#### ATTACHMENT F

## Kimley » Horn

#### **Technical Memorandum**

From: Gene B. Losito, P.E., Kimley-Horn and Associates, Inc.

Date: October 17, 2022

RE: Ocala Travel Center

Drainage Analysis

Kimley-Horn Project No: 045545009

The purpose of this technical memorandum is to provide a preliminary Drainage Analysis for the Ocala Travel Center (the "Project").

The Project is located in central Marion County, Florida, east of I-75, between US 27 and CR 326. The project area is approximately 32.8 acres in size and consists of a proposed travel center including fuel stations.

The Project site varies in elevation from 80' to 120'. No flood plains exist on site. The site is composed of Type A, well-drained soils. In existing conditions, the site is within 3 drainage basins delineated by the Northwest Ocala and Florida Ridge Watershed Management Plans. In proposed conditions, conditions, the Project will include 5 stormwater retention areas designed to Marion County, St. Johns River Water Management District, and Florida Department of Transportation requirements as applicable.

THIS IS TO CERTIFY THAT THE ENCLOSED ENGINEERING MEMORANDUM WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.



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GENE BRUNO LOSITO, P.E. Florida Registration Number #75547 Registry No. 35106

Attachments:

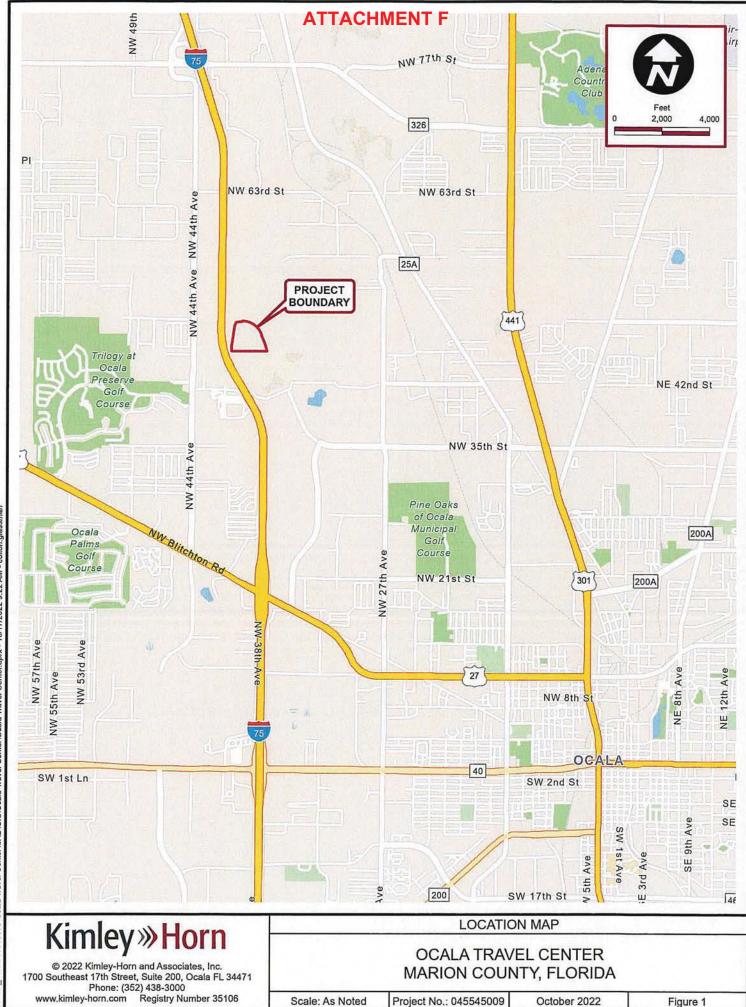
Location Map

Aerial Map

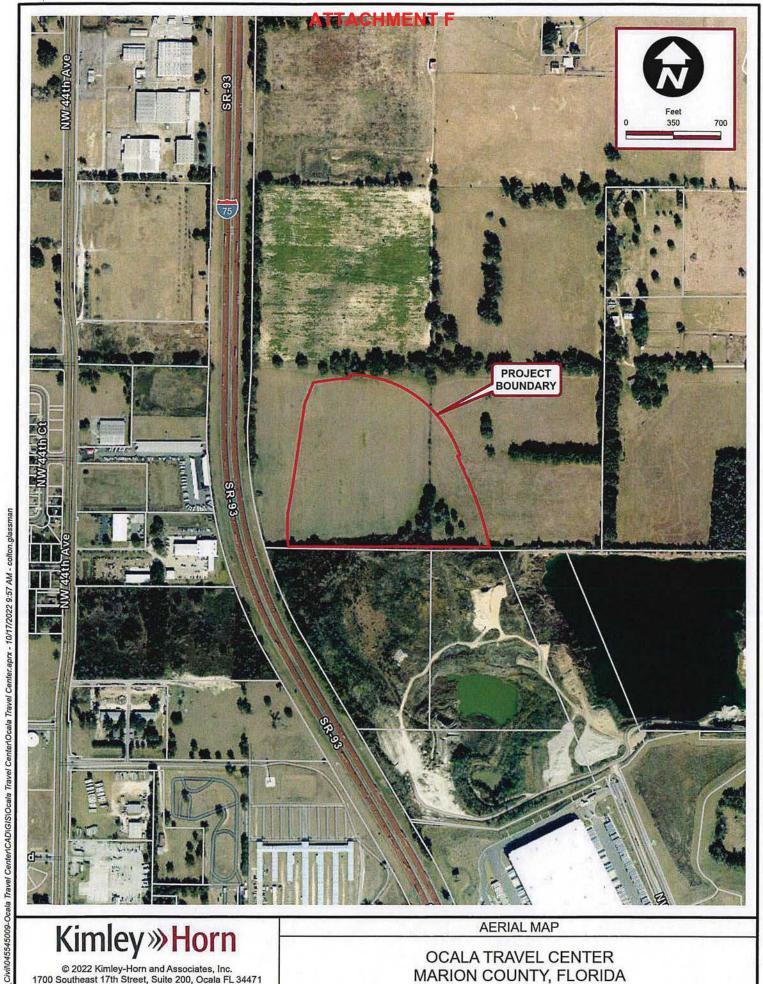
USGS Quad Map FEMA Firmette NRCS Soils Survey

