall habitat. There is a proposed primitive trail that will be done in a manner to have the least impact to the preserve area and maintenance of the trail will be the responsibility of the HOA. Please see plans for more details. Please also see the Lake Area Management Plan as part of this PAMP document, it includes the littoral layout and planting plan for the lake on site. **This will also include Firewise maintenance along the preserve/community buffer to maintain an area in the preserve as a fire break. This will include removing vegetative debris build up, trimming branches overhanging into community yards, as well as maintaining Firewise best management practices (See Section K). The Maintenance of the defensible space shall adhere to the Firewise landscaping guidelines developed by the Florida Forest Service and all other requirements in this section and be part of the Firewise Protection Plan incorporated into the PAMP. (ref. Section 4.35.E.3., LDR)**

## PRESERVE AREA



*PLEASE PROTECT*

*Not to be altered without written permission from Martin  
County BOCC. Please Contact Advanced Restoration Ecology  
772-242-7200 with any questions.*

# **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. 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.

## **B. COMPLIANCE**

The owner(s) of the lands to be preserved/maintained by this Preserve Area Management Plan 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. INSPECTION OF PRESERVE AREA**

Compliance with the terms of this PAMP includes inspections by county staff to ensure PAMP compliance. For any required restoration, the preserve area will be inspected after replanting to verify compliance with the planting plan included as part of this PAMP.

The Preserve Area may be subject to further inspections to ensure environmental integrity and consistency with the provisions of the PAMP.

## **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. 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. The surveyed locations of Preserve Areas will be provided to the Martin County Environmental Planning Administrator in a form compatible for use in the County's GIS mapping system.

## **F. PRESERVE AREA SIGNAGE REQUIREMENTS**

Preserve Area Signs. Preserve areas will be posted with permanent signs. These signs shall be at least 11 x 14 inches in size, be posted in conspicuous locations precisely along the Preserve Area boundary, at a frequency of no less than one (1) sign per 500 feet.

Designs for preserve signs shall be approved by the Martin County Environmental Planning Administrator prior to installation and must be in place prior to the issuance of a building permit for construction on the site.

#### **G. SITE PLAN**

1. Please see site plan

#### **H. SITE CLEARING**

Where clearing of vegetation is permitted (i.e. building envelope, utilities, drainage, road right-of-way, etc.), the developer will ensure that all Preserve Areas are protected with construction barricades and erosion control devices in accordance with the following guidelines.

Construction barricades will be placed at least 5 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 the completion of construction and prior to the issuance of a Certificate of Occupancy.

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 recreational uses, such as bird-watching and other non-destructive uses of natural areas are encouraged, as long as they do not negatively affect the hydrology, soils, 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 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.

## **K. MAINTENANCE ACTIVITIES**

Except for approved restoration, exotic removal, 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 conducted in accordance with this PAMP or as approved by the Martin County Environmental Planning Administrator. These activities will include quarterly exotic spray events covering the entirety of the preserve area with minor chainsaw work if needed. All cut materials will be removed from the preserve area and taken to the local landfill. The preserve area is in decent shape prior to the initial exotic removal and no restoration is anticipated for this project. **This will also include Firewise maintenance along the preserve/community buffer to maintain an area in the preserve as a fire break. This will include removing vegetative debris build up, trimming branches overhanging into community yards, as well as maintaining Firewise best management practices. The Maintenance of the defensible space shall adhere to the Firewise landscaping guidelines developed by the Florida Forest Service and all other requirements in this section and be part of the Firewise Protection Plan incorporated into the PAMP. (ref. Section 4.35.E.3., LDR)**

## **L. SITE HYDROLOGY**

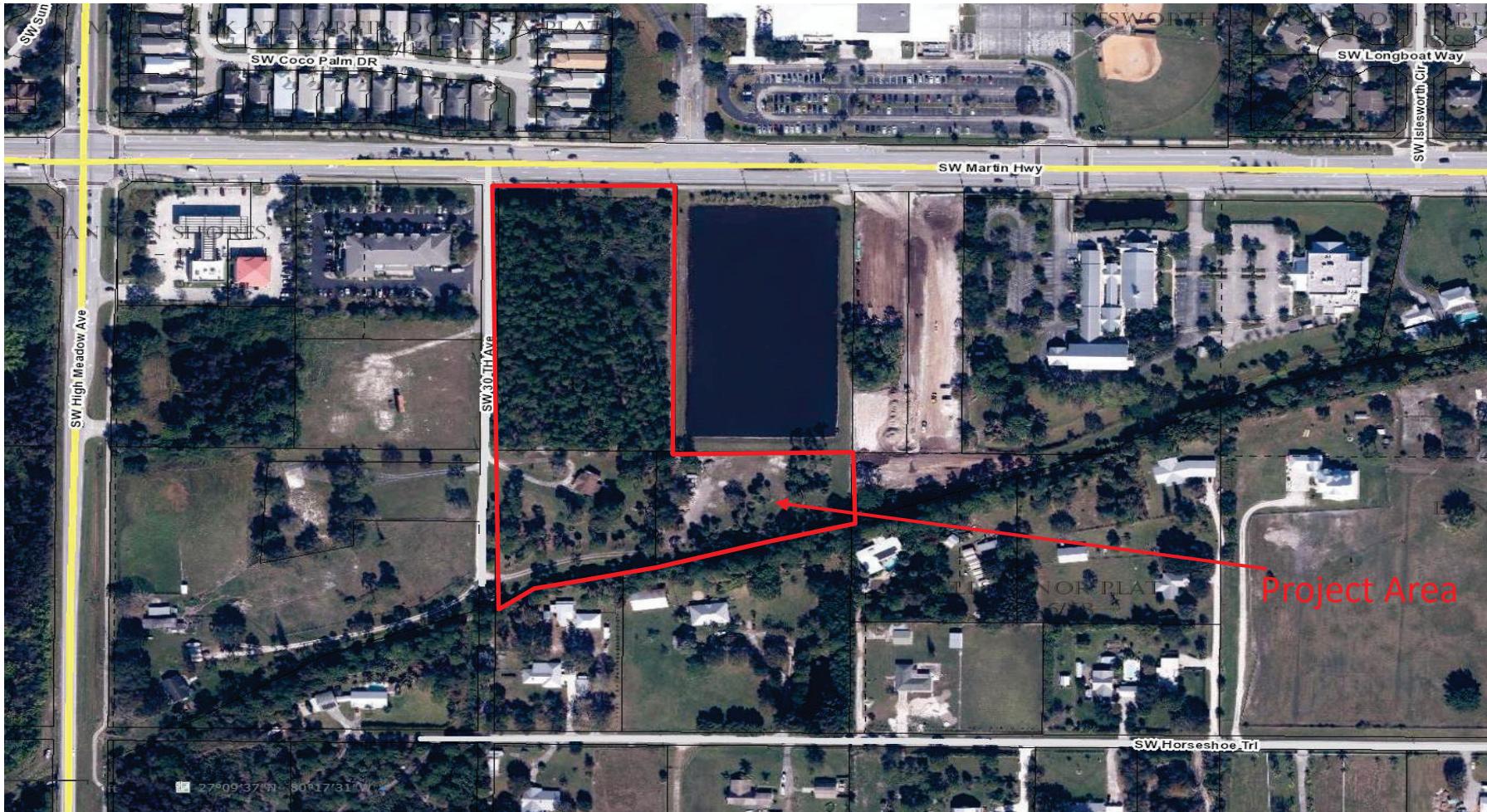
Previous or potential drainage impacts will be corrected to the extent technically feasible. Water quality and the rate, timing, and volume of run-off shall recreate natural conditions for the benefit of onsite wetlands and other waterbodies.

## **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**

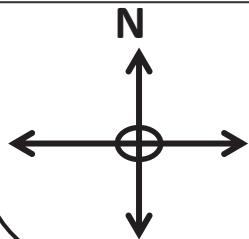
Martin County is authorized to inspect any County regulated site or appurtenance. Duly authorized representatives of Martin County may, at any time, upon presenting proper identification, enter upon and shall be given access to any premises for the purpose of such inspection. Martin County shall have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



4/10/2025

Property Appraiser Map

Map Source: Martin County



**3779 SW 30<sup>th</sup> Ave**  
Martin County, FL

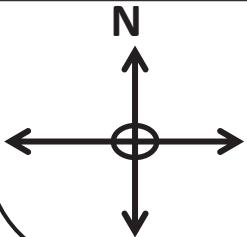




4/10/2025

CLC/FLUCCS Map

Map Source: Martin County



**3779 SW 30<sup>th</sup> Ave**  
Martin County, FL



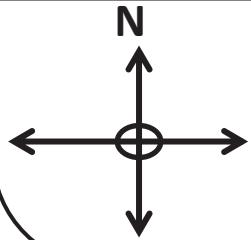
Advanced Restoration Ecology



4/10/2025

### Soil Map

Map Source: Web Soil



**3779 SW 30<sup>th</sup> Ave**  
Martin County, FL

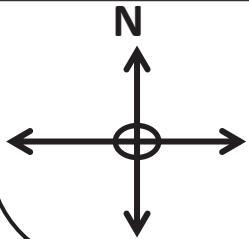




4/10/2025

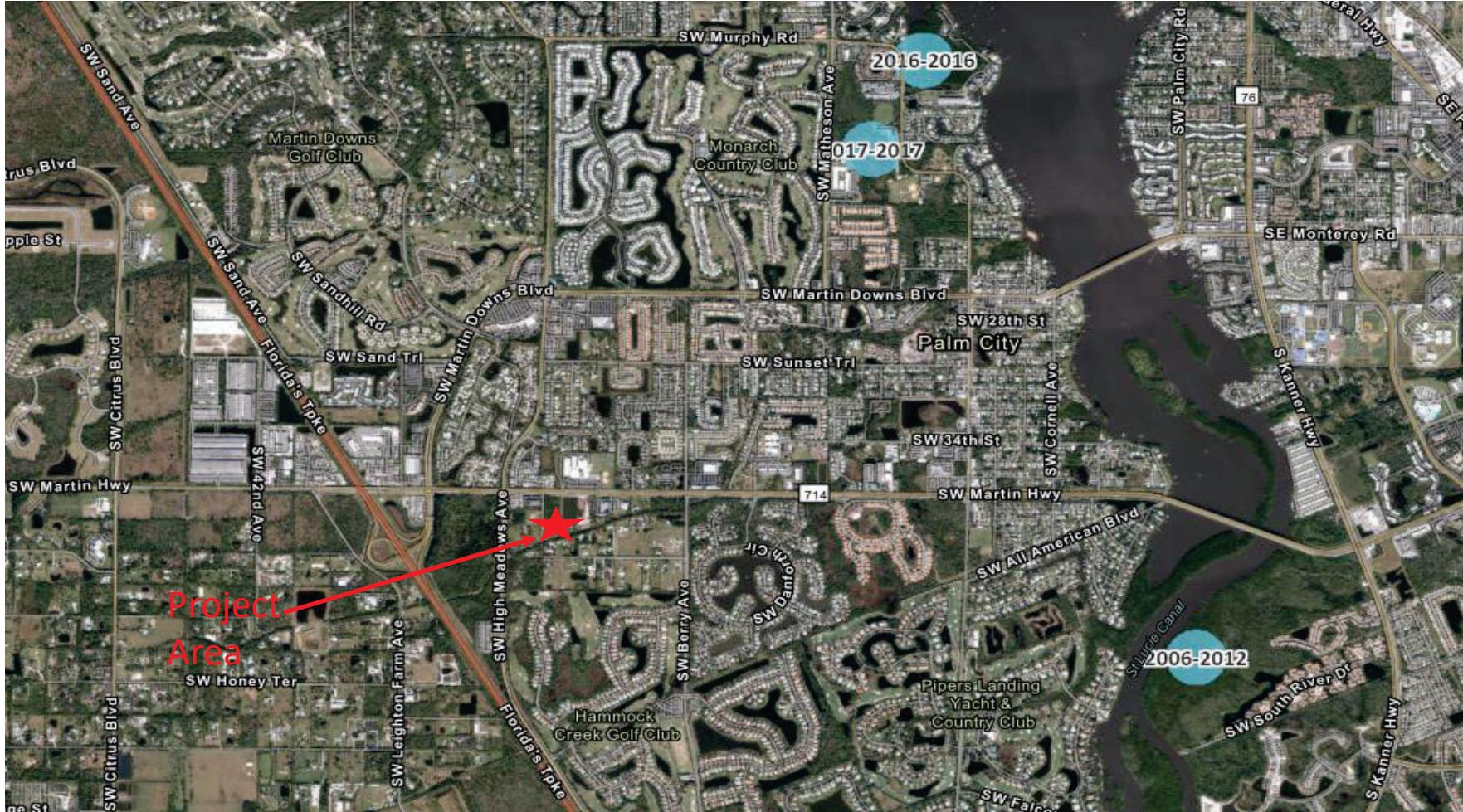
Listed Species Survey Map

Map Source: Martin County



**3779 SW 30<sup>th</sup> Ave**  
Martin County, FL

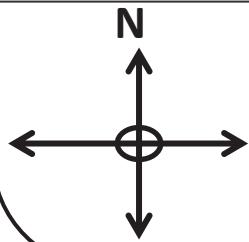




4/10/2025

Soil Map

Map Source: Web Soil



**3779 SW 30<sup>th</sup> Ave**  
Martin County, FL





## Florida Fish and Wildlife Conservation Commission

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Rodney Barreto  
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Vice Chairman  
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Thomas H. Eason, Ph.D.  
Assistant Executive Director  
Jennifer Fitzwater  
Chief of Staff

