



This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 10 February 2020

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Jacksonville, Palm Coast Industrial Park, SAJ-2002-08108-BJC

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Florida County/parish/borough: Flagler City: Palm Coast
Approximate center coordinates of site (in degree decimal format): Latitude 29.5530°N, Longitude - 81.2696°
Universal Transverse Mercator Zone:
Name of nearest waterbody: St. Joe Canal
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: St. Joe Canal
Name of watershed or Hydrologic Unit Code (HUC): Graham Swamp - HUC 12 Code 040802010304
[X] Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
[] Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

[X] Office (Desk) Determination - Date: 4 February 2020
[] Field Determination - Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- [] Waters subject to the ebb and flow of the tide.
[] Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply): 1

- [] TNWs, including territorial seas
[] Wetlands adjacent to TNWs
[] Relatively permanent waters2 (RPWs) that flow directly or indirectly into TNWs
[] Non-RPWs that flow directly or indirectly into TNWs
[X] Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
[] Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
[] Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
[] Impoundments of jurisdictional waters
[X] Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres
Wetlands: 2.424 acres

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):3

- [X] Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: One of the wetlands (0.65-acre) in the review area is isolated physically, chemically and biologically from the St. Joe Canal and TNW. The isolated wetland is completely surrounded by higher elevation uplands (see attached 1943 historic photo), preventing a physical nexus to the TNW. The area has undergone impacts from high-grade clear-

1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.

2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

3 Supporting documentation is presented in Section III.F.

cuts that have deteriorated the biological integrity of the wetlands. Therefore, a biological nexus to the TNW does not exist. The isolated wetland recharges from precipitation and runoff from the surrounding uplands. Therefore, the wetland does not filter chemicals or provide nutrients for the TNW. Therefore, a chemical nexus does exist to the TNW.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”:

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months) if there is a significant nexus. A wetland that directly abuts an RPW is also jurisdictional if there is a significant nexus. A wetland that is adjacent to but that does not directly abut an RPW also requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary (and its adjacent wetlands if any) and a traditional navigable water.

If a significant nexus is required, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If a significant nexus is required, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 20,000 acres

Drainage area: 20,000 acres

Average annual rainfall: 52 inches

Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

Project waters are less than 1 river miles from RPW.

Project waters are 5 aerial (straight) miles from TNW.

Project waters are less than 1 mile aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁴: Wetlands flows directly to the St. Joe Canal (RPW). The St. Joe Canal drains into Graham Swamps which is directly abutting Bulow Creek, the TNW.

⁴ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain: St. Joe Canal.
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: 100 feet
Average depth: 10 to 15 feet
Average side slopes: 2:1.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Man-made canal that is stable.

Presence of run/riffle/pool complexes. Explain: N/A

Tributary geometry: **relatively straight**

Tributary gradient (approximate average slope): <2 %

(c) Flow:

Tributary provides for: **perennial**

Estimate average number of flow events in review area/year: **20 or more**

Describe flow regime: Permanent flow.

Other information on duration and volume: N/A.

Surface flow is: Confined. Characteristics: Man-made drainage canal.

Subsurface flow: **Unknown.**

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁵ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁶ Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Water is tannin stained to a black color. The water quality is poor due to lack of shading and chemicals that drain into it from upland activities.

Identify specific pollutants, if known: Unknown.

⁵A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁶Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: The tributary provides habitat for various aquatic species and

herpetofauna. The area could be utilized by the Wood Stork for foraging.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 1.774 acres

Wetland type. Explain: palustrine forested.

Wetland quality. Explain: drained mixed forested swamp.

Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:

Flow is: Overland sheet flow. Explain: The wetlands drain into the RPW and TNW directly during precipitation events through overland sheet flow.

Surface flow is: Present during precipitation events

Characteristics: The wetlands drain into the RPW and TNW directly during precipitation events through overland sheet flow.

Subsurface flow: **Unknown**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:.

(d) Proximity (Relationship) to TNW

Project wetlands are **5** river miles from TNW.

Project waters are **5** aerial (straight) miles from TNW.

Flow is from: **No direct surface flow**.

Estimate approximate location of wetland as within the **100** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: No surface water present as wetland in the wetland.

