

**US 19 and Spring Hill Dr.
Hernando County, FL**

Environmental Report

July 28, 2025

Prepared For:

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**US 19 AND SPRING HILL DR.
ENVIRONMENTAL REPORT
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1.0 INTRODUCTION

This report provides the results of the environmental assessment performed by Naylor Environmental Solutions LLC for the approximately 11-acre site located at the intersection of US 19 and Spring Hill Dr., Spring Hill, Hernando County, FL (Parcel ID #: R32 323 17 5010 00A0 0000). See Figure 1 – Location and Figure 2 – Aerial.

The purpose of the assessment was to review the project area for protected species, their habitat, and wetlands and other surface waters. Four (4) wetlands and two (2) other surface water ditches were identified onsite. There is also an offsite roadside surface water ditch located along US 19. No listed or protected species were observed. Evidence of an active homeless encampment including mattresses, household items, and clothing are scattered throughout the site. Details regarding survey methodology, existing conditions, and permitting requirements are below.

2.0 METHODOLOGY

Desktop research was conducted to determine the potential for presence of state and federal protected species and their habitat, and wetlands and other surface waters on the project site. The following resources were reviewed:

- Florida Fish and Wildlife Conservation Commission (FWC) Florida's Endangered Species, Threatened Species, and Species of Special Concern List
- Florida Natural Areas Inventory (FNAI) Biodiversity Matrix
- U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC)
- Audubon's EagleWatch Nest Map
- FWC Wood Stork Nesting Colony and Core Foraging Area
- Florida's Water Bird Colony Locator Map
- USDA Natural Resources Conservation Service (NRCS) Soils Data
- Florida Land Use Cover and Forms Classification System (FLUCFCS)
- Historical Aerials
- Hernando County Property Appraiser records and maps

Biologists from Naylor Environmental Solutions (NES) conducted a field visit on May 8, 2025, to evaluate the site for protected species and their habitat and for wetland and surface waters. A general pedestrian survey for protected species included recording direct signs of protected species as well as indirect signs including burrows, feeding trails, nesting cavities, habitat, and other refugia. The protected species review was conducted using guidance from Florida Fish and Wildlife Conservation Commission (FWC) and U.S. Fish and Wildlife Services (USFWS) for general protected species surveys. The gopher tortoise survey was conducted following FWC Gopher Tortoise Permitting Guidelines, Methods for Burrow Survey. Assessment of wetlands and surface waters was conducted according to Chapter 62-340 F.A.C. Delineation of the Landward Extent of Wetlands and Surface Waters and the USACE 1987 Wetland Delineation Manual and Regional Supplement.

3.0 EXISTING CONDITIONS

3.1 Soils and Topography

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soils data show three (3) soil types onsite: Anclote Fine Sand, 0 to 2 Percent Slopes, Pondered (2),



Basinger Fine Sand, 0 to 2 Percent Slopes (9), which are classified as hydric according to the Hydric Soils of Florida Handbook and Candler Fine Sand, 0 to 5 Percent Slopes (14) which is classified non-hydric however can have hydric inclusions. See Figure 3 – NRCS Soils. The topography onsite is relatively flat across the site, with the lower elevations mostly coinciding with mapped wetlands. See Figure 4 – USGS Topography.

3.2 Habitat

Based on the Florida Land Use, Cover and Forms Classification System (FLUCFCS), the property contains two (2) main land uses – Longleaf Pine – Xeric Oak (4120) and Mixed Wetland Hardwood (6170). A detailed description of habitats found onsite is below. Please see Figure 5 – FLUCFCS. See Attachment A – Photograph Log.

Wetlands / Other Surface Waters

Four (4) wetlands and two (2) others surface water ditches were identified onsite. Wetland 1 (approximately 0.70-acres) and Wetland 3 (approximately 0.27-acres) are centrally located forested systems with hydrological connections offsite. Wetland 4 (approximately 0.05-acre onsite) in the northeast portion of the site continues offsite to the north. Wetlands 1, 3, and 4 contain similar species composition with a canopy dominated by red maple (*Acer rubrum*), cabbage palm (*Sabal palmetto*), laurel oak (*Quercus laurifolia*), sweet bay (*Persea palustris*), sweetbay magnolia (*Magnolia virginiana*). The understory consisted predominantly of royal fern (*Osmunda regalis*), maidencane (*Panicum hemitomon*), and limited maiden fern (*Thlypteris spp.*). High density of poison ivy (*Toxicodendron radicans*) and (*Smilax carolinana*) were present throughout the wetlands.

