

EW CONSULTANTS, INC.
NATURAL RESOURCE MANAGEMENT, WETLAND, AND ENVIRONMENTAL PERMITTING SERVICES



KINGS HIGHWAY PARCEL ENVIRONMENTAL IMPACT REPORT

Prepared by:

EW CONSULTANTS, INC.

March 2021

INTRODUCTION

The 109± acre-property covered by this Environmental Impact Report is located in Section 24, Township 35 South, Range 39 East, City of Ft. Pierce, Florida (Figures 1&2). The property is bordered to the north by White Road and agricultural lands, to the east by Peters Road and undeveloped land, to the south by undeveloped land and an RV vacation resort, and to the west by Kings Highway and agricultural lands.

This report has been prepared to document existing conditions, natural resources and potential environmental impacts on a 109 ± acre property referred to as the Kings Highway Parcel. The subject property is mostly undeveloped and currently utilized as unimproved pasture. This report has been prepared in accordance with City of Ft. Pierce, Land Development Ordinances and St. Lucie County, Land Development Code.

PROPERTY DESCRIPTION

The subject property is currently undeveloped except for a few residential structures along Peters Road on the eastern portion of the property, and a road construction staging area on the western portion of the property. The remainder of the land is utilized as unimproved pasture. Management practices and the presence of livestock were observed during the site assessment. Historical aerial imagery from c.1985 indicates that the majority of the property was previously planted with row crops which was likely citrus up to the mid-2000's. The unimproved pastures are now vegetated with typical pasture grasses, ruderal weeds and scattered clumps of trees and shrubs. A system of man-made ditches is present on the property, likely associated with prior agricultural uses for draining and irrigating the land.

SOILS

A soils map obtained from the USDA Web Soil Survey and with the property boundary is attached in the Appendix. According to the soil map, five soil types are found on the subject property. The description of these soils, in their natural state, according to the St. Lucie County Soil Survey is provided below:

Chobee loamy sands – Soils of the Chobee series are fine-loamy, siliceous, nearly level, very poorly drained, very slowly permeable soils that formed in unconsolidated, moderately fine marine sedi-ment. The water table is above the surface for 6 to 9 months in most years and is within 10 inches of the surface for most of the rest of the year except in very dry periods. Slope ranges from 0 to 2 percent. Under natural conditions, vegetation may consist of arrowhead, cabbage palm, Carolina willow, cypress, maidencane, pickerelweed, lilies, sawgrass, smartweed, wax myrtle, slash pine, water oak, understory of ferns and water tolerant grasses, and scattered swamp maples in treeless areas.

Pineda sand – Soils of the Pineda series are loamy, siliceous, poorly drained, slowly to very slowly permeable soils that formed in unconsolidated marine sandy and loamy materials. The water table is within a depth of 10 inches for 1 to 6 months and between depths of 10 to 40 inches for most of the rest of the year. Slope ranges from 0 to 2 inches. Under natural

conditions, vegetation consists of south Florida slash pine, cypress, myrtle, cabbage palm, blue maidencane, chalky bluestem, saw palmetto sedges, pineland threeawn, and sand cordgrass.

Riviera fine sand, 0 to 2 percent slopes – Soils of the Riviera series are loamy, siliceous, nearly level, poorly drained, slowly to very slowly permeable soils that formed in unconsolidated, marine sandy and loamy materials. The water table is within a depth of 10 inches for 2 to 4 months and between depths of 10 to 30 inches for most of the rest of the year. Depressional areas are ponded for 6 to 9 months or more annually. Nearly all of the acreage has been cleared and is planted to row crops/citrus or managed as pasture. Typical natural vegetation is cabbage palms and scattered longleaf pine and slash pine and an understory of wax myrtle and saw palmetto.