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

Riparian buffer. Characteristics (type, average width):

Vegetation type/percent cover. Explain:.

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: The wetland is habitat for many mammal, avian, herpetofauna and

insect species.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **6**

Approximately 1.774 acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Y	0.91	Y	0.23
Y	0.35	Y	0.07
Y	0.04	Y	0.21

Summarize overall biological, chemical and physical functions being performed: The jurisdictional wetlands are adjacently abutting the St. Joe Canal (RPW). The St. Joe Canal flows directly to Graham Swamp, which drains directly to Bulow Creek (TNW). The wetlands provide a significant source of water to the TNW to help maintain navigation. The wetlands provide habitat for roosting birds, mammals, herpetofauna, native vegetation, and aquatic species that significantly supports the biological integrity of the TNW. The wetland system filters containments from adjacent uplands before they reach the TNW.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for an RPW where the RPW flows directly or indirectly into a TNW.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
4. **Significant nexus findings for wetlands adjacent to an RPW where the RPW flows directly or indirectly into a TNW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The jurisdictional wetlands are adjacently abutting the St. Joe Canal (RPW). The St. Joe Canal flows directly to Graham Swamp, which drains directly to Bulow Creek (TNW). The wetlands provide a significant source of water to the TNW to help maintain navigation. The wetlands provide habitat for roosting birds, mammals, herpetofauna, native vegetation, and aquatic species that significantly supports the biological integrity of the TNW. The wetland system filters containments from adjacent uplands before they reach the TNW.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 - TNWs: linear feet width (ft), Or, acres.
 - Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Aerial photography shows surface water within the canal since the year 1995.

- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: **450,000** linear feet **100** width (ft).

Other non-wetland waters: _____ acres.

Identify type(s) of waters: _____

3. Non-RPWs⁷ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

Tributary waters: _____ linear feet _____ width (ft).

Other non-wetland waters: _____ acres.

Identify type(s) of waters: _____

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Aerial photography shows the wetland is directly abutting the RPW. Aerial photography also shows the RPW flowing towards Graham Swamp, which is abutting the TNW.**

- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: _____

Provide acreage estimates for jurisdictional wetlands in the review area: _____ acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **1.774** acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. Impoundments of jurisdictional waters.⁸

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
 Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):⁹

- which are or could be used by interstate or foreign travelers for recreational or other purposes
 from which fish or shellfish are or could be taken and sold in interstate or foreign commerce
 which are or could be used for industrial purposes by industries in interstate commerce
 Interstate isolated waters - Explain:
 Other factors - Explain:

⁷See Footnote # 3.

⁸To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

⁹Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture; i.e., SWANCC Decision), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: 0.65 acre. List type of aquatic resource: .
- Wetlands: 0.65 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard (i.e., Rapanos Decision), where such a finding is required for jurisdiction (check all that apply):