Fish and Wildlife Research Institute  
Gil McRae  
Director

727-896-8626  
727-823-0166 FAX

*Managing fish and wildlife resources for their long-term well-being and the benefit of people.*

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**Fish and Wildlife Research Institute**  
100 Eighth Avenue SE  
St. Petersburg, Florida  
33701-5020  
Voice: (727) 896-8626  
Fax: (727) 823-0166  
Hearing/speech-impaired:  
(800) 955-8771 (T)  
(800) 955-8770 (V)  
MyFWC.com/Research

December 21, 2021

Drew Gatewood  
2593 NE Roberta St  
Jensen Beach, FL 34957

Dear Drew:

This letter is in response to your request for listed species occurrence records and critical habitats for your project (3779 SW 30th Ave Palm City, FL 34990) located in Martin County, Florida. Records from The Florida Fish and Wildlife Conservation Commission's database indicate that listed species occurrence data and critical habitats are located within the project area. Records of Least tern, Small's flax, Florida black bear and Florida Sandhill crane were found on, or within a 1-mile distance of, the property. The Florida Fish and Wildlife Conservation Commission's database indicates that no SHCA's occur within a reasonable distance of the property. Enclosed are 8.5 x 11 maps showing, species richness, priority wetlands for listed species, and land cover for the project site and surrounding area.

This letter and attachments should not be considered as a review or an assessment of the impact upon threatened or endangered species of the project site. It provides FWC's most current data regarding the location of listed species and their associated habitats.

Our SHCA recommendations are intended to be used as a guide. Land development and ownership in Florida is ever-changing and priority areas identified as SHCA might already have been significantly altered due to development or acquired into public ownership. Onsite surveys, literature reviews, and coordination with FWC biologists remain essential steps in documenting the presence or absence of rare and imperiled species and habitats within the project area.

Our fish and wildlife location data represents only those occurrences recorded by FWC staff and other affiliated researchers. It is important to understand that our database does not necessarily contain records of all listed species that may occur in a given area. Also, data on certain species, such as gopher tortoises, are not entered into our database on a site-specific basis.

**Therefore, one should not assume that an absence of occurrences in our database indicates that species of significance do not occur in the area.**

The Florida Natural Areas Inventory (FNAI) maintains a separate database of listed plant and wildlife species, please contact FNAI directly for specific information on the location of element occurrences within the project area.

Because FNAI is funded to provide information to public agencies only, you may be required to pay a fee for this information. County-wide listed species information can be located at their website (<http://www.fnai.org>).

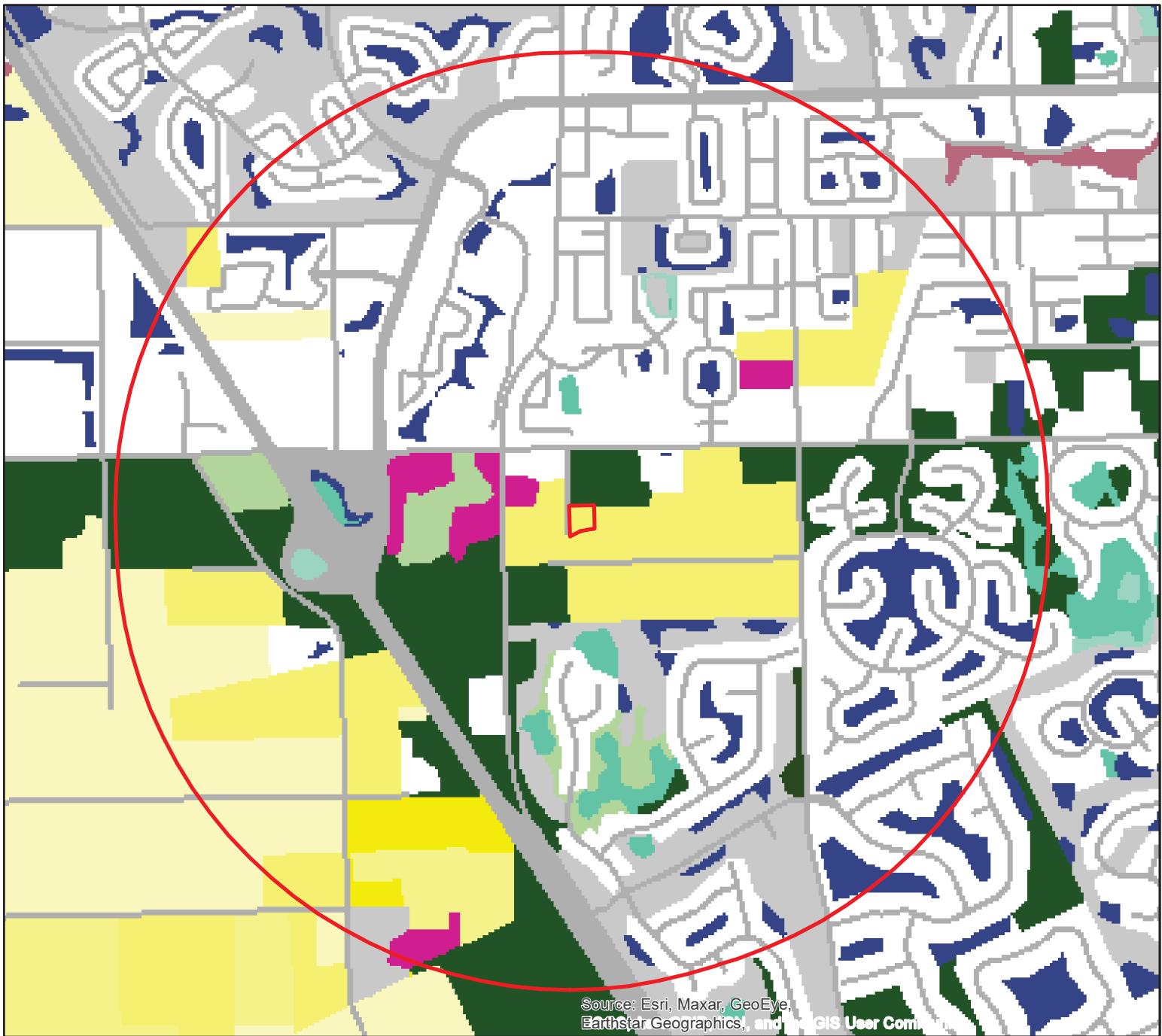
Please credit the Florida Fish and Wildlife Conservation Commission in any publication or presentation of these data. If you have any questions or further requests, please contact me at (850) 488-0588 or [gisrequests@myfwc.com](mailto:gisrequests@myfwc.com).

Sincerely,

*Steven Nicholl*

Steven Nicholl

Environmental Specialist I/GIS Technician  
Center for Spatial Analysis  
Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
100 8th Avenue S.E.  
St. Petersburg, FL 33701  
727-502-4970



### Cooperative Land Cover -- State Classes



Martin County Parcel ID:  
24-38-40-000-013-00000-9

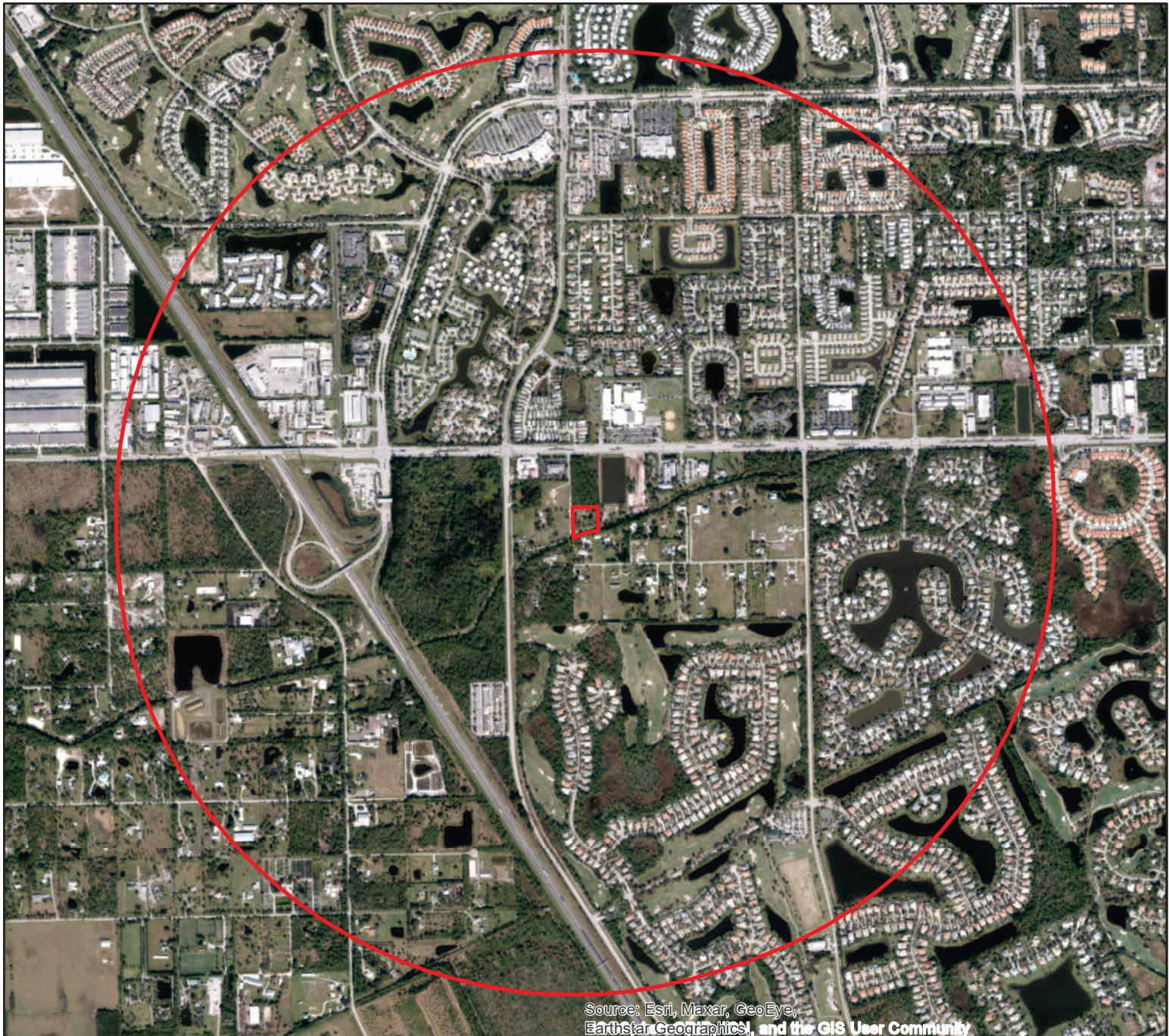
<span style="border: 1px solid red; padding: 2px;"> </span>	Approximate site boundary and 1-mile buffer
<span style="background-color: #006400; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	1311 - Mesic Flatwoods
<span style="background-color: #669933; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	1500 - Shrub and Brushland
<span style="background-color: #CCCCCC; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	1821 - Low Intensity Urban
<span style="background-color: #F0F0D0; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	1822 - High Intensity Urban
<span style="background-color: #FFFF99; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	1830 - Rural
<span style="background-color: #FFCC00; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	183313 - Improved Pasture
<span style="background-color: #FFCC00; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	18332 - Orchards/Groves
<span style="background-color: #FFCC00; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	18334 - Vineyard and Nurseries
<span style="background-color: #FFCC00; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	18335 - Other Agriculture
<span style="background-color: #CCCCCC; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	1840 - Transportation
<span style="background-color: #CCCCCC; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	1850 - Communication
<span style="background-color: #CCCCCC; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	1860 - Utilities
<span style="background-color: #3CB371; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	2100 - Freshwater Non-Forested Wetlands
<span style="background-color: #66CDAA; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	2110 - Prairies and Bogs
<span style="background-color: #3CB371; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	2120 - Marshes
<span style="background-color: #CC6666; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	2200 - Freshwater Forested Wetlands
<span style="background-color: #006400; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	2221 - Wet Flatwoods
<span style="background-color: #002B36; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	3200 - Cultural - Lacustrine
<span style="background-color: #CC0099; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	7000 - Exotic Plants