Existing Conditions Drainage Analysis Exhibit Proposed Conditions Drainage Analysis Exhibit

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# Kimley » Horn

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**AERIAL MAP** 

OCALA TRAVEL CENTER MARION COUNTY, FLORIDA

Scale: As Noted

Project No.: 045545009

October 2022

Figure 2



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OCALA TRAVEL CENTER MARION COUNTY, FLORIDA

Project No.: 045545009 Scale: As Noted

October 2022

Figure 3

### National Flood Hazard Layer FIRMetterment F





#### Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT.

Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone) **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee, See Notes, Zone X Area with Flood Risk due to Levee Zone D NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs Area of Undetermined Flood Hazard Zone - - - Channel, Culvert, or Storm Sewer STRUCTURES | | | Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** 

> ---- Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transect Baseline Profile Baseline Hydrographic Feature Digital Data Available

No Digital Data Available Unmapped

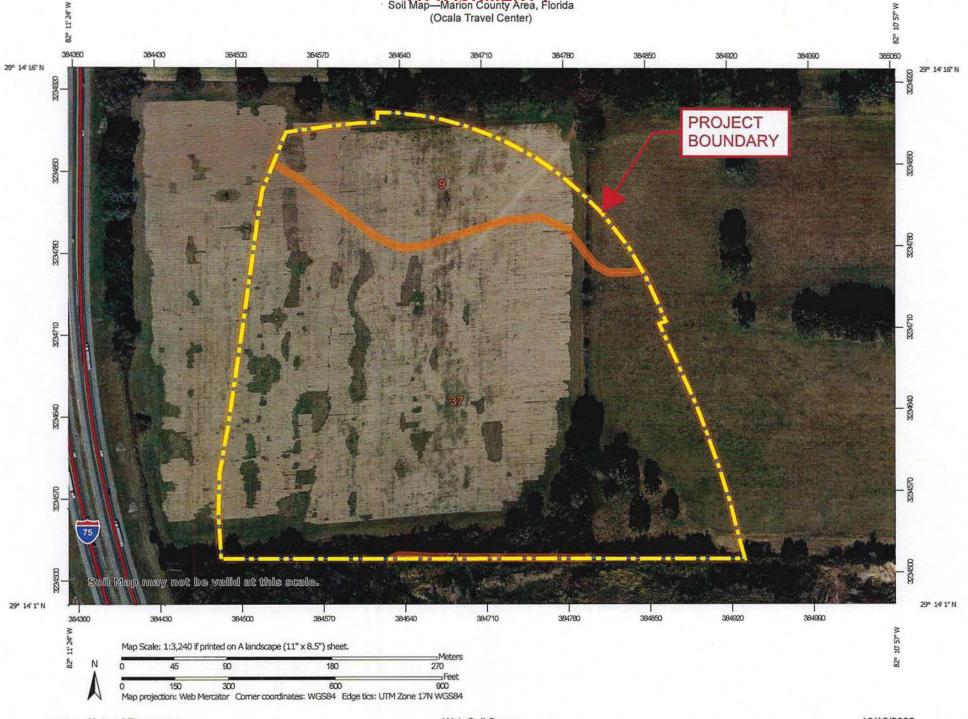
The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/14/2022 at 8:00 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.





#### MAP LEGEND

Spoil Area

Stony Spot

Wet Spot

Other

Rails

**US Routes** 

Major Roads

Local Roads

Δ

Water Features

Transportation

200

Background

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

#### 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

9

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

A 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

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15.800.

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: Marion County Area, Florida Survey Area Data: Version 20, Sep 1, 2022

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

Date(s) aerial images were photographed: Jan 9, 2022—Feb 10, 2022

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
9	Arredondo sand, 0 to 5 percent slopes	5.3	16.1%
37	Hague sand, 2 to 5 percent slopes	27.5	83.8%
57	Pits	0.0	0.1%
Totals for Area of Interest		32.8	100.0%