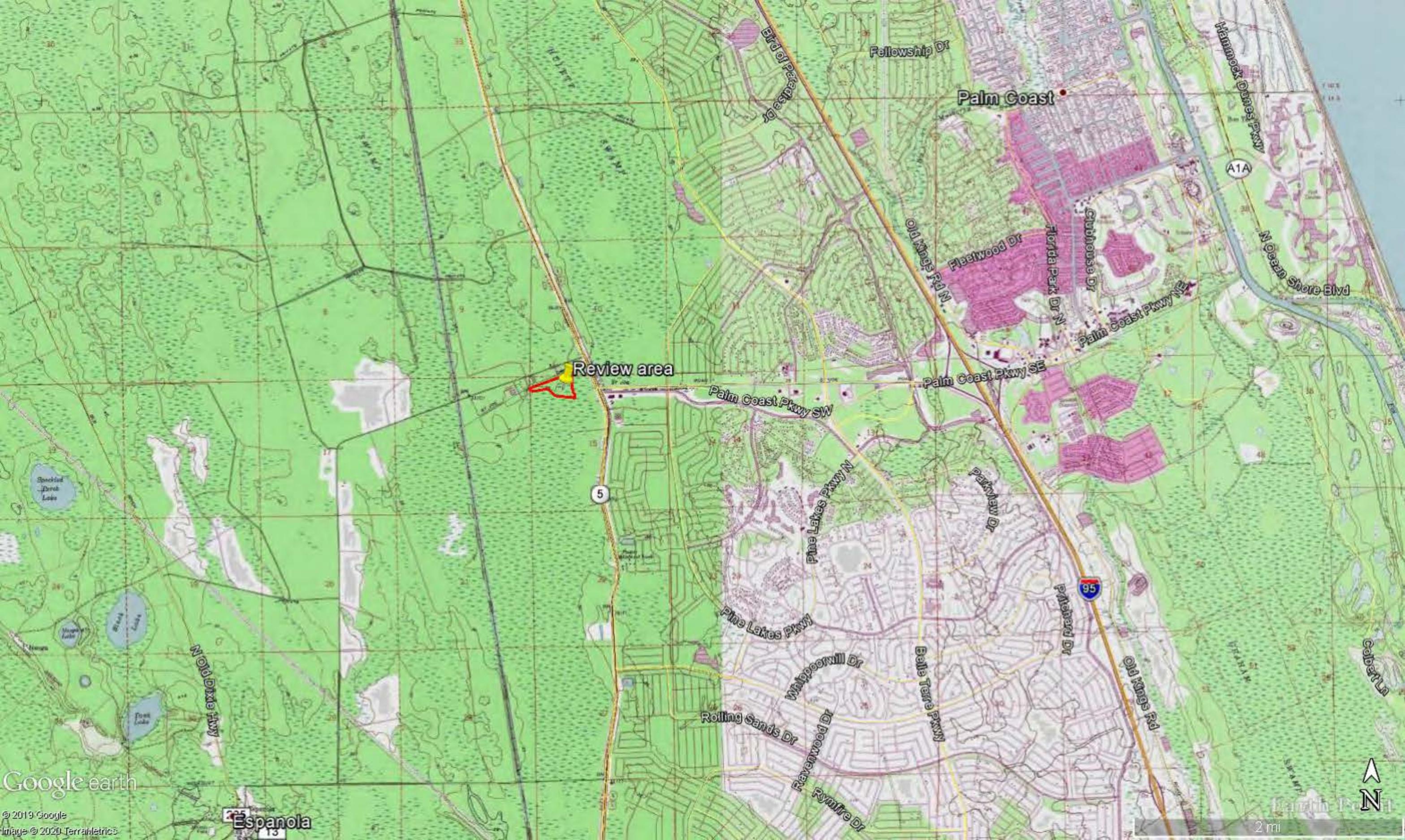
- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Attachments 1, 2, and 3
- Data sheets prepared/submitted by or on behalf of the applicant/consultant. Attachment 9
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas: Attachment 8
 - USGS NHD data
 - USGS 8 and 12 digit HUC maps
- U.S. Geological Survey map(s). Cite scale & quad name: Attachment 2
- USDA Natural Resources Conservation Service Soil Survey:
- National wetlands inventory map(s): Attachment 6
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation:
- Photographs: Aerial: Attachment 7
 - or Other:
- Previous determination(s):
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify): Attachment 4, 5, and 10

B. ADDITIONAL COMMENTS TO SUPPORT JD: On 28 October 2005, an Approved Jurisdictional Determination was established on the property (attached).