Florida Fish and Wildlife  
Conservation Commission  
MyFWC.com

Miles  
0 0.25 0.5 0.75 1

FWC ID: 2021\_6532 December 21, 2021



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

## Prioritized SHCA's



Priority 1  
Priority 2  
Priority 3  
Priority 4  
Priority 5



Approximate site boundary and 1-mile buffer



Martin County Parcel ID:  
24-38-40-000-013-00000-9

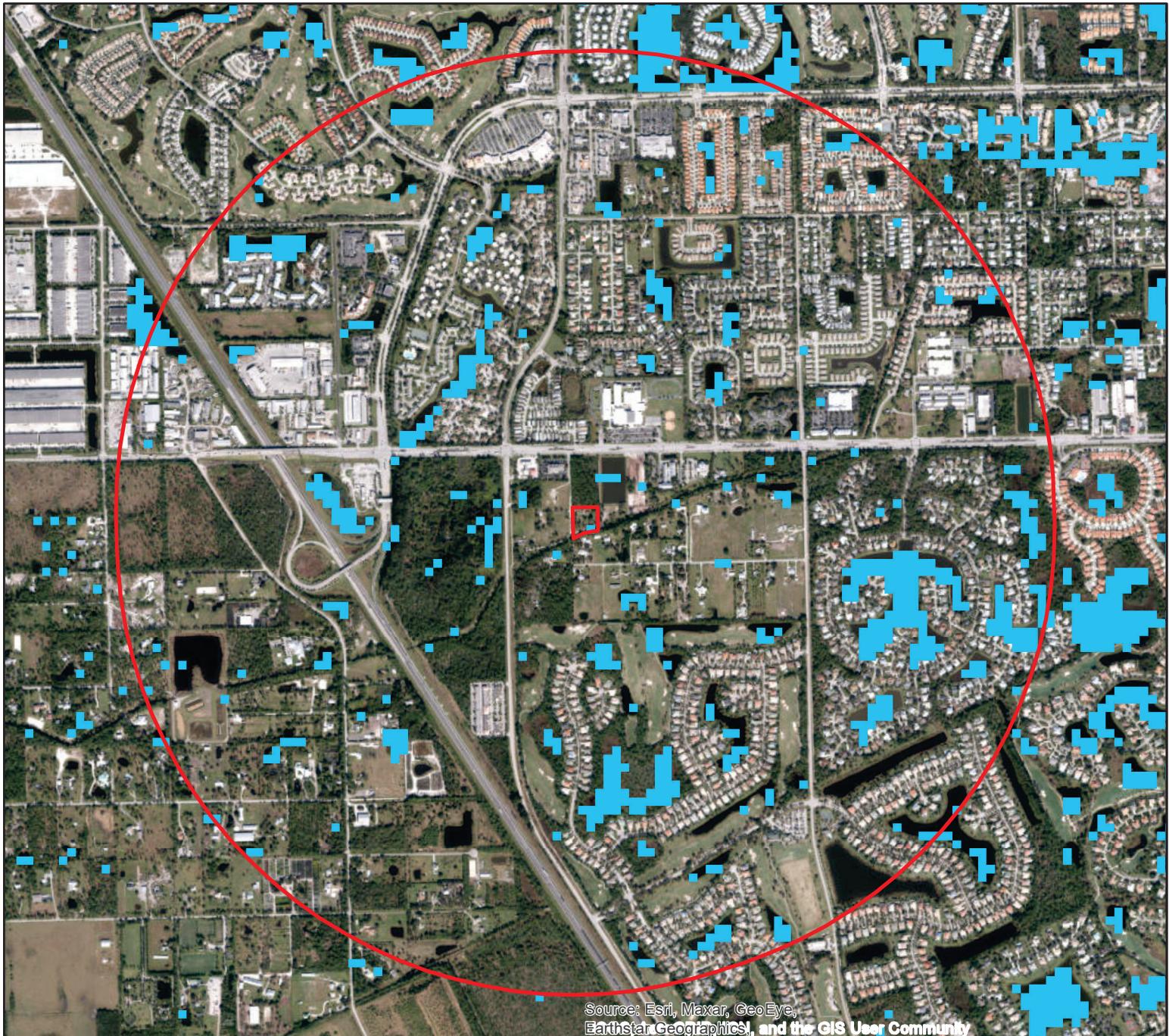
The prioritized SHCA map identifies 5 classes of SHCA based upon Heritage ranking criteria developed by The Nature Conservancy, the Natural Heritage Program Network, and the Florida Natural Areas Inventory. There are 2 possible ranks used to prioritize a species' SHCA: 1) the global rank based on a species worldwide status, and 2) the state rank based upon the species status in Florida. The state and global ranks are based upon many factors such as known occurrence locations, estimated abundance, range, amount of habitat currently protected, perceived levels of threats towards the species, and ecological fragility.



Florida Fish and Wildlife  
Conservation Commission  
MyFWC.com

0 0.25 0.5 0.75 1 Miles

FWC ID: 2021\_6532 December 21, 2021



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

## Priority Wetlands

- 1-3 Species, Wetlands habitat
- 4-6 Species, Wetlands habitat
- 7-9 Species, Wetlands habitat
- 10-11 Species, Wetlands habitat



Approximate site boundary and 1-mile buffer



Martin County Parcel ID:  
24-38-40-000-013-00000-9

This raster dataset identifies Florida wetlands important to wetland-dependent vertebrates listed by the State of Florida as endangered, threatened, or species of special concern. The dataset also ranks the relative importance of wetland areas based on species richness of the selected vertebrate species.



Florida Fish and Wildlife  
Conservation Commission  
MyFWC.com

0 0.25 0.5 0.75 1 Miles

FWC ID: 2021\_6532 December 21, 2021



## Species Richness



1-3    4-6    7-9    10-13



Approximate site boundary and 1-mile buffer



Martin County Parcel ID:  
24-38-40-000-013-00000-9

This dataset represents the richness of potential habitat for selected focal species in Florida. Potential habitat includes areas that have been occupied by the species and areas where occupancy is unknown based on available occurrence records. We combined the potential habitats generated for Florida into a single grid layer indicating diversity. Pixel cell value indicates the total number of species potential habitat identified at the specific location.



Florida Fish and Wildlife  
Conservation Commission  
MyFWC.com

0 0.25 0.5 0.75 1 Miles

FWC ID: 2021\_6532 December 21, 2021

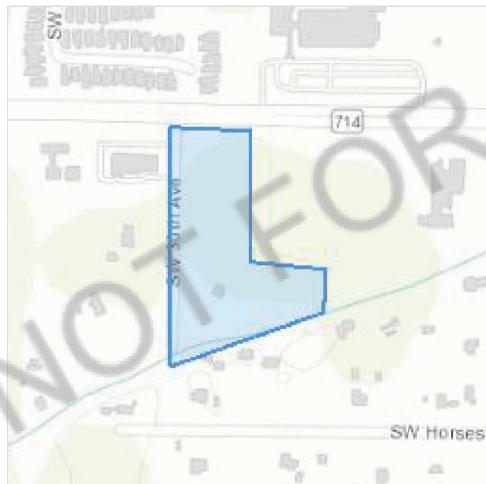
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Martin County, Florida



## Local office

South Florida Ecological Services Field Office

📞 (772) 562-3909

📠 (772) 562-4288

1339 20th Street  
Vero Beach, FL 32960-3559

<http://fws.gov/verobeach>

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

## NAME

## STATUS

Florida Panther	Puma (=Felis) concolor coryi	Endangered
Wherever found	No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1763">https://ecos.fws.gov/ecp/species/1763</a>	
Puma (=mountain Lion)	Puma (=Felis) concolor (all subsp. except coryi)	SAT
	No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6049">https://ecos.fws.gov/ecp/species/6049</a>	

Southeastern Beach Mouse	Peromyscus polionotus niveiventeris	Threatened
Wherever found	No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3951">https://ecos.fws.gov/ecp/species/3951</a>	

**Birds**

## NAME

## STATUS

Audubon's Crested Caracara	Polyborus plancus audubonii	Threatened
Wherever found	No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8250">https://ecos.fws.gov/ecp/species/8250</a>	
Everglade Snail Kite	Rostrhamus sociabilis plumbeus	Endangered
Wherever found	There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/7713">https://ecos.fws.gov/ecp/species/7713</a>	

Florida Grasshopper Sparrow	Ammodyramus savannarum floridanus	Endangered
Wherever found	No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/32">https://ecos.fws.gov/ecp/species/32</a>	

Red-cockaded Woodpecker	Picoides borealis	Endangered
Wherever found	No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7614">https://ecos.fws.gov/ecp/species/7614</a>	

Whooping Crane	Grus americana	EXPN
Wherever found	No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	

Wood Stork *Mycteria americana* Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/8477>

## Reptiles

NAME	STATUS
American Alligator <i>Alligator mississippiensis</i>	SAT
Wherever found	
No critical habitat has been designated for this species.	
<a href="https://ecos.fws.gov/ecp/species/776">https://ecos.fws.gov/ecp/species/776</a>	
Eastern Indigo Snake <i>Drymarchon corais couperi</i>	Threatened
Wherever found	
No critical habitat has been designated for this species.	
<a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a>	
Hawksbill Sea Turtle <i>Eretmochelys imbricata</i>	Endangered
Wherever found	
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	
<a href="https://ecos.fws.gov/ecp/species/3656">https://ecos.fws.gov/ecp/species/3656</a>	
Leatherback Sea Turtle <i>Dermochelys coriacea</i>	Endangered
Wherever found	
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	
<a href="https://ecos.fws.gov/ecp/species/1493">https://ecos.fws.gov/ecp/species/1493</a>	
Loggerhead Sea Turtle <i>Caretta caretta</i>	Threatened
Wherever found	
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	
<a href="https://ecos.fws.gov/ecp/species/1110">https://ecos.fws.gov/ecp/species/1110</a>	

## Insects

NAME	STATUS
Florida Leafwing Butterfly <i>Anaea troglodyta floridalis</i>	Endangered
Wherever found	
There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.	
<a href="https://ecos.fws.gov/ecp/species/6652">https://ecos.fws.gov/ecp/species/6652</a>	

Miami Blue Butterfly	<i>Cyclargus</i> (= <i>Hemiargus</i> ) <i>thomasi</i> bethunebakeri	Endangered
Wherever found		
No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3797">https://ecos.fws.gov/ecp/species/3797</a>		

Monarch Butterfly	<i>Danaus plexippus</i>	Candidate
Wherever found		
No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>		

## Flowering Plants

NAME	STATUS
Beach Jacquemontia	Endangered
<i>Jacquemontia reclinata</i>	
Wherever found	
No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1277">https://ecos.fws.gov/ecp/species/1277</a>	
Four-petal Pawpaw	Endangered
<i>Asimina tetramera</i>	
Wherever found	
No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3461">https://ecos.fws.gov/ecp/species/3461</a>	
Lakela's Mint	Endangered
<i>Dicerandra immaculata</i>	
Wherever found	
No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6390">https://ecos.fws.gov/ecp/species/6390</a>	
Tiny Polygala	Endangered
<i>Polygala smallii</i>	
Wherever found	
No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/996">https://ecos.fws.gov/ecp/species/996</a>	

## Lichens

NAME	STATUS
Florida Perforate Cladonia	Endangered
<i>Cladonia perforata</i>	
Wherever found	
No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7516">https://ecos.fws.gov/ecp/species/7516</a>	

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A  
BREEDING SEASON IS INDICATED)

FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

**American Kestrel** *Falco sparverius paulus*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9587>

Breeds Apr 1 to Aug 31

**American Oystercatcher** *Haematopus palliatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8935>

Breeds Apr 15 to Aug 31

**Bald Eagle** *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Sep 1 to Jul 31

**Black Skimmer** *Rynchops niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/5234>

Breeds May 20 to Sep 15

**Great Blue Heron** *Ardea herodias occidentalis*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Jan 1 to Dec 31

**Magnificent Frigatebird** *Fregata magnificens*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Oct 1 to Apr 30

**Prairie Warbler** *Dendroica discolor*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Jul 31

Red-headed Woodpecker *Melanerpes erythrocephalus* Breeds May 10 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Ruddy Turnstone *Arenaria interpres morinella* Breeds elsewhere

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Swallow-tailed Kite *Elanoides forficatus* Breeds Mar 10 to Jun 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8938>