Wetland 2 is an approximately 0.57-acre isolated wetland located in the southwest portion of the site. Dominant species include red maple (*Acer rubrum*), sweetbay magnolia (*Magnolia virginiana*) and slash pine (*Pinus elliottii*) in the canopy with maidencane (*Panicum hemitomon*) duck potato (*Sagittaria latifolia*), and saltbush (*Baccharis halimifolia*) in the shrub-stratum understory. See Figure 6 – Wetland and Other Surface Waters.

Other Surface Water 1 is man-made; upland excavated and extends south of Wetland 1. It connects to a drainage feature for the neighborhood to the west. OSW 3 is also man-made; upland excavated and extends west of Wetland 3. There is also an offsite roadside ditch located along US 19.

Other than Wetland 4, all wetlands and surface waters onsite appear to have been formed out of uplands due to land alterations including ditching and berming over the last 75 years which has altered onsite hydrology.

Uplands

The uplands onsite are predominately xeric forested habitat dominated by long leaf pine (*Pinus palustris*), slash pine (*Pinus elliottii*) and live oak (*Quercus virginiana*) in the canopy. The shrub stratum includes saw palmetto (*Serenoa repens*), beauty berry (*Callicarpa americana*), and cherry laurel (*Prunus laurocerasus*) with sparse groundcover of bahia grass (*Paspalum notatum*) present. Significant evidence of an active homeless encampment (trash/tents) is present.

3.3 Protected Species

Desktop research indicated the potential for twelve (12) protected species to utilize the project habitat for foraging, nesting, and/or breeding and were therefore further evaluated for presence onsite:

Table 1. Protected Species with Potential to Occur Onsite

Common Name	Scientific Name	Status	Probability
Gopher Tortoise	<i>Gopherus polyphemus</i>	State Threatened	Low
Eastern Indigo Snake	<i>Drymarchon couperi</i>	Federal Threatened	Low
Florida Sandhill Crane	<i>Antigone canadensis pratensis</i>	State Threatened	Low
Wood Stork	<i>Mycteria americana</i>	Federal Threatened	Low
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Bald and Golden Eagle Protection Act	Low
Florida Burrowing Owl	<i>Athene cunicularia floridana</i>	State Threatened	Low
Florida Scrub-jay	<i>Aphelocoma coerulescens</i>	Federal Threatened	Low
Eastern Black Rail	<i>Leterallus jamaicensis ssp. jamaicensis</i>	Federal Threatened	Low
Everglade Snail Kite	<i>Rostrhamus sociabilis plumbeus</i>	Federal Endangered	Low
Tricolored Bat	<i>Perimyotis sublavus</i>	Proposed Endangered	Low
Tricolored Heron	<i>Egretta tricolor</i>	State Threatened	Low
Little Blue Heron	<i>Egretta caerulea</i>	State Threatened	Low

A general pedestrian survey was conducted to evaluate the potential for presence of the above protected species. Direct and indirect observations of protected species were recorded including vocalizations, tracks, nests, etc. No protected species were observed onsite; however potential gopher tortoise habitat is present. The information below details the findings from the desktop and site surveys per species.

Gopher Tortoise (*Gopherus polyphemus*)

Gopher tortoises prefer well-drained, sandy soil habitats. Although the general pedestrian survey resulted in no direct or indirect observations of gopher tortoises or their burrows within or adjacent to the project site, suitable gopher tortoise habitat is present. A 100% burrow survey no more than 90 days prior to construction is recommended to confirm gopher tortoises do not relocate to the property. An FWC permit may also be required to allow for the excavation of any identified onsite burrows and the relocation of gopher tortoises to an offsite recipient area.