Wabasso sand – Soils of the Wabasso series are sandy, siliceous, nearly level, poorly drained, slowly and very slowly permeable soils that formed in beds of marine sandy and loamy materials. These soils are on broad flatwoods. In most years, the water table is within a depth of 10 inches for 1 to 4 months and between depths of 10 to 40 inches for 6 to 9 months. Slope ranges from 0 to 2 percent. The typical natural vegetation consists of longleaf pine, slash pine, cabbage palm, live oak, with an understory of saw palmetto, laurel oak, wax myrtle, chalky bluestem, creeping bluestem, indiagrass, little bluestem, Florida paspalum, running oak, south Florida slash pine and pineland threeawn.

Winder loamy sand – Soils of the Winder series are fine-loamy, siliceous, nearly level, poorly drained, slowly to very slowly permeable soils that formed in unconsolidated marine sand, and loamy materials. These soils are in hammocks, along poorly defined drainageways, and in depressional areas. A water table is within a depth of 10 inches for 2 to 4 months and between depths of 10 to 40 inches for most of the rest of the year. Depressional areas are ponded for 6 to 9 months in most years. Slope ranges from 0 to 2 percent. Typical natural vegetation consists of cordgrass, maidencane, cabbage palmetto, saw palmetto, and pineland threeawn.

NATURAL COMMUNITIES AND LAND COVER

The following is a summary of the land cover and vegetation communities found on the subject site. Land cover and vegetative community classifications were mapped based on the Florida Land Use, Cover and Forms Classification System (FLUCFCS) developed by the Florida Department of Transportation. Field reconnaissance and aerial photograph interpretation were employed in the mapping effort of the vegetative communities on the subject property. Observed and potential listed wildlife species presence and usage of the habitat is further discussed in the subsequent section of this report.

There are four different FLUCFCS classifications currently present on the site including (111) single family units, (140) commercial and services, (212) unimproved pasture, the ditches that network throughout the site are classified as streams and waterways (510).

A land cover map of the observed community types is included as Figure in the Appendix of this report. The land cover types observed on the property are described as follows:

111 Fixed Single Family Units – 9.3 ± acres

There are several single family and associated structures along the eastern portion of the property. Some appear dilapidated and uninhabited, and some appear maintained and inhabited. The property immediately surrounding these structures appears maintained and contains a variety of grasses, shrubs and trees, some landscaping and some natural.

140 Commercial Services – 7.4 ± acres

This area is located along the western portion of the property and appears to be utilized for road construction staging and storage. The area has been cleared of vegetation and the surface leveled and partially graveled.

212 Unimproved Pasture – 91.4 ± acres

This land cover accounts for the majority of the property where citrus and crops once existed. There is still evidence of rows and swales associated with prior uses, however the groundcover has been allowed to fill in and has possibly been supplemented with pasture grasses. Vegetation assemblages within this land cover type is predominantly short, herbaceous grass and ruderal weeds with dominant species including bahia grass, dropseed grass, guinea grass, dog fennel, ragweed, shrubby false buttonweed, pepperweed, Caesarweed and sandspur grass. Taller vegetation and trees consist mainly of Brazilian pepper, live oak, Australian pine, earleaf acacia and sabal palms. The remnant swales contain some wetland vegetation such as primrose willow, marsh purslane, spikerush and dollarweed.

510 Ditches – 0.9 ± acres

A system of drainage ditches extends throughout the property. The ditches are approximately 6-10 feet wide and are typically open water with scattered vegetation such as Carolina willow, primrose willow, cattail, and swamp fern.

WILDLIFE AND LISTED SPECIES

The pasture and ditch areas provide habitat for numerous wildlife species. Observations from the site visit conducted in March, 2021 included sightings or signs of great egret, white Ibis, glossy ibis, northern mocking bird, tri-colored heron, cattle egret, and raccoon.

Of these species observed, only the tri-colored heron is protected and listed by the State as a threatened species. The tri-colored heron was observed foraging in a ditch area and no nests were observed on the site. Although not observed, the site also provides suitable habitat for three Federally listed species, Audubon's crested caracara, wood stork, and eastern indigo snake. During the site plan approval process, the U.S Fish and Wildlife Service should be consulted for guidance and protection measures for these species.

The absence of natural habitat combined with active agricultural and land management practices has left the property unsuitable for most other listed species found in the region.