Willet *Tringa semipalmata* Breeds Apr 20 to Aug 5

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of

presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

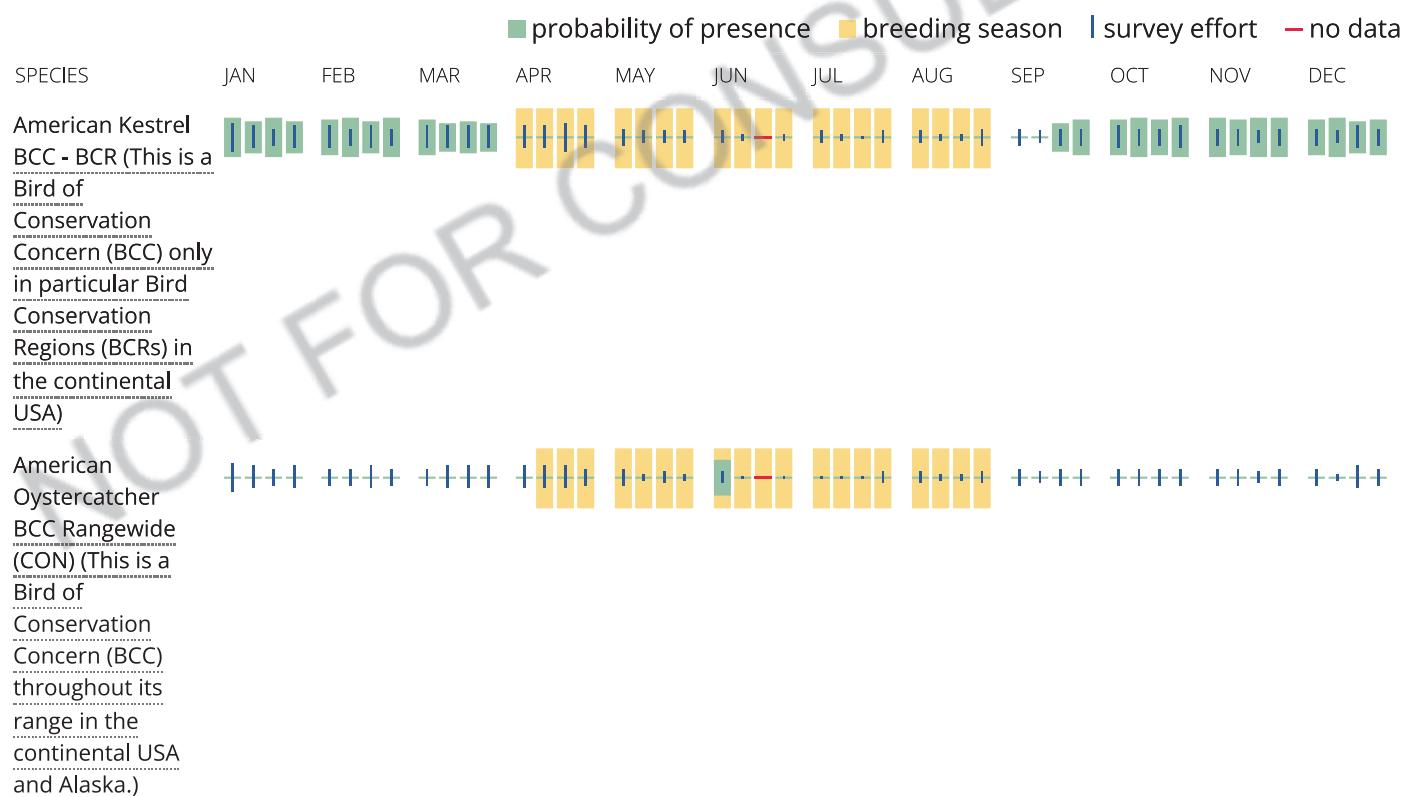
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald Eagle

Non-BCC

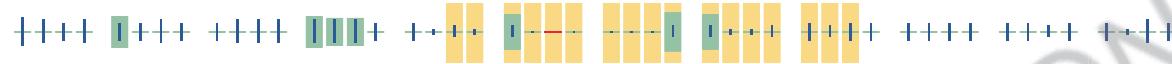
Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Black Skimmer

BCC Rangewide (CON) (This is a

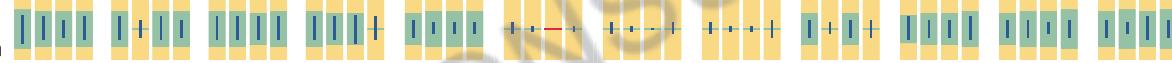
Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Great Blue Heron

BCC - BCR (This is a

Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Magnificent Frigatebird

BCC - BCR (This is a

Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Prairie Warbler

BCC Rangewide (CON) (This is a

Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Red-headed  
Woodpecker  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)

Ruddy Turnstone  
BCC - BCR (This is a  
Bird of  
Conservation  
Concern (BCC) only  
in particular Bird  
Conservation  
Regions (BCRs) in  
the continental  
USA)

++++ +++++ +++|+ +++++ | +---+ +---+---+ +---+ +---+ +---+ +---+ +---+ +---+ +---+ +---+

Swallow-tailed Kite  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)

Willet  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental USA  
and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review.

Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

## WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted.

Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



Drew Gatewood &lt;drew.gatewood@gmail.com&gt;

## New Projects

**Vovsi, Eman M.** <Eman.Vovsi@dos.myflorida.com>  
To: Drew Gatewood <drew.gatewood@gmail.com>

Thu, Dec 16, 2021 at 4:23 PM

Completed; no cultural resources detected

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**From:** Drew Gatewood <[drew.gatewood@gmail.com](mailto:drew.gatewood@gmail.com)>  
**Sent:** Thursday, December 16, 2021 4:13 PM  
**To:** Vovsi, Eman M. <[Eman.Vovsi@DOS.MyFlorida.com](mailto:Eman.Vovsi@DOS.MyFlorida.com)>; Requests, GIS <[GIS.Requests@myfwc.com](mailto:GIS.Requests@myfwc.com)>  
**Subject:** New Projects

EMAIL RECEIVED FROM EXTERNAL SOURCE

The attachments/links in this message have been scanned by Proofpoint.

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[Quoted text hidden]

### 2 attachments

-  **3779 SW 30th Ave Palm City, FL 34990.pdf**  
1601K
-  **6104 SW WOODHAM ST PALM CITY FL.pdf**  
2542K



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

## **Lake Area Management Plan**

### **Paddock at Palm City Martin County, Florida**

The following Lake Area Management Plan is provided for the wet retention lakes within the Paddock at Palm City development site. It is to be used in conjunction with the master site plan and lake planting plans as shown in the approved landscape plan. This plan addresses standards set forth in the Martin County Excavation and Fill Ordinance.

#### **Erosion Control and Water Management Provisions**

The operator shall use Best Management Practices to minimize erosion. The use of native top-soils is encouraged, especially in areas reclaimed for aquatic or wildlife habitats. Where topsoil is not used, the operator shall use a soil or growing medium, including amendments, suitable for the type of vegetative communities planned. Should washes or rills develop after re-vegetation and before final release of the area, the operator shall repair the eroded areas and stabilize the slopes.

Best Management Practices also apply to water quality within the lakes so as to protect the health of the plant material. Turbid water will be kept to a minimum so that sunlight may reach the littoral shelf floor promoting aquatic grass/submerged aquatic vegetation recruitment. The water levels within the lakes have been designed to a specific elevation. Such elevations will be staked along the littoral shelf where necessary in order to provide the plant installation contractor a reference from which to install the appropriate plant material. Should water levels within the completed lakes drop to elevations potentially harmful to the planted littoral and upland transition zones, temporary irrigation will be established where necessary by using a small pump and spray-rig situated within the affected lake(s). Water from the lake(s) will be sprayed onto the planted littoral and upland transition zones as needed in order to keep such plants healthy.

#### **Installation of Native Plant Material**

The installation of the native plant material within the littoral and upland transition zones will be in accordance with approved planting plans as shown in the recorded landscape plan. Planting of such material where necessary will be conducted at the appropriate time after the lake banks are sloped in accordance with the approved construction drawings. Plants are to be installed where necessary in accordance with the spacing and quantities detailed on the approved landscape plans. All plant material will be of appropriate type for the soils found on site. An Environmental Professional familiar with aquatic plant installation will oversee this activity.

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

The littoral and upland transition zone planting areas as shown on the approved landscape plans will be kept free of nuisance and exotic vegetation in perpetuity. All Category I and II nuisance and exotic vegetation as listed by the Florida Exotic Pest Plant Council (Rule 5B-57.007 FAC) will be treated in such areas. All treatment will be through the application of the appropriate herbicide approved for use within aquatic environments. The criterion for acceptance of eradication for Category I and II exotic vegetation will be 100 percent treatment/kill and 95 percent treatment/kill for nuisance species. If initial efforts do not achieve this criterion, follow up treatments will be conducted.

Transport of vegetative debris from the lake area to the staging area will be conducted in a fashion that minimizes the distribution and dispersal of seeds from such debris. No exotic or nuisance woody vegetative material will be left in the littoral and upland transition zone areas. All herbicide application activity will be conducted under the supervision of a Florida Department of Agriculture certified applicator, licensed for application of aquatic herbicides. All herbicide applied within aquatic systems on-site must be properly labeled for such use. All herbicide applied must include a visible tracer dye in the mix to facilitate observation of treated vegetation. Within the designated littoral and upland transition zone planting areas, the areal extent of desirable native plants shall cover at least 80% of the surface area by the end of the second year of monitoring after installation.

#### Re-Vegetation Provisions

Re-vegetation of the lakes littoral areas and upland transition zones where necessary will occur using plant species native to the region in accordance with the approved landscape plans. The operator has developed a plan for the proposed re-vegetation, including the species of aquatic vegetation to be planted, and the spacing of vegetation.

Water body shorelines shall be re-vegetated with a variety of native aquatic plant species where necessary as specified in the approved landscape plans. The littoral zones and upland transition zones will be planted where necessary no longer than 60 days after the final grade is completed and certified.

#### Prohibition of Alteration to Lake Slopes

It shall be unlawful to alter the approved slopes, contours, or cross-sections, or to chemically, mechanically, or manually remove, damage, or destroy any plants in the littoral or upland transition zone buffer areas of constructed lakes except upon the written approval of the Growth Management Department Director, as applicable. It is the responsibility of the owner or property owners' association, its successors or assigns, to maintain the required survivorship and coverage of the reclaimed upland and planted littoral and upland transition zone areas and to ensure ongoing removal and/or herbicide treatment of prohibited and invasive non-native plant species from these areas.

# **Paddock of Palm City Restoration & Maintenance Plan**

Prepared for:

**Martin County**

Prepared by:



**Advanced Restoration Ecology**

2593 NE Roberta St  
Jensen Beach, FL 34958

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June 2025

## **Introduction**

The Paddock of Palm City planting includes expansion to the upland preserve area (4,375 ac) and enhancing other preserve areas on site with exotic maintenance. This plan will include replanting, maintenance and monitoring. The vegetative strategy for the preserve restoration area includes the planting of various sized native species. The data will be collected into quarterly reports that will be submitted as such for two (2) years so that maintenance and enhancement activity can be closely tracked.

## **Restoration Area**

The restoration activity proposed includes enhancing the preserve areas to achieve the 80% native vegetation coverage. Exotic removal maintenance will be an ongoing event. The restoration area is (4,375 sq ft) of upland preserve that expansion to the proposed preserve area. The canopy remains unimpacted in the preserve and doesn't need supplemental planting.

As of the June 27th, 2025 site visit, the current ground cover coverage is 50% consisting of galberry and some broom sedge . The canopy is 90% coverage and is made up of dense pines with some scattered laurel oaks. The shrub/ subcanopy consists of 50% coverage and is the main focal point of the restoration. It consists of some wax myrtle, cocoplum, and scattered saw palmetto. Preserve signs will be installed to delineate preserve areas on site in hope to prevent future encroachment and clearing.

## **Enhancement Planting**

The planting area of the project consists planting, and maintaining the preserve expansion area (4,375 sq ft). Planting efforts will reflect native species found within this habitat. The vegetative success criteria for the restoration areas include the goal for 80 percent coverage of desirable vegetation in the designated planting areas and within twelve (12) months, aerial coverage of exotic vegetation at zero percent, and nuisance vegetation limited to 5 percent or less within the restoration areas. Replanting of the planting area will be evaluated after one year (12 months).

The quantities listed below are for the planting area. The actual planting quantities may vary depending on the size and nature of the area to be planted. Final planting quantities will be submitted to Martin County, please note species selection will be based on availability. The current ground cover coverage in preserve area is 50% consisting of saw palmetto as well as gallberry and beakrush. The canopy is 90% coverage and is made up of dense pines with some scattered laurel oaks. The shrub/ subcanopy consists of 50% coverage and consists of saw palmetto, and wax myrtle.

The planted material is as follows:

#### **Preserve Enhancement Planting List**

Common Name	Size	Quantity	Spacing
Wax Myrtle	3 gal	15	10' o.c.
Coco Plum (Horizontal)	3 gal	15	10' o.c.
Beauty Berry	3 gal	15	10' o.c.
Saw Palmetto	3 gal	15	10' o.c.
Cordgrass	1 gal	100	3' o.c.
Fakahatchee Grass	1 gal	100	3' o.c.