Eastern Indigo Snake (*Drymarchon couperi*)

The Eastern Indigo Snake (EIS) requires tracts of continual habitat and tends to rely on commensal relationships with gopher tortoises and their burrows for shelters. No direct observations of the Eastern Indigo Snake were made during the protected species surveys. There were also no direct observations of gopher tortoise burrows or other characteristics typical for Eastern indigo snakes onsite; however, the project parcel and adjacent properties provide suitable habitat. Although the likelihood is low for the presence of the Eastern indigo snake (EIS), during construction, the USFWS's "Standard Protection Measures for the Eastern Indigo Snake" can be implemented which include distribution of USFWS approved materials, posting signage, and allowing the snake to vacate the area if observed during construction. Assuming the USFWS's

guidance on EIS is administered during construction activities, the determination is that the project is not likely to adversely affect EIS's and formal consultation with USFWS will not be required.

Florida Sandhill Crane (*Grus canadensis pratensis*)

The Florida Sandhill Crane is protected under the U.S. Migratory Bird Treaty Act and listed as a State Threatened species. No sandhill cranes were observed during the site visit and no nests were identified onsite or immediately offsite. Although the wetland consists of freshwater habitat, the wetlands are forested and do not provide the proper nesting structure. Additionally, the proper nesting habitat does not appear to exist within immediate proximity to the site and, therefore, additional consultation with regulatory agencies is not anticipated.

Wood Stork (*Mycteria americana*)

No wood storks were observed during the site visit. Based on the Florida Nesting Colonies and Core Foraging Areas database, the project is located within a wood stork core foraging area. The closest colony (Embassy – Shoppers Way) is approximately 12.43 miles southwest of the project site. No wood storks were observed onsite, and suitable foraging habitat (SFH) is not present onsite. SFH is defined as relatively open water at a depth between 2 to 15 inches. Impact on this species is not anticipated.

Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle remains protected under the Bald and Golden Eagle Protection Act and therefore a review of the Audubon EagleWatch Nest Map was performed. There are no documented bald eagle nests on or adjacent to the project area and no bald eagles or their nests were observed during the site visit. The closest active nest (HN030) is located approximately 0.9 miles northeast of the site. Since the recorded nest is located outside the 660 ft buffer requirement and no nests were observed onsite, no coordination is needed regarding bald eagles.

Florida burrowing owl (*Athene cunicularia floridana*)

No Florida burrowing owls, or their burrows were observed during the protected species surveys onsite. It is not anticipated that the Florida burrowing owl is present onsite; therefore, no effect to this species is anticipated.

USFWS Consultation Areas - Florida Scrub-jay (*Aphelocoma coerulescens*)

The project site is located within the Florida Scrub-Jay Consultation Area, a species which is listed as threatened by the USFWS. However, no Florida scrub-jays were observed onsite, and appropriate habitat is limited onsite. It is not anticipated that a formal survey or consultation with USFWS would be required.

Eastern Black Rail (*Laterallus jamaicensis ssp. jamaicensis*)

The eastern black rail is most commonly found in salt and brackish waters with dense vegetation for nesting and foraging such as tall grasses, sedges and rushes. Utilization becomes much less likely when shrubs are within the wetland. Habitat for the Eastern black rail does not exist onsite. There is low likelihood it would utilize the site.

Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*)

Everglade snail kite habitat consists of freshwater marshes and shallow vegetated edges of lakes where apple snails can be found. Habitat for the snail kite does not exist onsite therefore, no effect to the snail kite is anticipated.

Tricolored Bat (*Perimyotis subflavus*)

The tricolored bat is a proposed endangered species. The USFWS has proposed a draft rule to list as endangered. Proposed endangered species are not protected by the take prohibitions of Section 9 of the Endangered Species Act (ESA) until the rule to list is finalized. Until the rule is finalized, there is no regulatory requirement to address this species.

Tricolored Heron (*Egretta tricolor*) and Little Blue Heron (*Egretta caerulea*)

According to the FWC Water Bird Colony locator and database, there are no known water bird colonies located onsite or in proximity. No wading bird rookeries or nests are known or were identified on or near the subject property. Development of the site is not likely to adversely affect any wading bird populations.

4.0 PERMITTING REQUIREMENTS

4.1 Habitat

Impacts to Wetlands 1, 2, 3, and 4 fall under the jurisdiction of the Southwest Florida Water Management District (SWFWMD). Impacts to wetlands require demonstration of elimination and reduction of wetland impact through design modifications and mitigation where wetland impacts are unavoidable. An Environmental Resource Permit (ERP) will be required from SWFWMD for any wetland impacts associated with the project. SWFWMD enforces a 15-foot minimum, average of 25-foot buffer from wetlands to remain. SWFWMD will also require that the wetlands and other surface waters be verified via a Formal Determination of the Landward Extent of Wetlands or Surface Waters or informally during the ERP process.