PROPOSED IMPACTS FROM DEVELOPMENT

Under the development proposal, the majority of the 109-acre site will be occupied with warehouse and office space with associated infrastructure such as parking and surface water

management systems. Because there is no significant native upland or native wetland habitat present on the site, the environmental impacts are minimal.

There are surface waters in the form of drainage ditches. Permits will be obtained from South Florida Water Management District (SFWMD) that will address impacts to surface waters. The proposed surface water management lakes will provide surface water area to offset the ditch impacts. Although federally listed species were not observed during the site assessment, U.S Fish and Wildlife Service will be consulted for guidance and protection measures for listed species habitat that occurs on the property.

APPENDIX

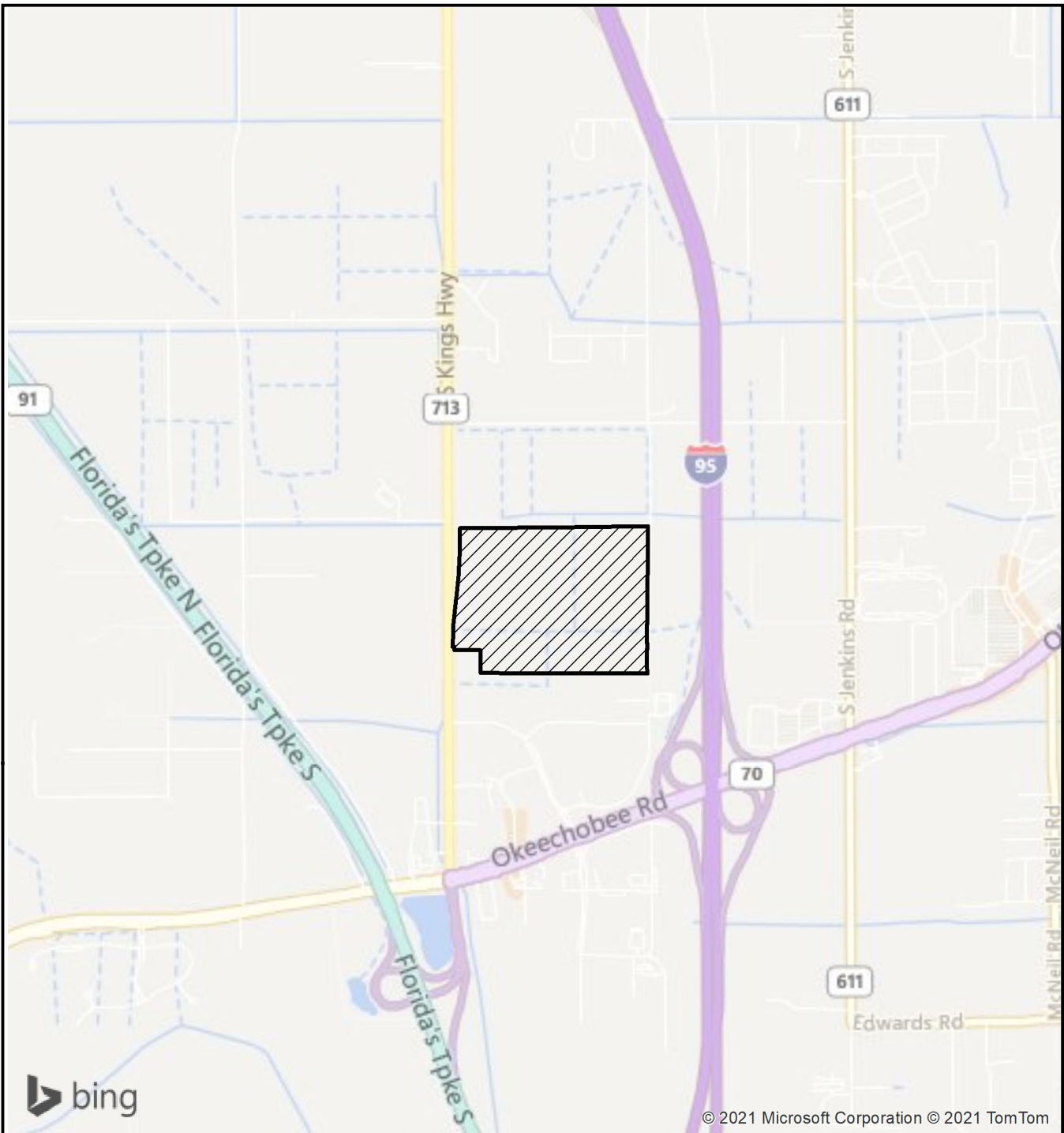
FIGURE 1. LOCATION MAP

FIGURE 2. QUAD MAP


FIGURE 3. AERIAL MAP

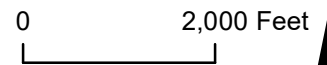
FIGURE 4. FLUCFCS MAP

ATTACHMENT
SOILS REPORT



LEGEND

 - SITE (109+/- AC)