#### **Success Criteria**

The vegetative success criteria for the planting areas include the goal for 80 percent coverage of desirable vegetation within one (1) year, and aerial coverage of exotic vegetation at zero percent, and nuisance vegetation limited to 5 percent or less within the restoration areas only. The project will be monitored for two (2) years.

Wildlife success criterion will include the documented observation wildlife utilization, or indicators of wildlife (i.e. tracks, scat, etc.). Specifically this will include the observation of mammal tracks, scratchings, rubs, evidence of forging, and or direct observations.

If, after one (1) year the parcel has not achieved desired coverage requirements, supplemental plantings will be completed. Supplemental plantings, (if any) will be noted in the monitoring report.

#### **Maintenance**

Initial removal and maintenance of exotic/nuisance plant species is a critical component of the restoration activities within the restoration area. Exotic/nuisance plant species will be controlled by physical and chemical means in addition to various land management practices. Maintenance activities will be perpetual.

#### **Monitoring**

The monitoring plan includes photo stations and data collection stations established along a transect through the restoration area. A total of two (2) data/photo collection stations will be established along the restoration area. At the station vegetative data will be collected as outlined below. The data station will also include a "panoramic" photo station in order to visually document vegetative coverage and conditions in the preservation area.

Vegetative coverage will be documented at each of the data collection stations in the Monitoring Plan. The vegetative coverage will be measured as absolute coverage within an area of approximately 2500 square feet at the monitoring station. The vegetation will be measured in percent coverage of the restoration areas vegetation. The total percent cover will not exceed 100 percent, and each species documented will be reported in both common and Latin names. The coverage will be measured by visual observation in each of four quadrants from the fixed monitoring point. Observations will extend approximately

twenty-five (25) feet from the observer in each direction thus covering approximately 2500 square feet at each station. The data from each quadrant observation will be combined to calculate the vegetative coverage. Station locations will be permanently marked with PVC pipe to ensure consistency in data collection. At least three (3) photos will be collected from compass points at each of the established photo stations to provide documentation of vegetative coverage.

In addition to vegetative coverage documentation, any observed wildlife utilization, or indicators of wildlife (i.e. tracks, scat, etc.) will be noted.

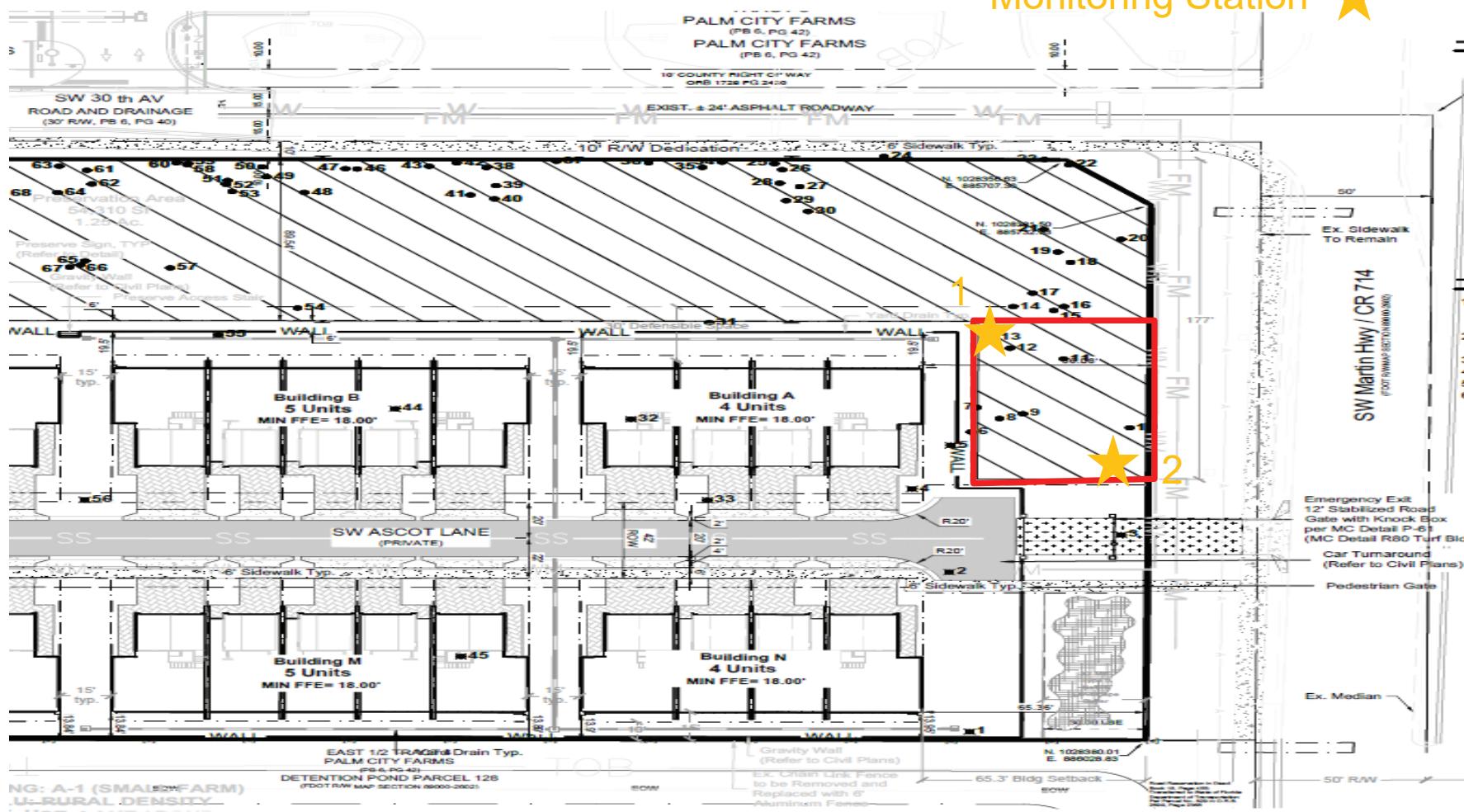
The monitoring will be conducted on a quarterly basis according to the schedule below. The data will be collected into quarterly reports that will be submitted as such for two (2) years on an annual basis so that maintenance and enhancement activity can be closely tracked. The reports provided will include a discussion and conclusion regarding progress towards the achievement of the success criteria as per the permit. If coverage goals are not met extended monitoring may be needed.

## **Monitoring/Maintenance Work Schedule**

The schedule for conducting the proposed monitoring and maintenance is based on the date of completion of the initial exotic treatment and replanting. The following schedule is proposed, with specific dates based upon receipt of notice to proceed.

Activity	Months after Notice to Proceed
Complete planting of proposed restoration area	1 month
County inspection of proposed restoration area	1 month
Conduct Time Zero Monitoring	On-going maintenance
Conduct exotic removal within restoration area	
First Quarter Monitoring Report and Coverage Evaluation	1st quarter after 1st report
Second Quarter Monitoring Report and Coverage evaluation	2nd quarter after 1st report
Third Quarter Monitoring Report and Coverage Evaluation	3rd quarter after 1st report
Fourth Quarter Monitoring Report and Coverage evaluation	4th quarter after 1st report
Fifth Quarter Monitoring Report and Coverage Evaluation	5th quarter after 1st report
Sixth Quarter Monitoring Report and Coverage Evaluation	6th quarter after 1st report
Seventh Quarter Monitoring Report and Coverage evaluation	7th quarter after 1st report
Eighth Quarter Monitoring Report and Coverage Evaluation	8th quarter after 1st report

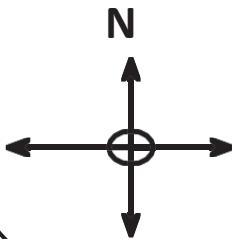
# Monitoring Station



6/27/2025

## Location Map

Map Source: Site Plan



# Paddock of Palm City Palm City, FL



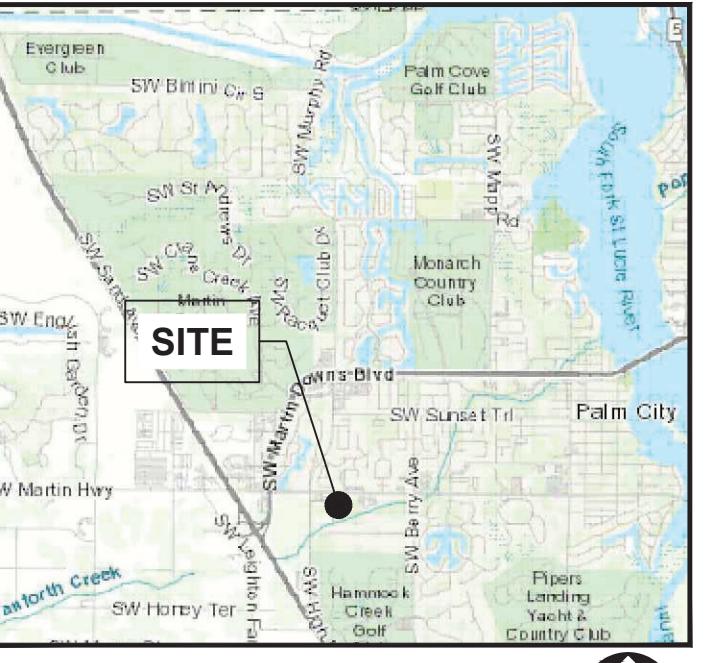
Advanced Restoration Ecology

# Florida

## Paddock at Palm City PUD

## Martin County Master / Final Site Plan

**HJ A DESIGN STUDIO**  
LANDSCAPE ARCHITECTURE  
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Palm City, Florida 34990  
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LA 0000905



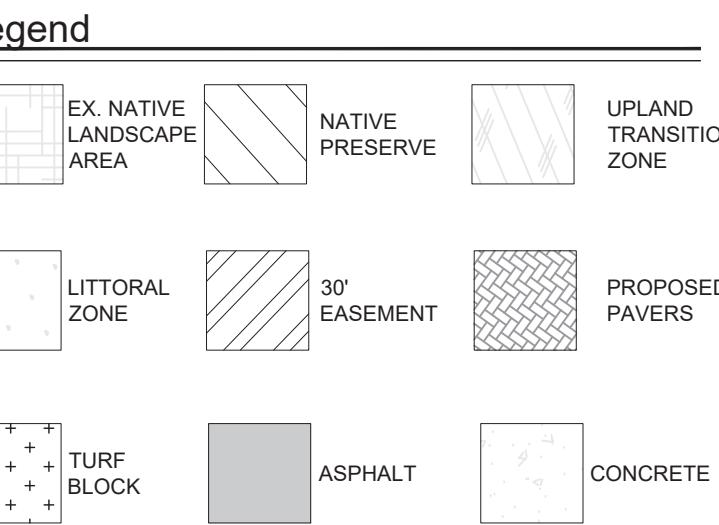
VICINITY MAP  
SECTION 19, TOWNSHIP 38S, RANGE 41E  
NTS

Project Team

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**ENVIRONMENTAL**  
ADVANCED RESTORATION  
ECOLOGY  
2593 NE ROBERTA ST  
JENSEN BEACH, FL 34957



### Legal Description

A PARCEL OF LAND IN THE WEST HALF (1/2) OF TRACT 4 AND ALL OF TRACT 13 LYING NORTH OF THE CENTER OF DANFORTH CREEK, SECTION 24, TOWNSHIP 38 SOUTH, RANGE 40 EAST, PALM CITY FARMS, ACCORDING TO THE PLAT OR PLAT THEREOF AS RECORDED IN PLAT BOOK 6, PAGE 42, PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA; LESS ROAD RIGHT-OF-WAY, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTH QUARTER CORNER OF SECTION 24, TOWNSHIP 38 SOUTH, RANGE 40 EAST, THENCE SOUTH 89°42'42" EAST ALONG THE NORTH LINE OF SAID SECTION 24 A DISTANCE OF 50 FEET; THENCE CONTINUE SOUTH 89°42'42" EAST ALONG THE SECTION SOUTH 00°17'18" WEST A DISTANCE OF 50 FEET TO THE SOUTH RIGHT OF WAY LINE OF SOUTHWEST MARTIN HIGHWAY, A 100 FOOT WIDE RIGHT OF WAY, AS SHOWN IN FLORIDA DEPARTMENT OF TRANSPORTATION PROJECT NUMBER 89000-2602 AS RECORDED IN MAP BOOK 1, PAGE 42, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE CONTINUE SOUTH 89°42'42" EAST A DISTANCE OF 32.00 FEET TO THE POINT OF BEGINNING, THENCE SOUTH 89°42'42" EAST A DISTANCE OF 296.51 FEET TO THE EAST LINE OF THE WEST HALF (1/2) OF TRACT 4 SAID PLAT OF PALM CITY FARMS; THENCE SOUTH 00°06'09" WEST ALONG THE EAST LINE OF THE WEST HALF (1/2) OF TRACT 4 SAID PLAT OF PALM CITY FARMS A DISTANCE OF 580.44 FEET TO THE NORTH LINE OF TRACT 13 OF SAID PLAT OF PALM CITY FARMS; THENCE SOUTH 89°42'42" EAST A DISTANCE OF 332.08 FEET TO THE NORTHEAST CORNER OF TRACT 13 OF SAID PLAT OF PALM CITY FARMS; THENCE SOUTH 00°05'47" WEST ALONG THE EAST LINE OF TRACT 13 OF SAID PLAT OF PALM CITY FARMS A DISTANCE OF 29.61 FEET TO THE CENTER OF DANFORTH CREEK; THENCE THENCE WEST-WARDLY ALONG THE CENTER OF DANFORTH CREEK A DISTANCE OF 693 FEET MORE OR LESS TO A LINE 10 FEET EAST-WARDLY AND PARALLEL WITH THE EAST LINE OF SOUTHWEST 30TH AVENUE OF SAID PLAT OF PALM CITY FARMS; THENCE WEST-WARDLY AND PARALLEL WITH THE EAST LINE OF SOUTHWEST 30TH AVENUE OF SAID PLAT OF PALM CITY FARMS A DISTANCE OF 912.11 FEET; THENCE NORTH 45°11'03" EAST A DISTANCE OF 35.29 FEET TO THE POINT OF BEGINNING.