The U.S. Army Corps of Engineers (USACE) only requires a permit for impacts to WOTUS. According to the Federal Register, Waters of the U.S. (WOTUS) extends only to those wetlands with a continuous surface connection to bodies that are WOTUS (such as navigable waters, tributaries, etc.). Wetlands 1, 2, 3, and 4 have no surface connection to traditionally navigable waterways; therefore, they are not considered Waters of the U.S. (WOTUS) and USACE permitting is not required.

4.2 Protected Species

No protected species were determined to be located onsite, and no protected species are anticipated to be affected by the project, therefore there are no permitting requirements associated with protected species. Based on current observations onsite, no permitting is required from FWC or USFWS for protected species. It is recommended that USFWS's *Standard Protection Measures for the Eastern Indigo Snake* are implemented during construction.

4.3 Mitigation

Wetland mitigation will be required for direct or secondary impacts to the wetlands located onsite. The project site is located within the service area of several mitigation banks including the Nature Coast, Old Florida, and Upper Coastal Mitigation Bank.

5.0 SUMMARY

Assessment of wetlands and surface waters was conducted at the project site according to Chapter 62-340 F.A.C. Delineation of the Landward Extent of Wetlands and Surface Waters and the USACE 1987 Wetland Delineation Manual and Regional Supplement. Three wetlands (3) and two (2) other surface waters were identified onsite. An offsite roadside ditch is located along US

19. An ERP from SWFWMD will be required for wetland impacts. Mitigation bank credits are available to compensate for impacts.

The protected species and gopher tortoise survey conducted at the subject site was performed using guidance from FWC and USFWS for general pedestrian surveys and FWC Gopher Tortoise Permitting Guidelines, Methods for Burrow Surveys. No protected species were identified however potential gopher tortoise habitat is present onsite. A 100% gopher tortoise burrow survey is recommended 90 days prior to construction. It is recommended that USFWS's "*Standard Protection Measures for the Eastern Indigo Snake*" be implemented during construction.

6.0 REFERENCES

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NAYLOR ENVIRONMENTAL SOLUTIONS LLC