Palm Coast

Review area

5

95

A1A

N Old Dixie Hwy

Bird of Prey Dr

Fellowship Dr

Hammock Dunes Pkwy

N Ocean Shore Blvd

Old Kings Rd N

Fleetwood Dr

Florida Park Dr N

Clubhouse Dr

Palm Coast Pkwy NE

Palm Coast Pkwy SE

Palm Coast Pkwy SW

Parkview Dr

Pine Lakes Pkwy N

Pine Lakes Pkwy

Patchard Dr

Old Kings Rd

Whippoorwill Dr

Belle Terre Pkwy

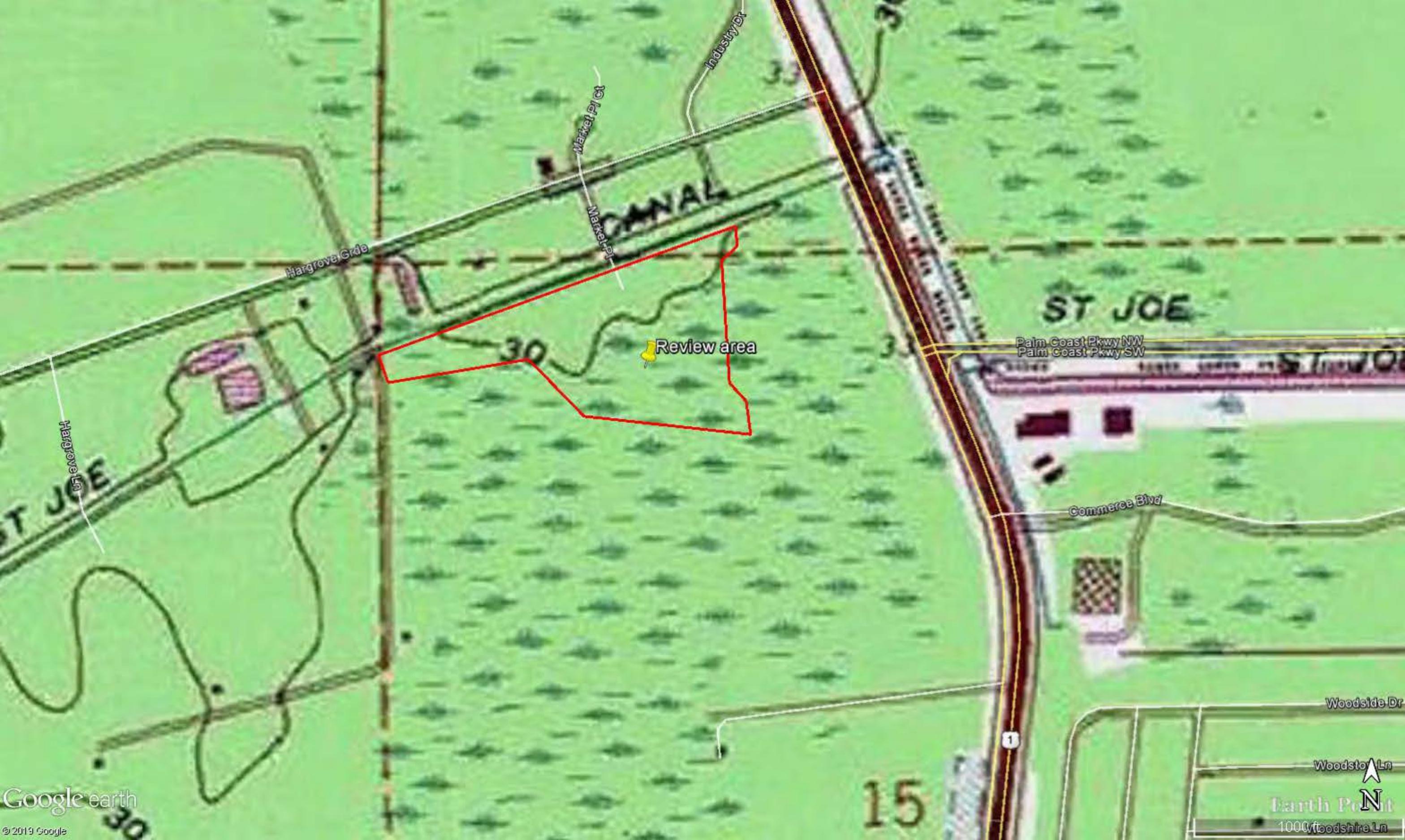
Rolling Sands Dr

Ravenwood Dr

Rymfire Dr

Colbert Ln





Review area

ST JOE

Palm Coast Pkwy NW
Palm Coast Pkwy SW

Commerce Blvd

Woodside Dr

Woodsto Ln

Earth Point

1000 Woodshire Ln



Legend

- Flag Points
- ▭ Parcel Boundary
- ▨ Wetlands
- Data Points

USACE WETLAND LIMITS
 Uplands (+/- 16.8 ac)
 Jurisdictional Wetlands (+/- 1.77)
 Non-jurisdictional Wetlands (+/- 0.65 ac)