CONTAINING 8.14 ACRES MORE OR LESS.

**RIGHT OF WAY DEDICATION LEGAL DESCRIPTION**  
COMMENCE AT THE NORTH QUARTER CORNER OF SECTION 24, TOWNSHIP 38 SOUTH, RANGE 40 EAST THENCE SOUTH 89°42'42" ALONG THE NORTH LINE OF SAID SECTION 24 A DISTANCE OF 15.18 FEET; THENCE DEPARTING THE NORTH LINE OF SAID SECTION SOUTH 00°17'18" WEST A DISTANCE OF 50 FEET TO THE SOUTH RIGHT OF WAY LINE OF SOUTHWEST MARTIN HIGHWAY, A 100 FOOT WIDE RIGHT OF WAY, AS SHOWN IN FLORIDA DEPARTMENT OF TRANSPORTATION PROJECT NUMBER 89000-2602 AND THE POINT OF BEGINNING;

THENCE SOUTH 89°42'42" EAST ALONG THE SOUTH RIGHT OF WAY OF SAID MARTIN HIGHWAY A DISTANCE OF 331.52 FEET; THENCE SOUTH 00°06'09" WEST A DISTANCE OF 29.61 FEET; THENCE WEST 89°42'42" WEST AND PARALLEL WITH SAID MARTIN HIGHWAY A DISTANCE OF 206.51 FEET; THENCE SOUTH 45°11'03" WEST A DISTANCE OF 35.29 FEET; THENCE SOUTH 00°04'43" WEST ALONG A LINE 10.00 FEET EAST-WARDLY AND PARALLEL WITH THE EAST LINE OF SOUTHWEST 30TH AVENUE AS RECORDED IN THE PLAT OF PALM CITY FARMS, PLAT BOOK 6, PAGE 40, PALM CITY, NOW MARTIN COUNTY, FLORIDA A DISTANCE OF 356.36 FEET TO THE SOUTH LINE OF TRACT 4 AND THE NORTH LINE OF TRACT 13 OF SAID PLAT OF PALM CITY FARMS; THENCE SOUTH 00°04'43" WEST ALONG A LINE 10.00 FEET EAST-WARDLY AND PARALLEL WITH THE EAST LINE OF SOUTHWEST 30TH AVENUE AS RECORDED IN THE PLAT OF PALM CITY FARMS A DISTANCE OF 356.75 FEET TO THE CENTER OF DANFORTH CREEK A DISTANCE OF 12.13 FEET; THENCE DEPARTING THE CENTER OF DANFORTH CREEK A DISTANCE OF 4.43' EAST ALONG THE EAST LINE OF SOUTHWEST 30TH AVENUE OF SAID PLAT OF PALM CITY FARMS A DISTANCE OF 593.61 FEET TO THE SOUTH LINE OF TRACT 4 AND THE NORTH LINE OF TRACT 13 OF SAID PLAT OF PALM CITY FARMS; THENCE CONTINUE ALONG THE EAST LINE OF SW 30TH AVENUE OF SAID PLAT OF PALM CITY FARMS NORTH 00°04'43" EAST A DISTANCE OF 612.40 FEET TO THE POINT OF BEGINNING.

CONTAINING 20,327 SQUARE FEET OR 0.47 ACRES MORE OR LESS.

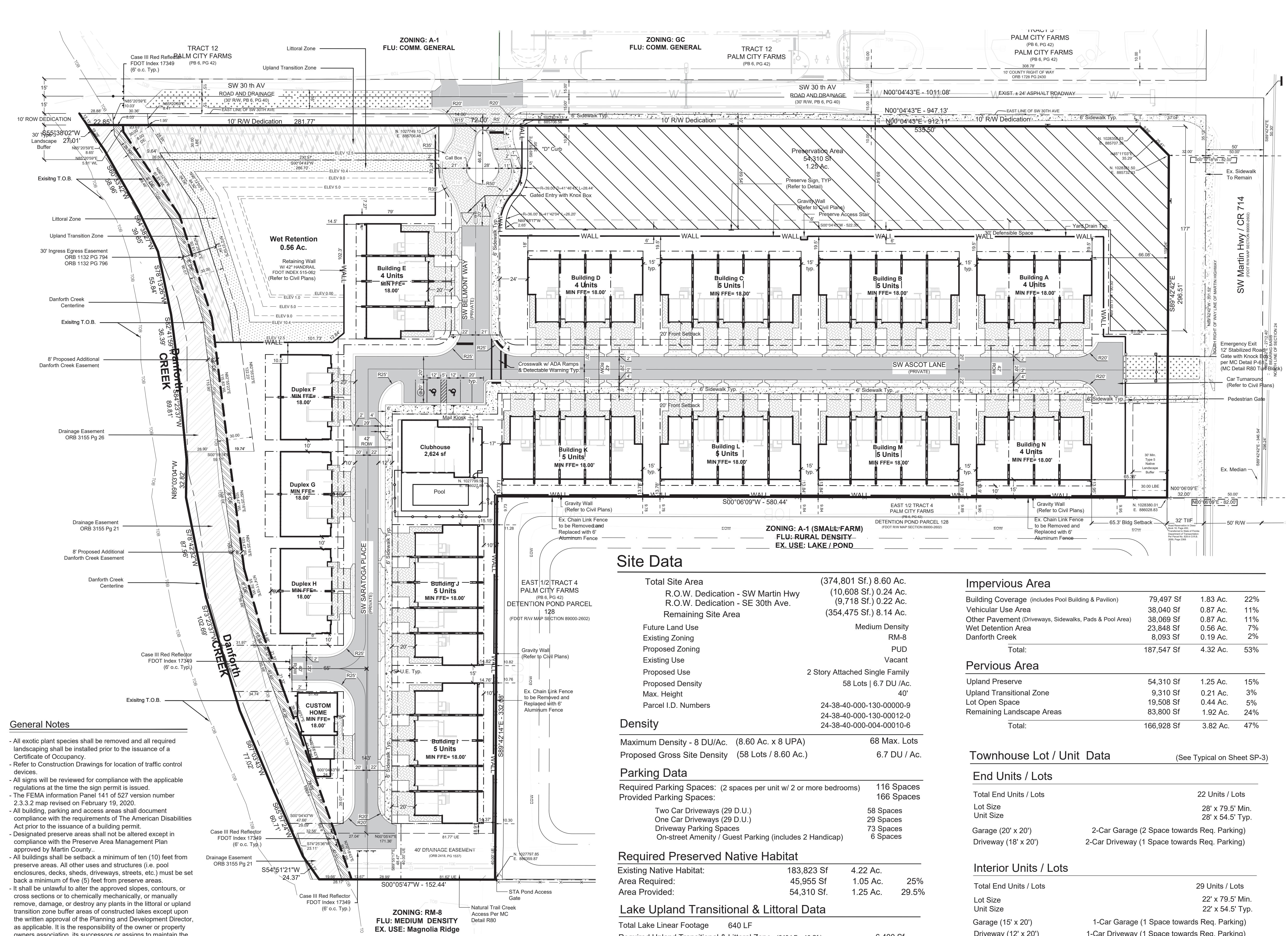
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Job No. 2020-22  
Drawn By EB  
Checked By MH  
Approved By MH  
Submittal Dates 4-30-2025  
Revision Dates