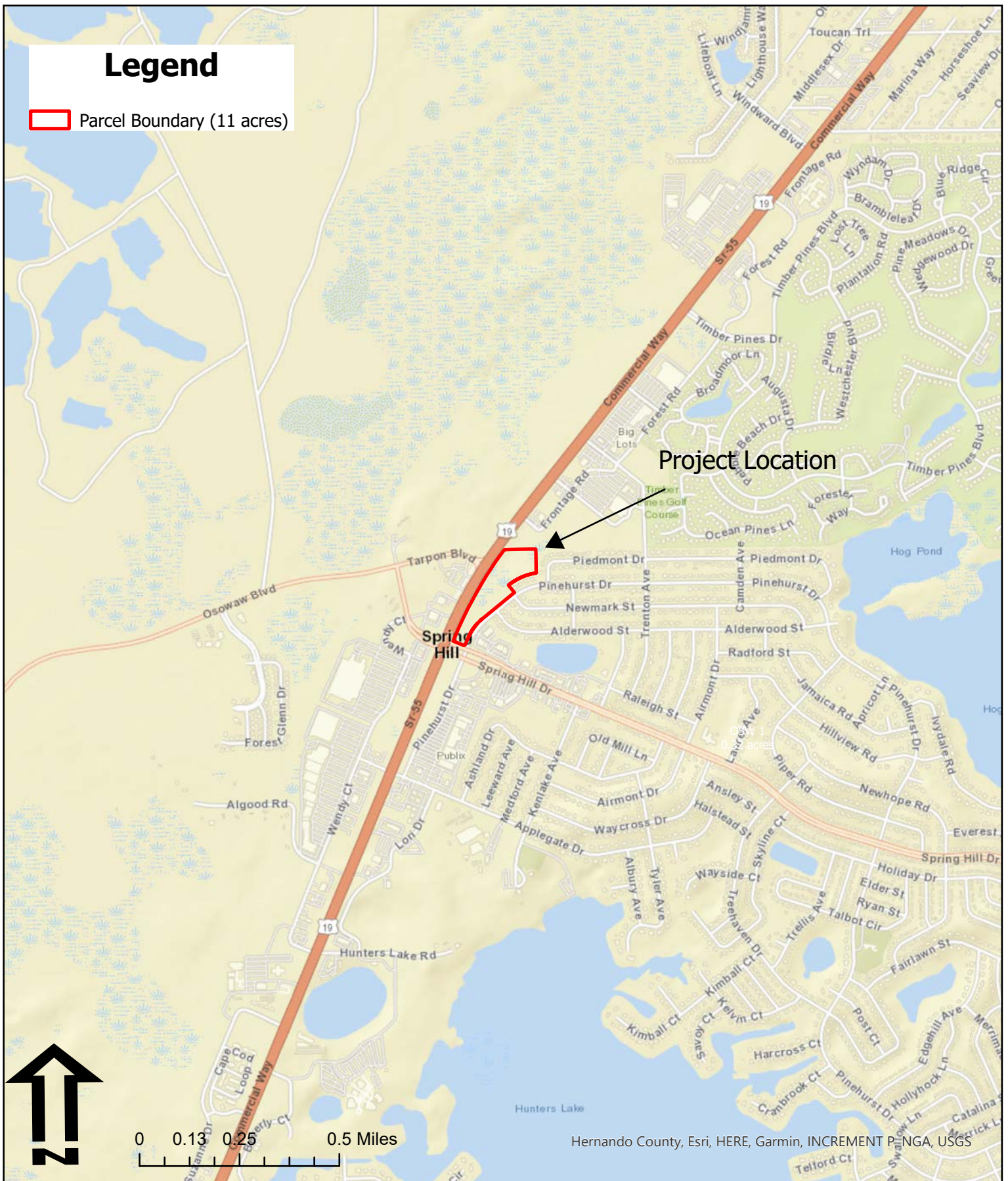
ABBEY NAYLOR
PRINCIPAL ECOLOGIST

FIGURES

Legend

 Parcel Boundary (11 acres)

Project Location



Hernando County, Esri, HERE, Garmin, INCREMENT PINGA, USGS

Prepared by:



Figure 1. Location
US 19 & Spring Hill Drive
Parcel ID: R32 323 17 5010 00A0 0000
Hernando County, FL