**KINGS HIGHWAY PARCEL
LOCATION**

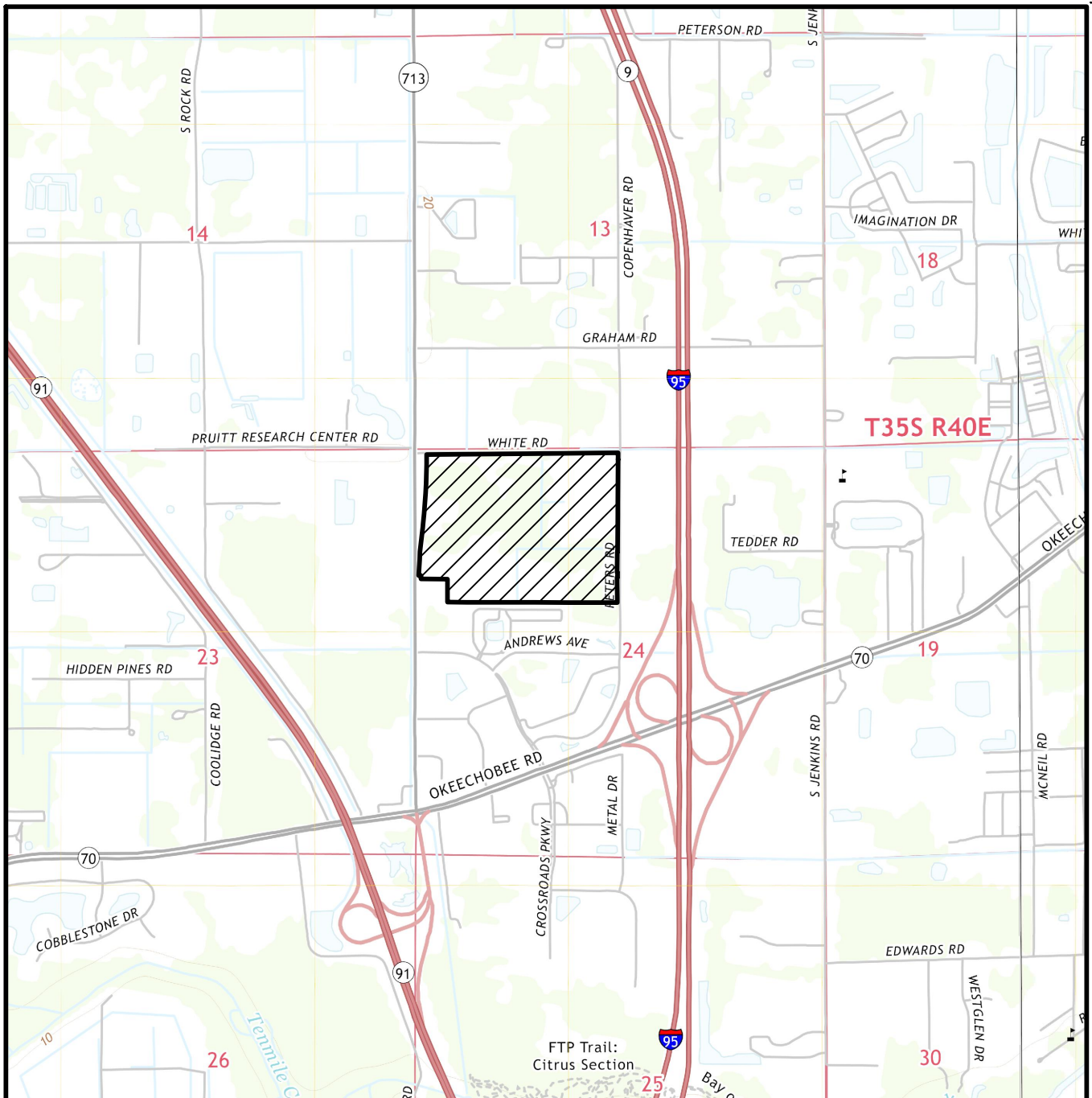


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MAR 2021

FIGURE

1



USGS QUAD MAP "FORT PIERCE NW", SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, CITY OF FORT PIERCE & UNINCORPORATED ST LUCIE COUNTY, FORT PIERCE, ST LUCIE COUNTY, FLORIDA, LATITUDE 27°25'26" LONGITUDE -80°23'42"