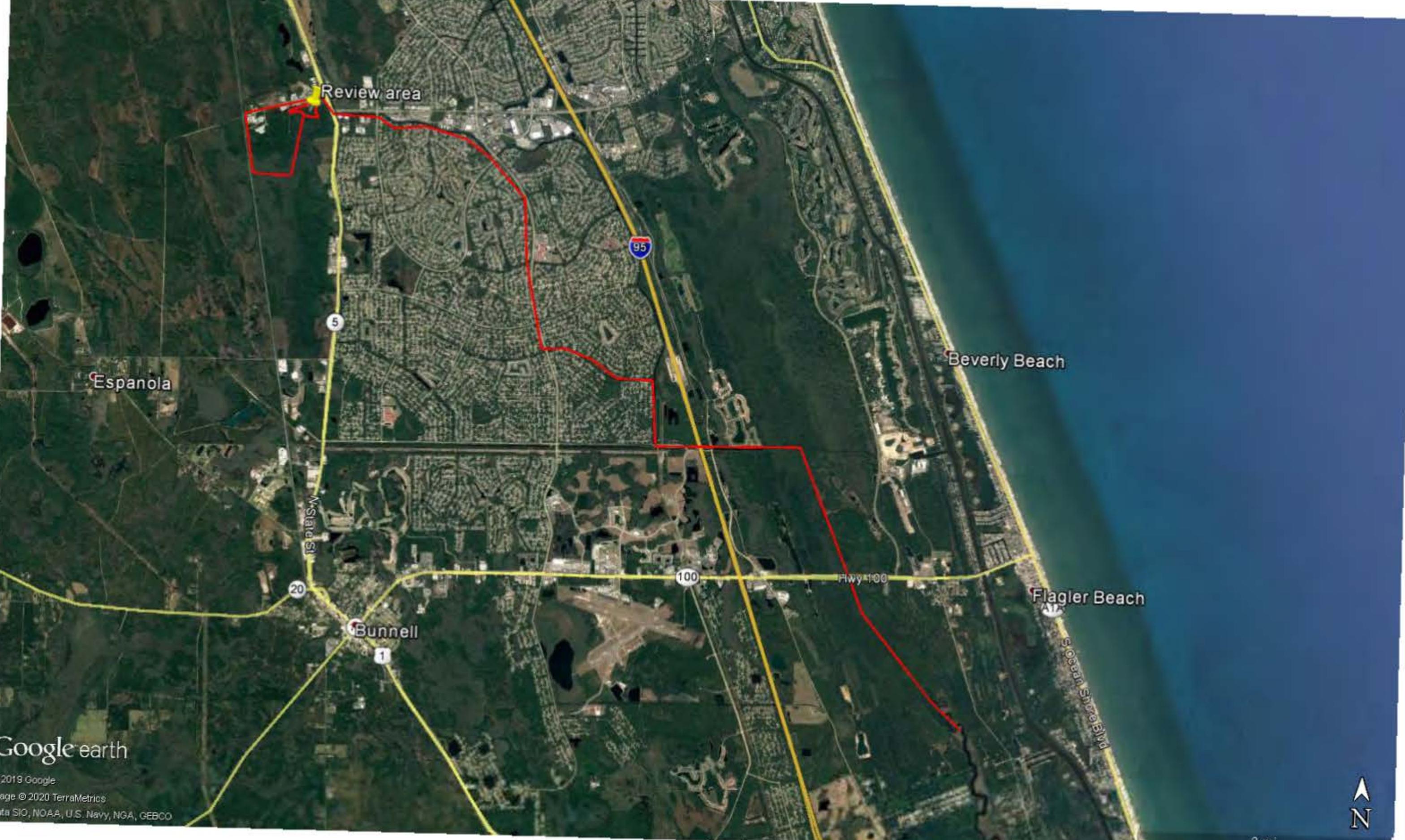
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