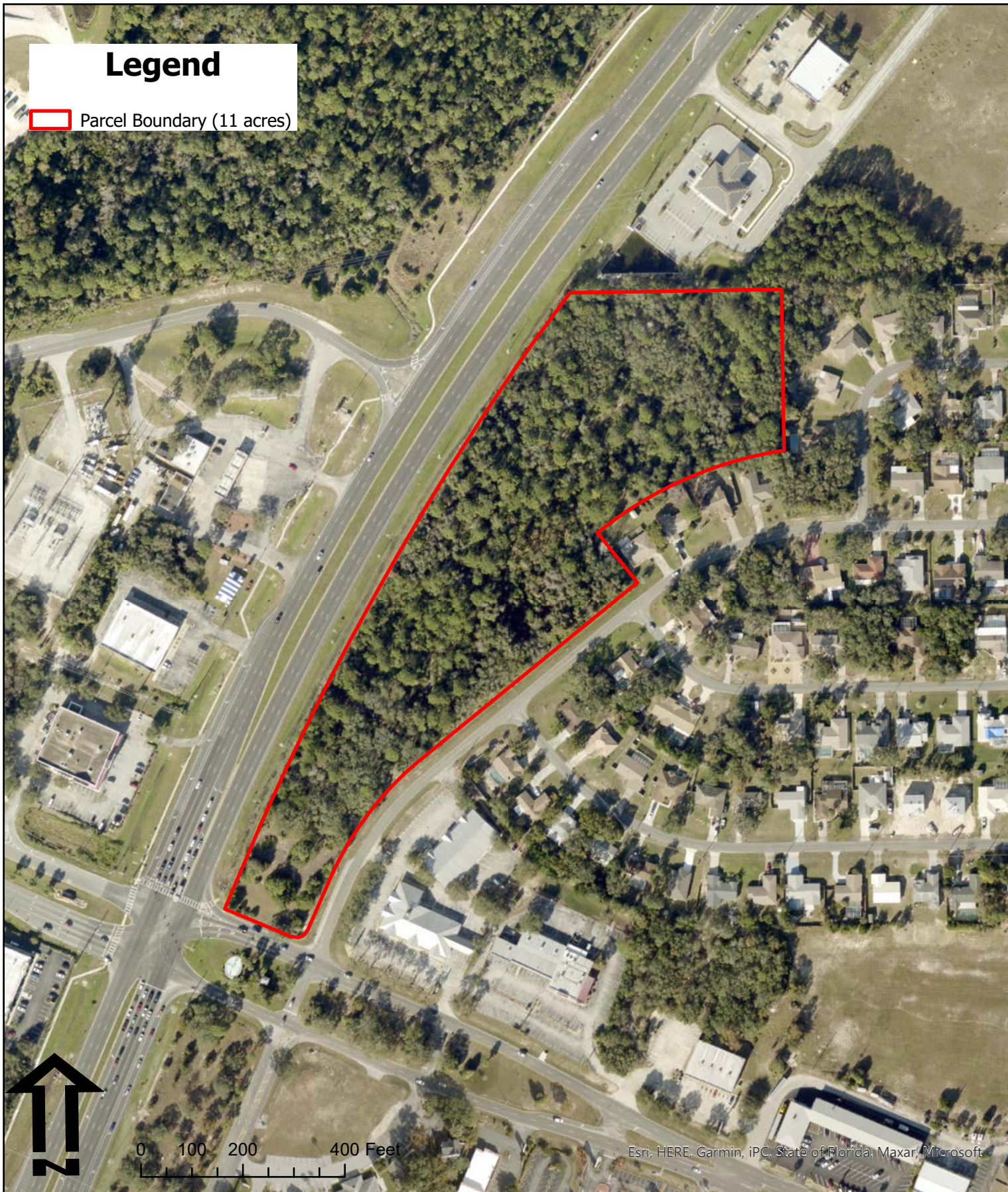
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Creation Date: 06/30/25
Author: A. Naylor

Prepared for:

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Hobe Sound, FL 33488

Legend

 Parcel Boundary (11 acres)



Prepared by:



Figure 2. Aerial
US 19 & Spring Hill Drive
Parcel ID: R32 323 17 5010 00A0 0000
Hernando County, FL

Source: Aerial (ESRI); Property Boundary (Hernando County);
Creation Date: 06/30/25
Author: A. Naylor

Prepared for:

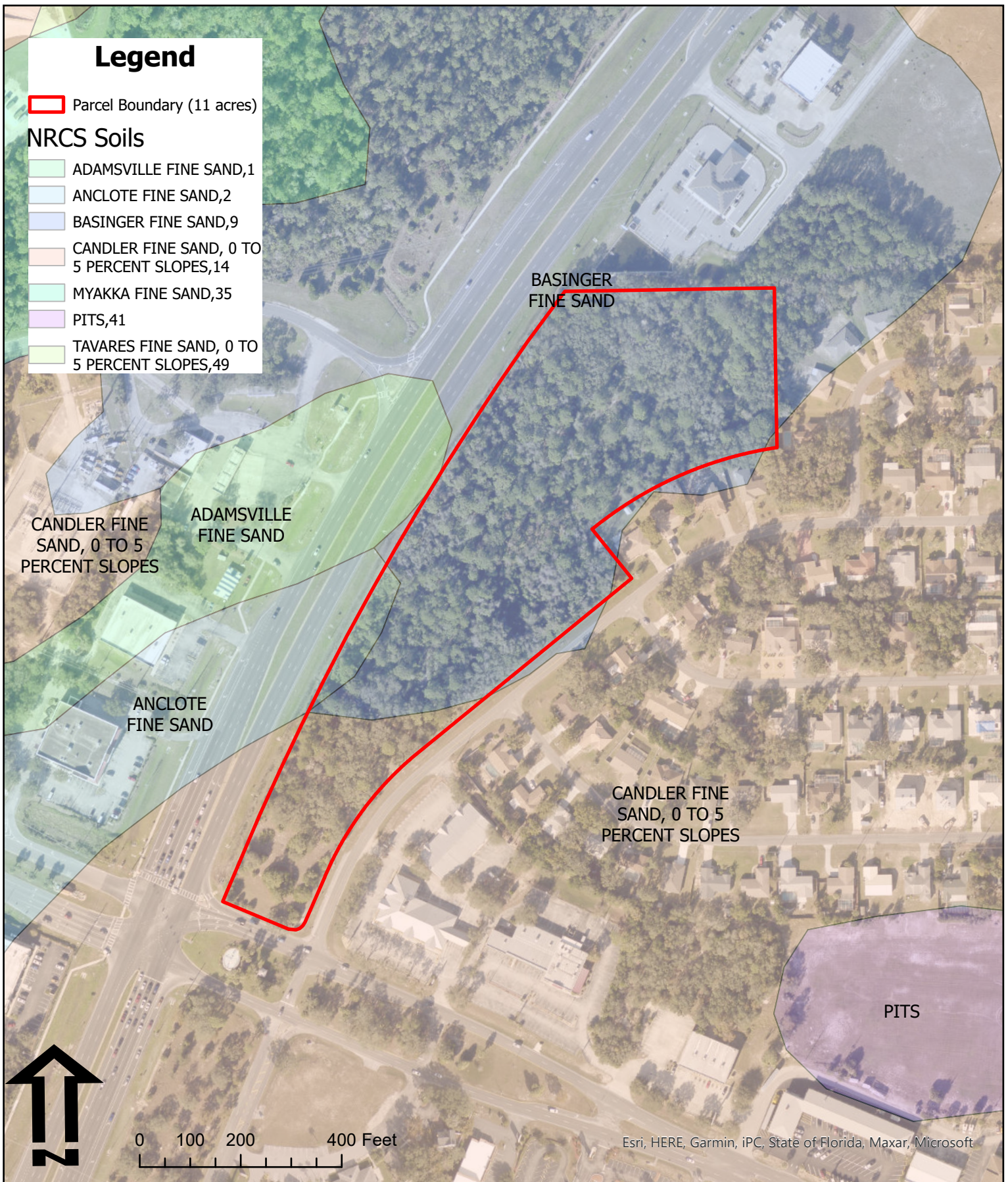
Meriden Development, LLC
7901 SE Osprey St.
Hobe Sound, FL 33488

Legend

 Parcel Boundary (11 acres)

NRCS Soils

-  ADAMSVILLE FINE SAND,1
-  ANCLOTE FINE SAND,2
-  BASINGER FINE SAND,9
-  CANDLER FINE SAND, 0 TO 5 PERCENT SLOPES,14
-  MYAKKA FINE SAND,35
-  PITS,41
-  TAVARES FINE SAND, 0 TO 5 PERCENT SLOPES,49



Prepared by:



Figure 3. NRCS Soils
US 19 & Spring Hill Drive
Parcel ID: R32 323 17 5010 00A0 0000
Hernando County, FL