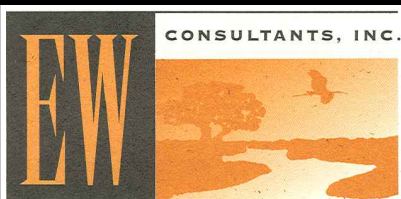
LEGEND

 - SITE (109± AC)



**KINGS HIGHWAY PARCEL
QUAD**

Kings Highway Parcel.dwg QUAD



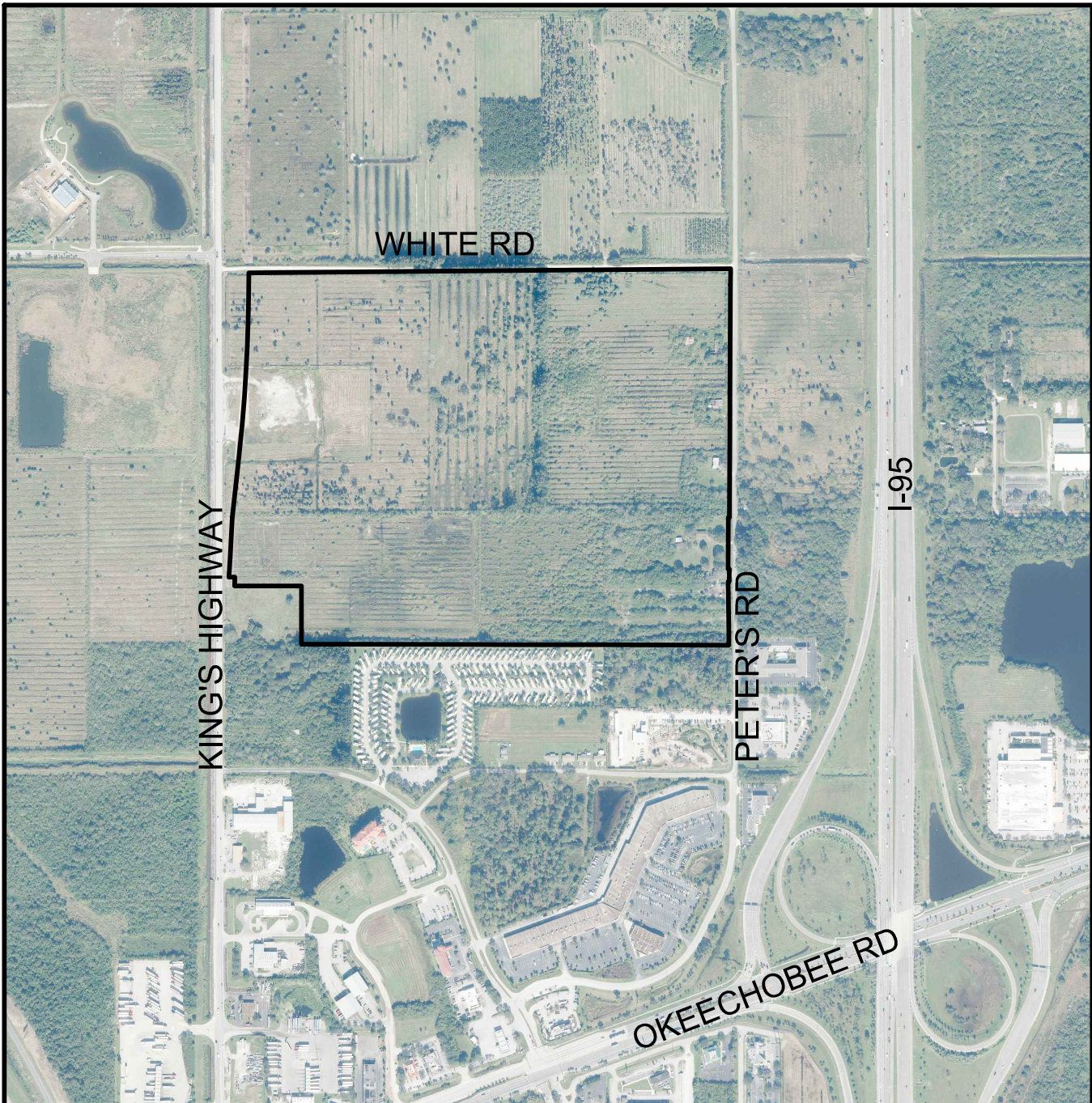
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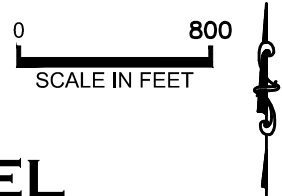
MAR 2021