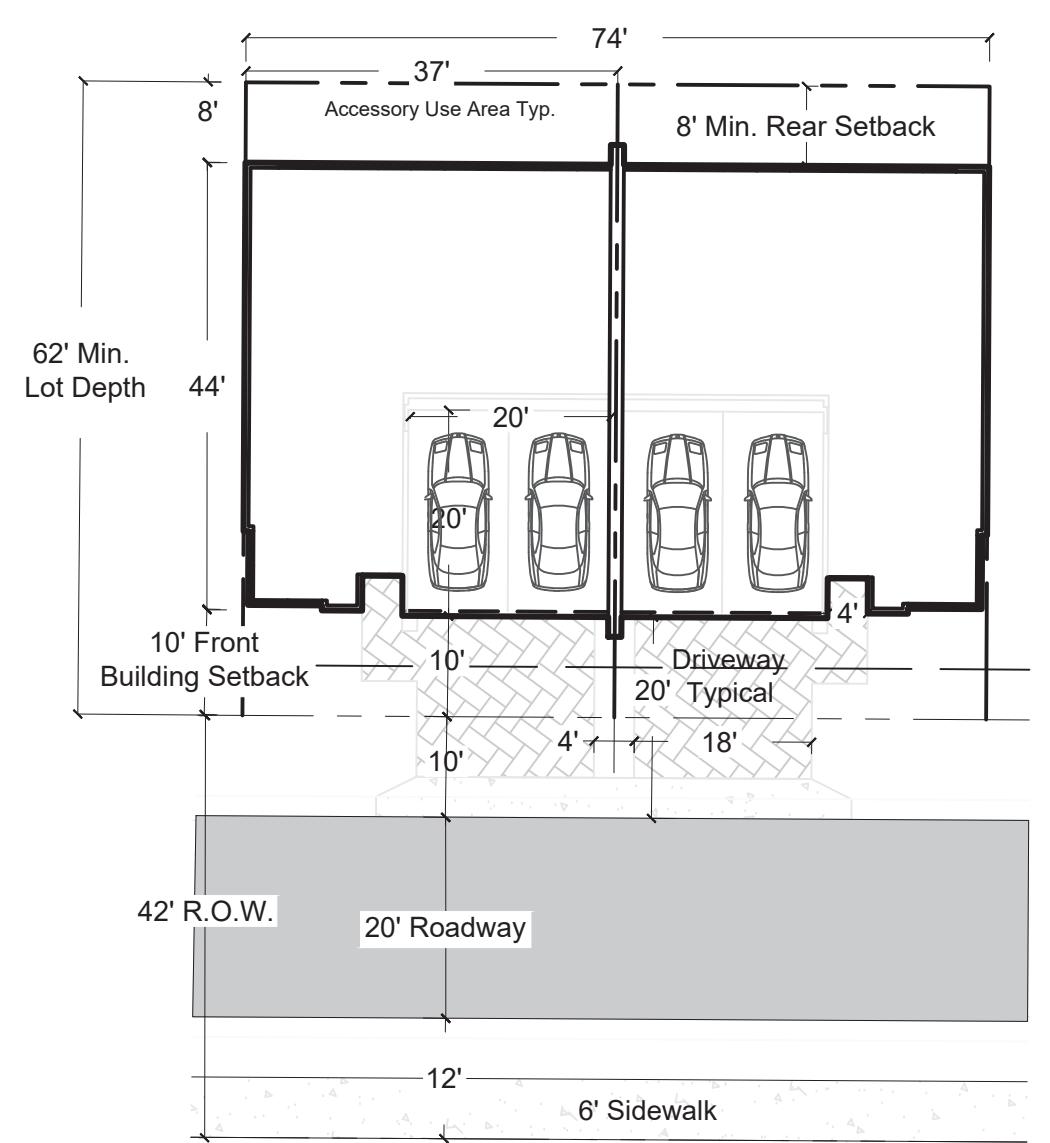
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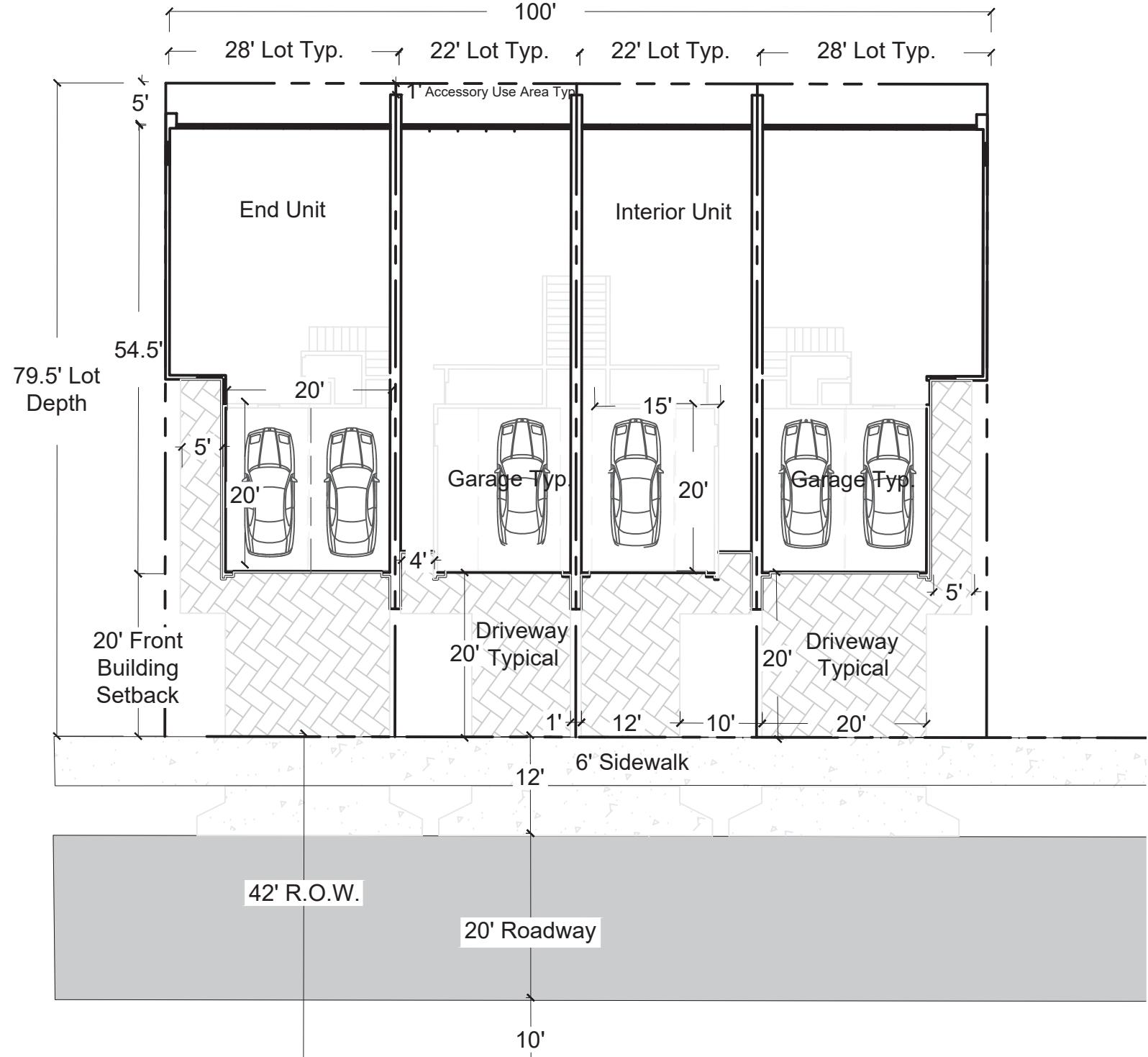
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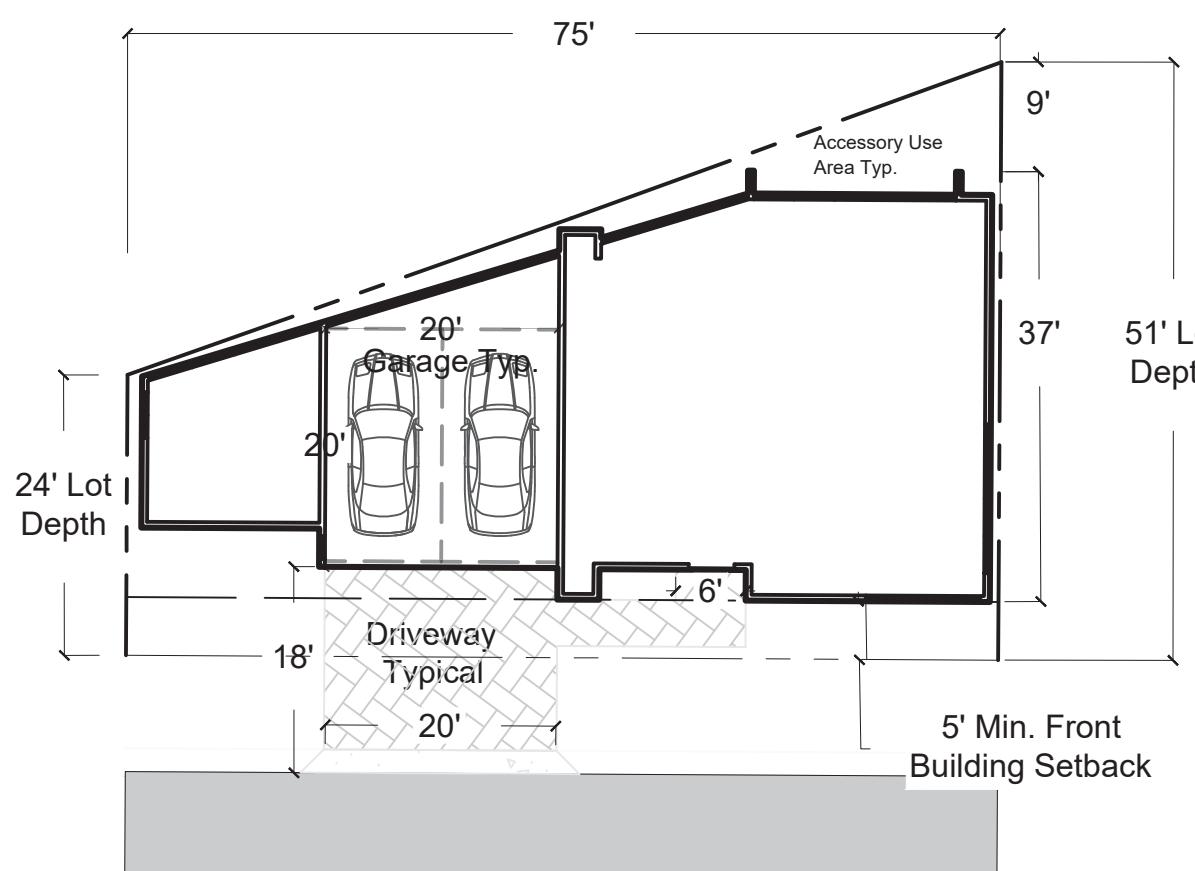
## Duplex Lot & Building Typical



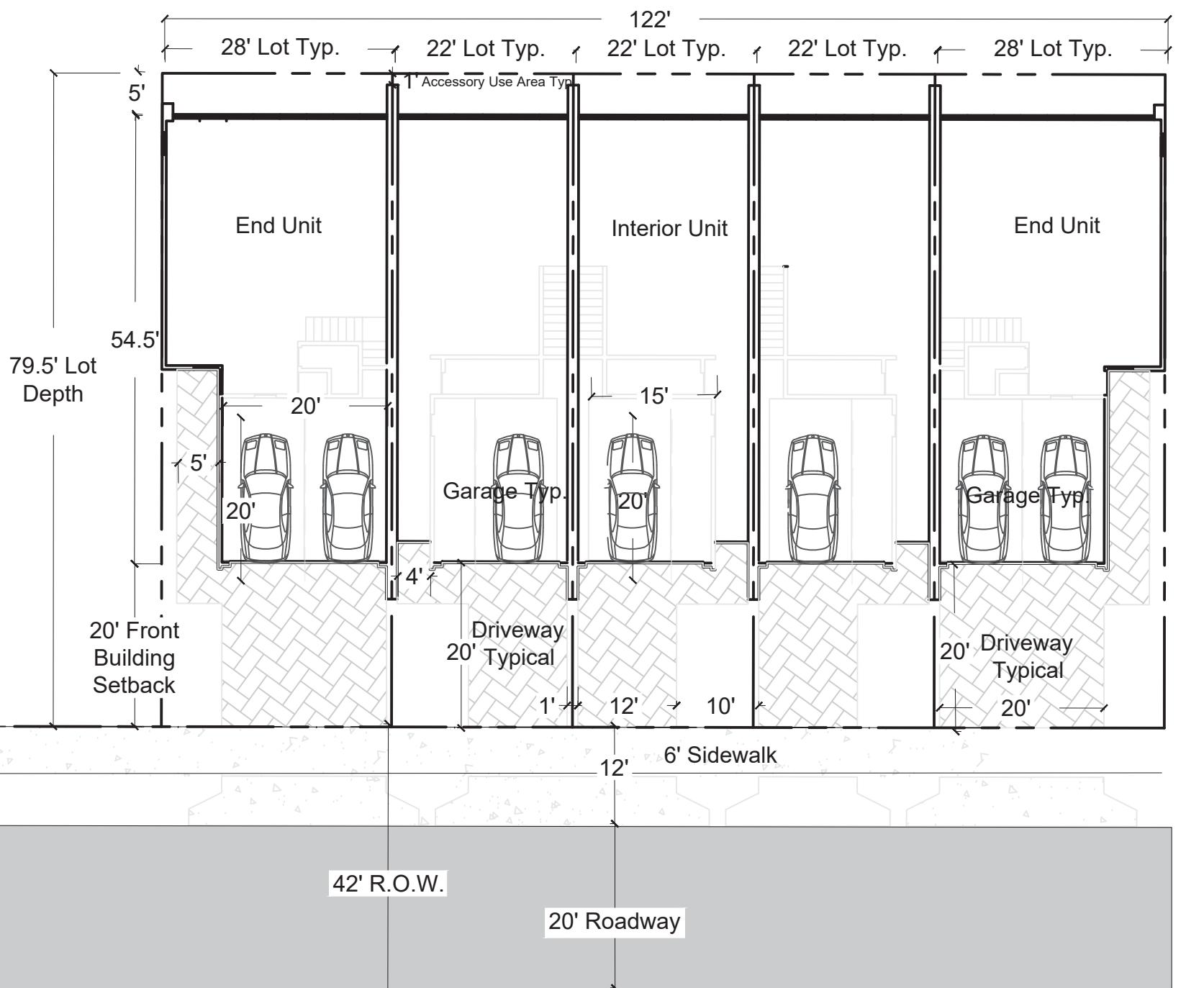
## 4 Unit Townhouse Lot & Building Typical



## Single Family-Custom Home & Building Typical



## Single Family-5 Unit Townhouse Lot & Building Typical



## Lot and Building Setbacks

### Min. Required Setbacks

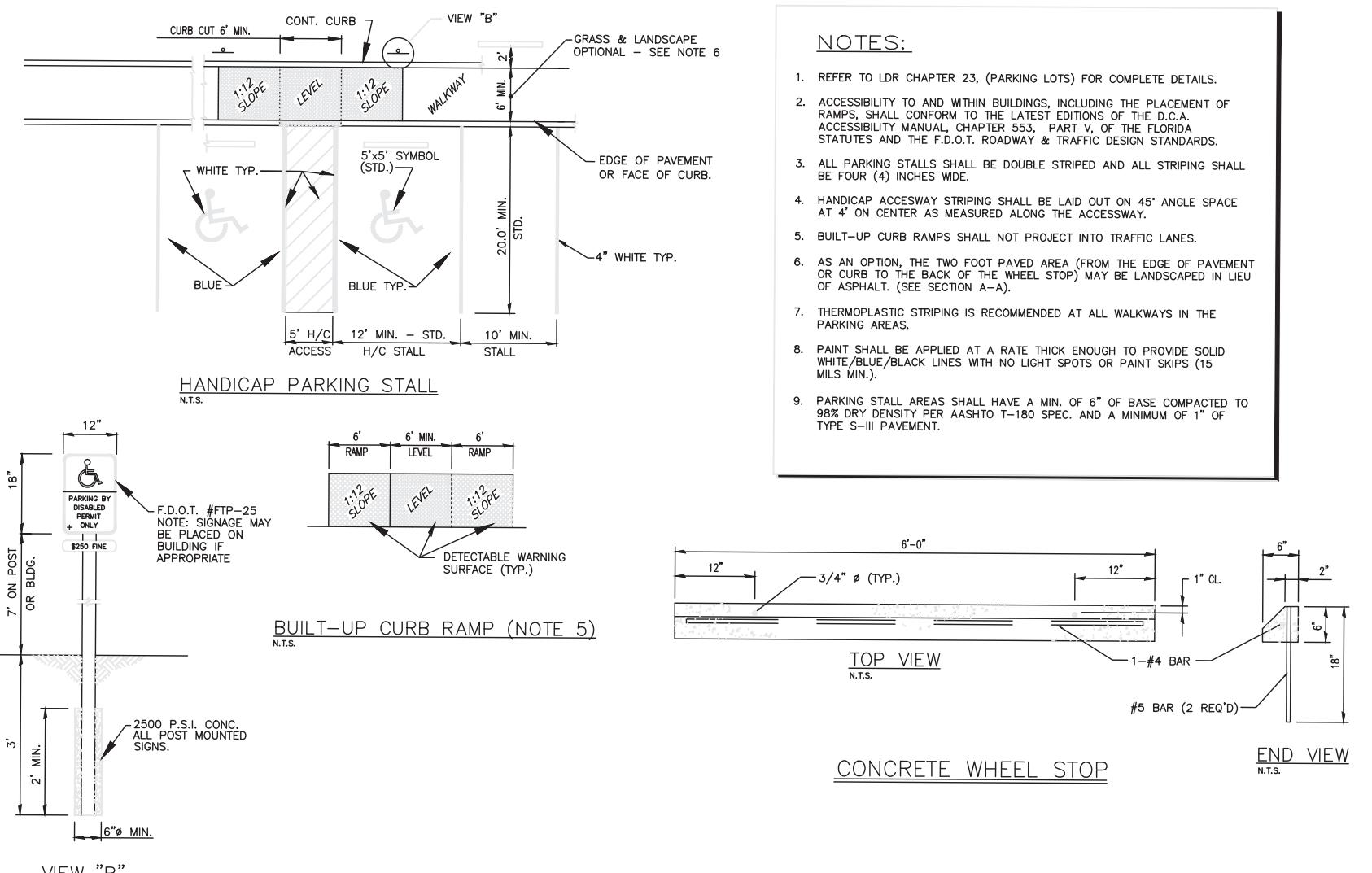
	Front	Side	Rear	Building Separation	Accessory*
Site Property Line	25'	10'	10'	NA	NA
Townhome	20'	0'	5'	15'	1'
Duplex	10'	0'	6'	10'	5'
Single Family	5'	0'	0'	NA	0'