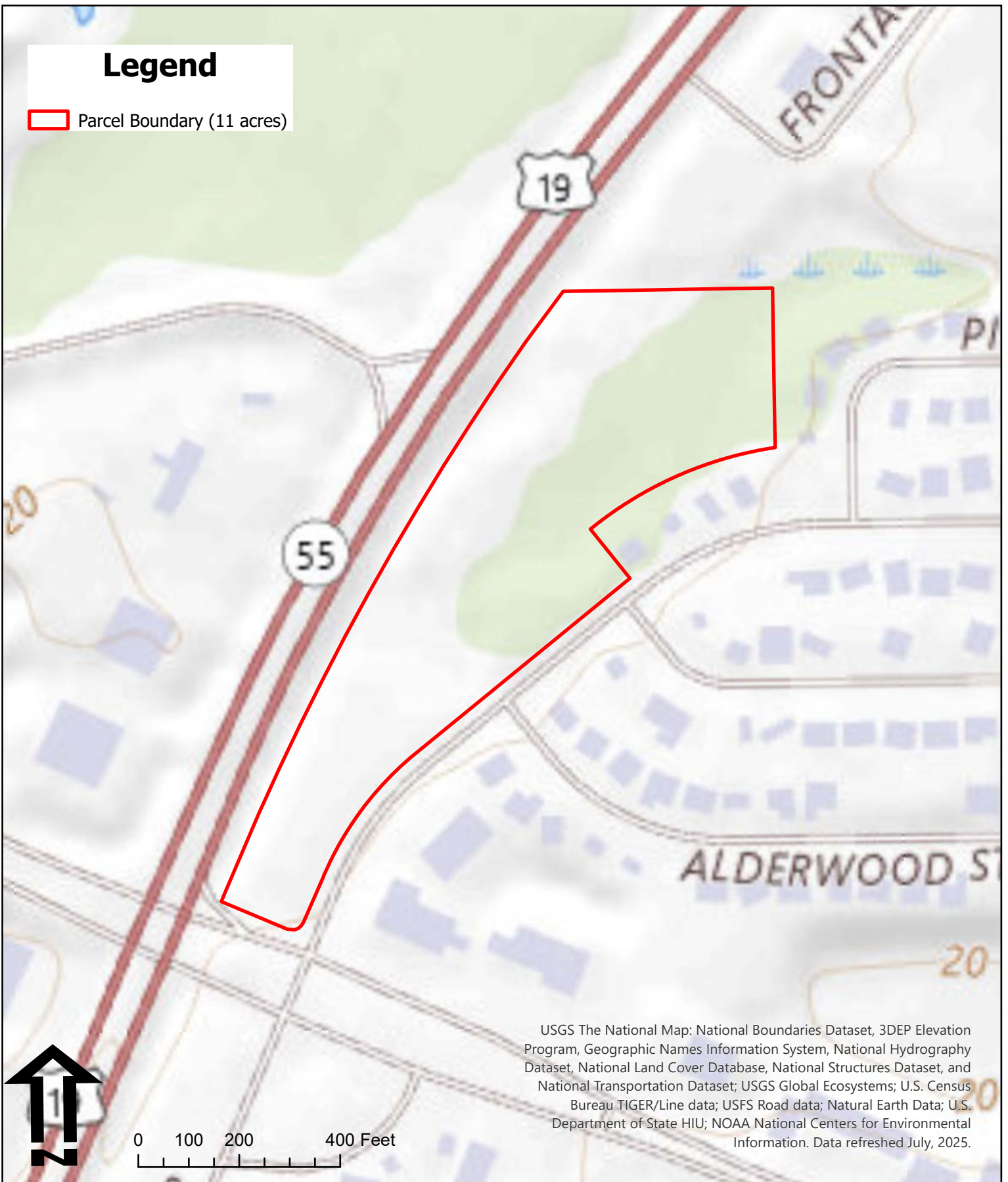
Source: Aerial (ESRI); Property Boundary (Hernando County);
Creation Date: 06/30/25
Author: A. Naylor

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Legend

 Parcel Boundary (11 acres)



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Figure 4. USGS Topography
US 19 & Spring Hill Drive
Parcel ID: R32 323 17 5010 00A0 0000
Hernando County, FL

Source: Aerial (ESRI); Property Boundary (Hernando County);
Creation Date: 06/30/25
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Legend

 Parcel Boundary (11 acres)

FLUCFCS

 4120: Longleaf Pine - Xeric Oak

 6170: Mixed Wetland Hardwoods



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Figure 5. FLUCFCS
US 19 & Spring Hill Drive
Parcel ID: R32 323 17 5010 00A0 0000
Hernando County, FL

Source: Aerial (ESRI); Property Boundary (Hernando County);
Creation Date: 06/30/25
Author: A. Naylor

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Legend

- Parcel Boundary (11 acres)
- OSW Ditches
- Wetlands



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Figure 6. Wetlands and Other Surface Waters
US 19 & Spring Hill Drive
Parcel ID: R32 323 17 5010 00A0 0000
Hernando County, FL

Source: Aerial (ESRI); Property Boundary (Hernando County);
Creation Date: 06/30/25
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ATTACHMENT A
PHOTOGRAPH LOG



Wetland 3 representative of onsite wetlands



OSW 1 facing east



OSW 2 extending east from OSW 3



Oak and cherry laurel dominated upland



Xeric upland dominated by long leaf pine



1974 - uplands dominated the site