FIGURE

2

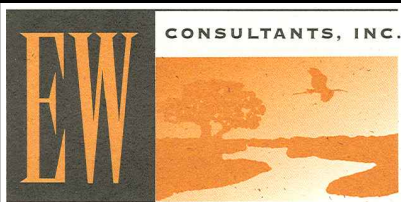


FDOT AERIALS DATED 2018



KINGS HIGHWAY PARCEL AERIAL

Kings Highway Parcel.dwg AERIAL



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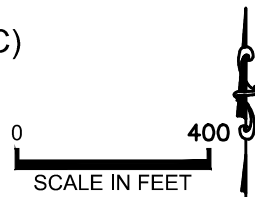
MAR 2021
FIGURE
3



FDOT AERIALS DATED 2018

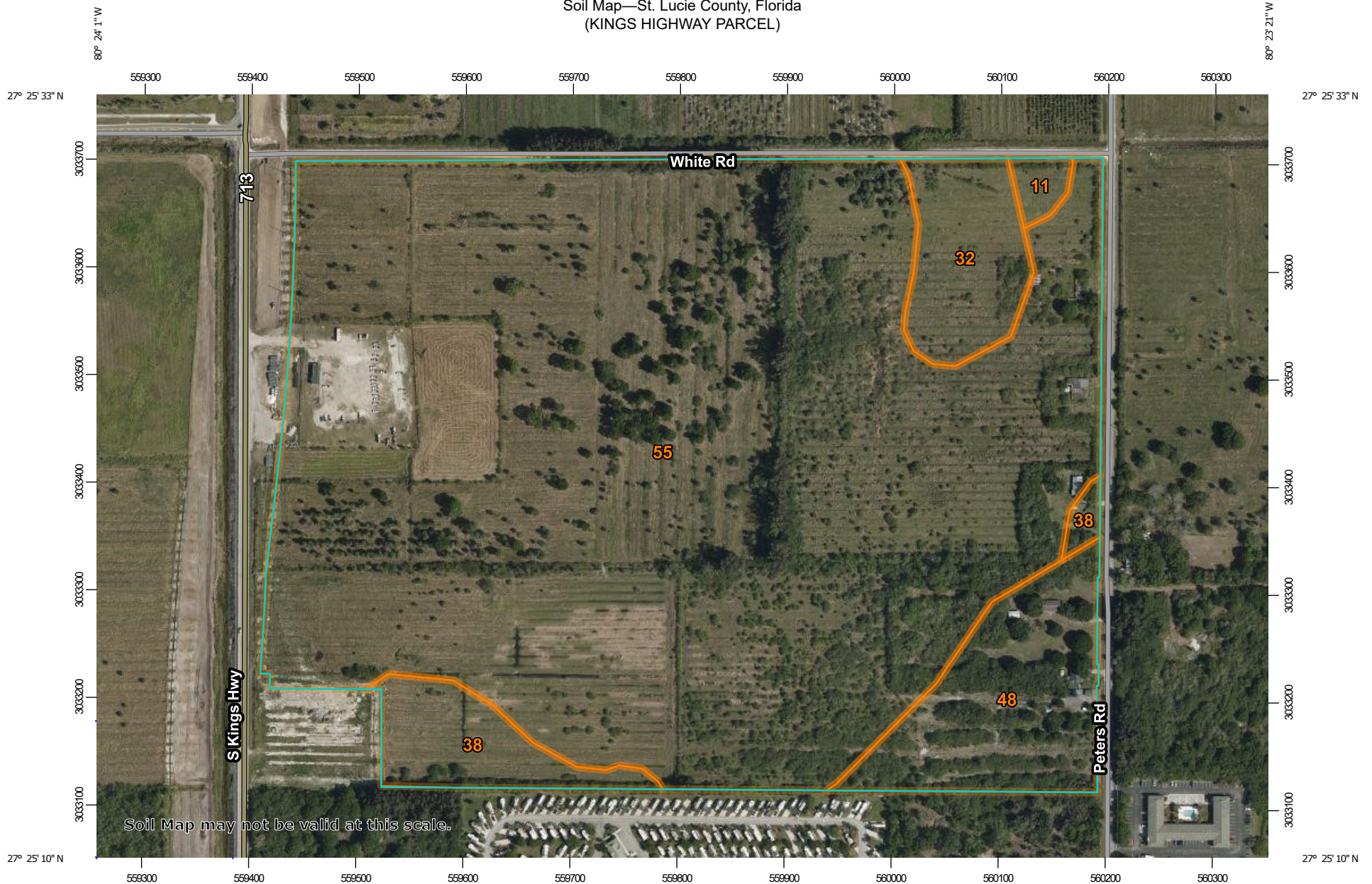
LEGEND

- 111 - FIXED SINGLE FAMILY UNITS (9.3± AC)
- 140 - COMMERCIAL & SERVICES (7.4± AC)
- 212 - UNIMPROVED PASTURE (91.4± AC)
- 510 - DITCHES (0.9± AC)
- TOTAL SITE (109± AC)

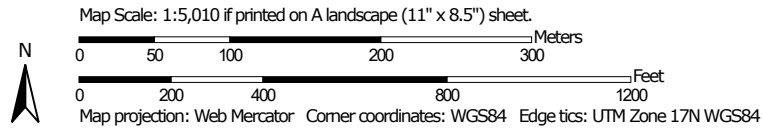


KINGS HIGHWAY PARCEL FLUCFCS MAP		MAR 2021
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		FIGURE 4

Soil Map—St. Lucie County, Florida
(KINGS HIGHWAY PARCEL)




Soil Map may not be valid at this scale.



Soil Map—St. Lucie County, Florida
(KINGS HIGHWAY PARCEL)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: St. Lucie County, Florida

Survey Area Data: Version 14, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 6, 2019—Mar 23, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
11	Chobee loamy sand, frequently ponded, 0 to 1 percent slopes	0.7	0.6%
32	Pineda sand, 0 to 2 percent slopes	4.6	4.3%
38	Riviera fine sand, 0 to 2 percent slopes	4.2	3.8%
48	Wabasso sand, 0 to 2 percent slopes	8.1	7.4%
55	Winder loamy sand	91.5	83.9%
Totals for Area of Interest		109.0	100.0%