\* Accessory structures include architectural features. Other accessory uses such as AC compressors and other equipment will be located on the roof. Final location will be determined at the time of Building Permit.

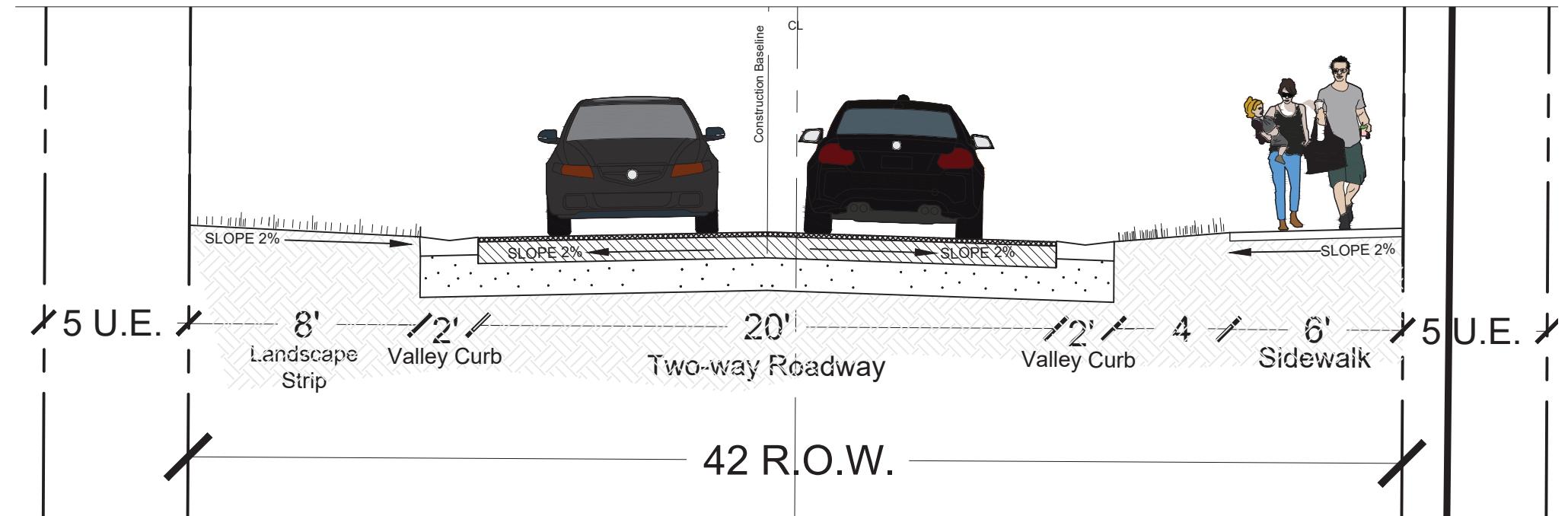
### Note:

Interior lots can only have a single car driveway, to ensure open space is met with future permits, or account for larger driveway maximum sizes.

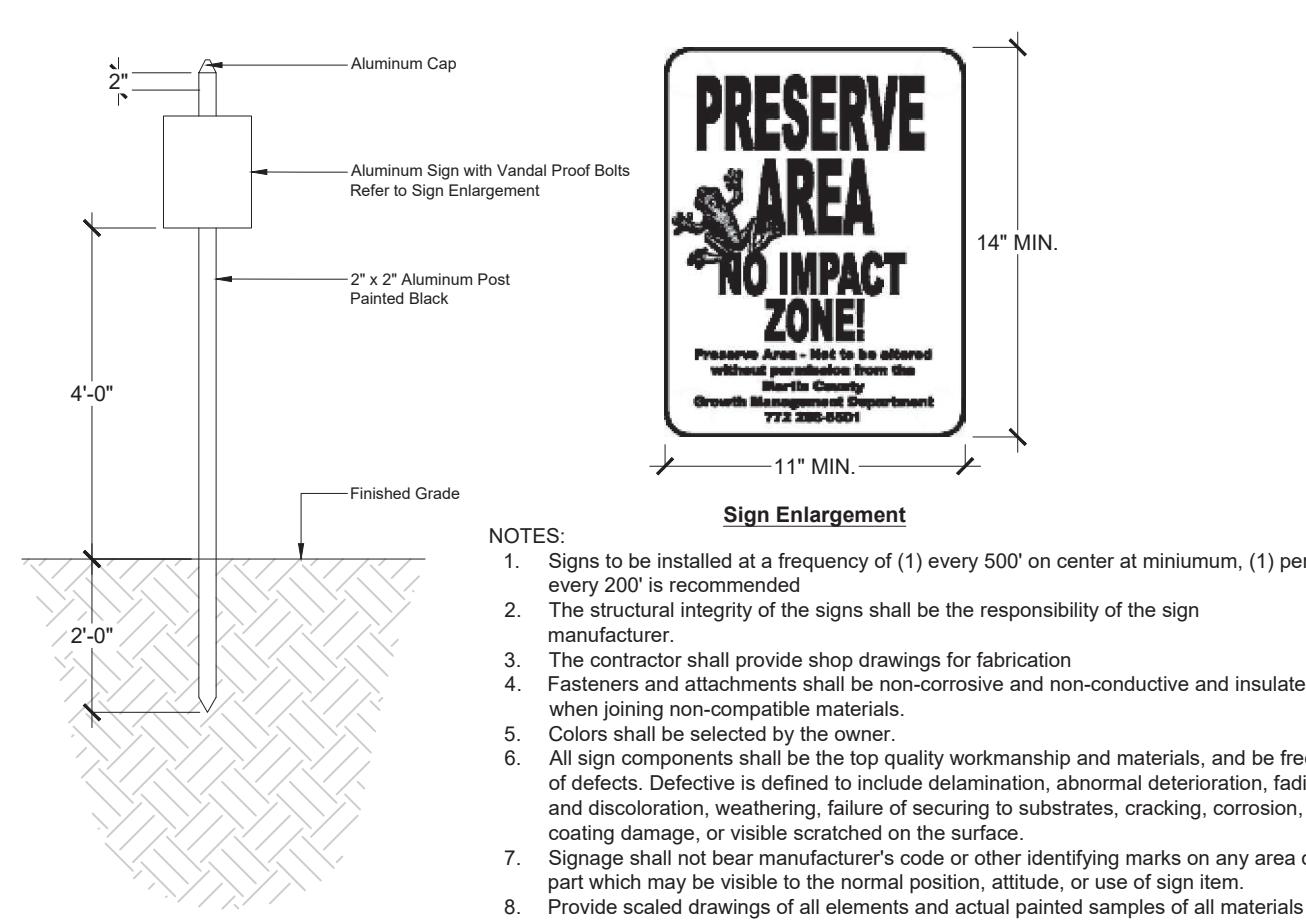
## Handicap Parking Detail



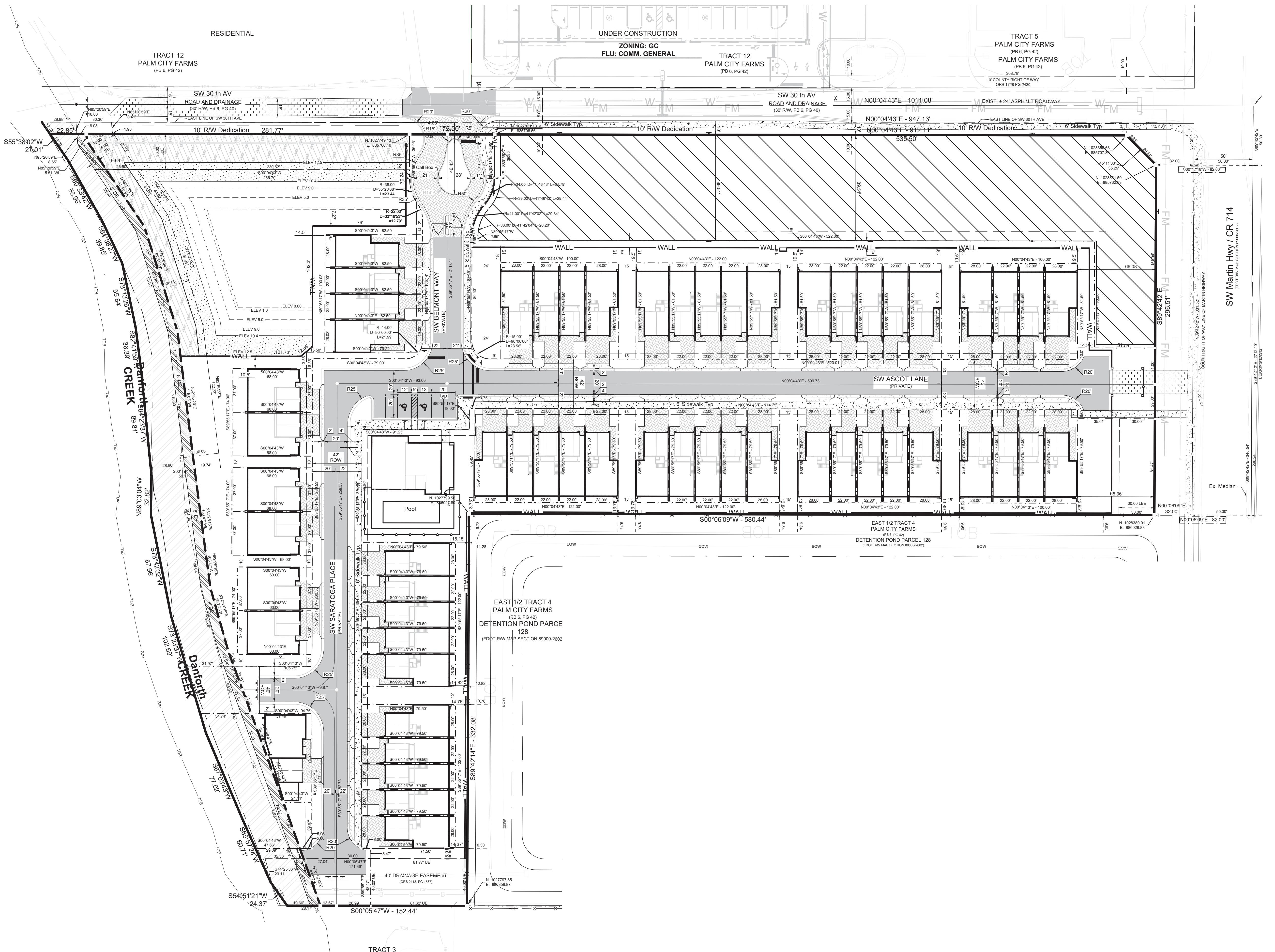
## 42' Road Right-of-Way Typical



## Preserve Sign Detail







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Palm City, Florida 34990

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# Florida Lions

# Paddock at Palm City PUD

# Martin County Horizontal Co

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Drawn By EB  
Checked By MH  
Approved By MH  
Submittal Dates 4-30-2025

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## Revision Dates

Scale: 1" = 40'

A white right-pointing arrow inside a black circle, indicating the direction to the next slide.