PEACOCK CONSULTING GROUP, LLC

Helping developers and landowners solve environmental issues

PALM COAST IND PARK
FLAGLER COUNTY

Wetland Determination
Scale: 1 in = 250 ft
Revised 3/30/2020
2017 Aerial



Review area

95

5

Espanola

Beverly Beach

M State St

20

100

Flwy 100

Bunnell

1

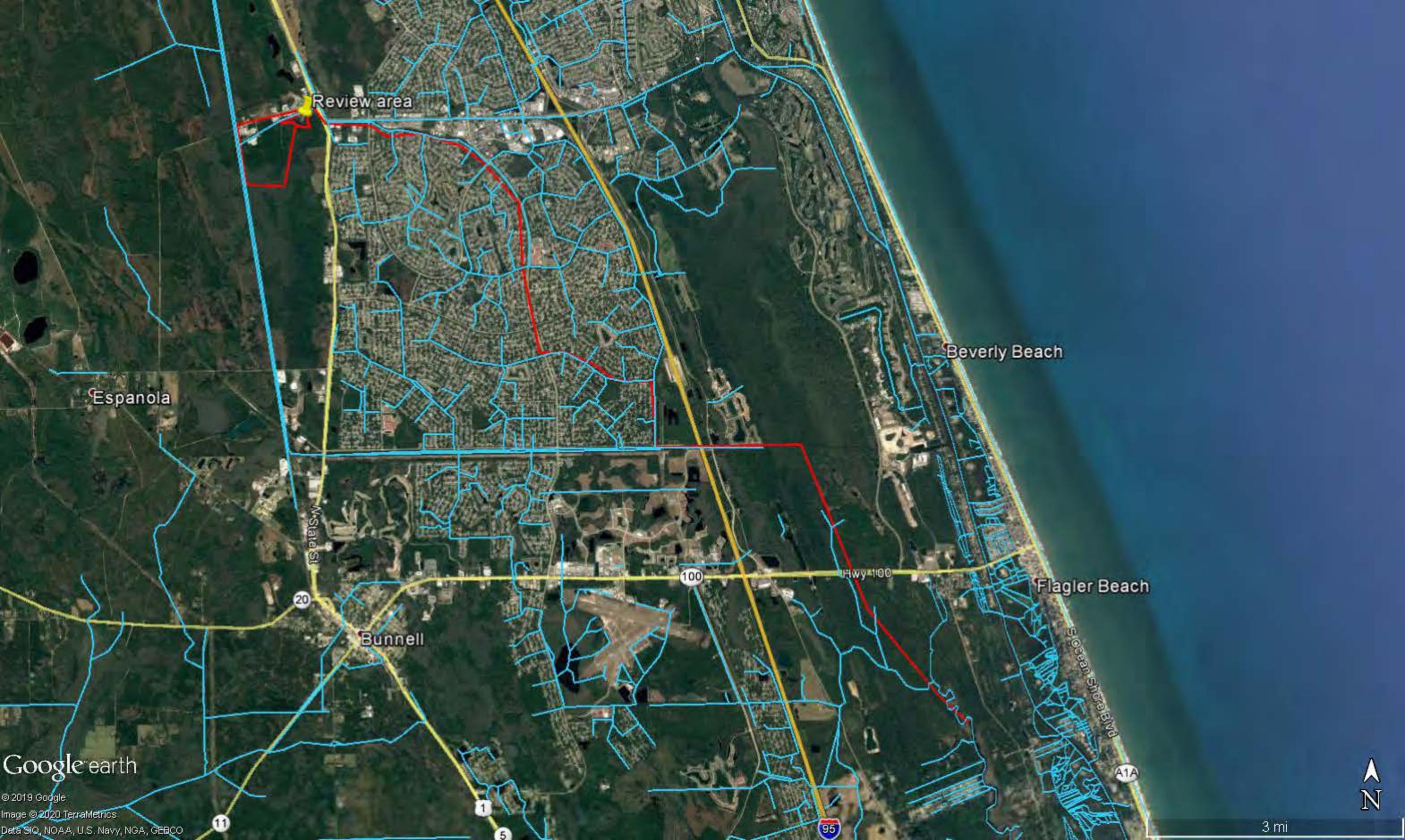
Flagler Beach

S Ocean Shore Blvd

Google earth

© 2019 Google
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Data SIO, NOAA, U.S. Navy, NGA, GEBCO





Review area

Espanola

Beverly Beach

W State St

20

Bunnell

100

Hwy 100

Flagler Beach

Ocean Shore Blvd

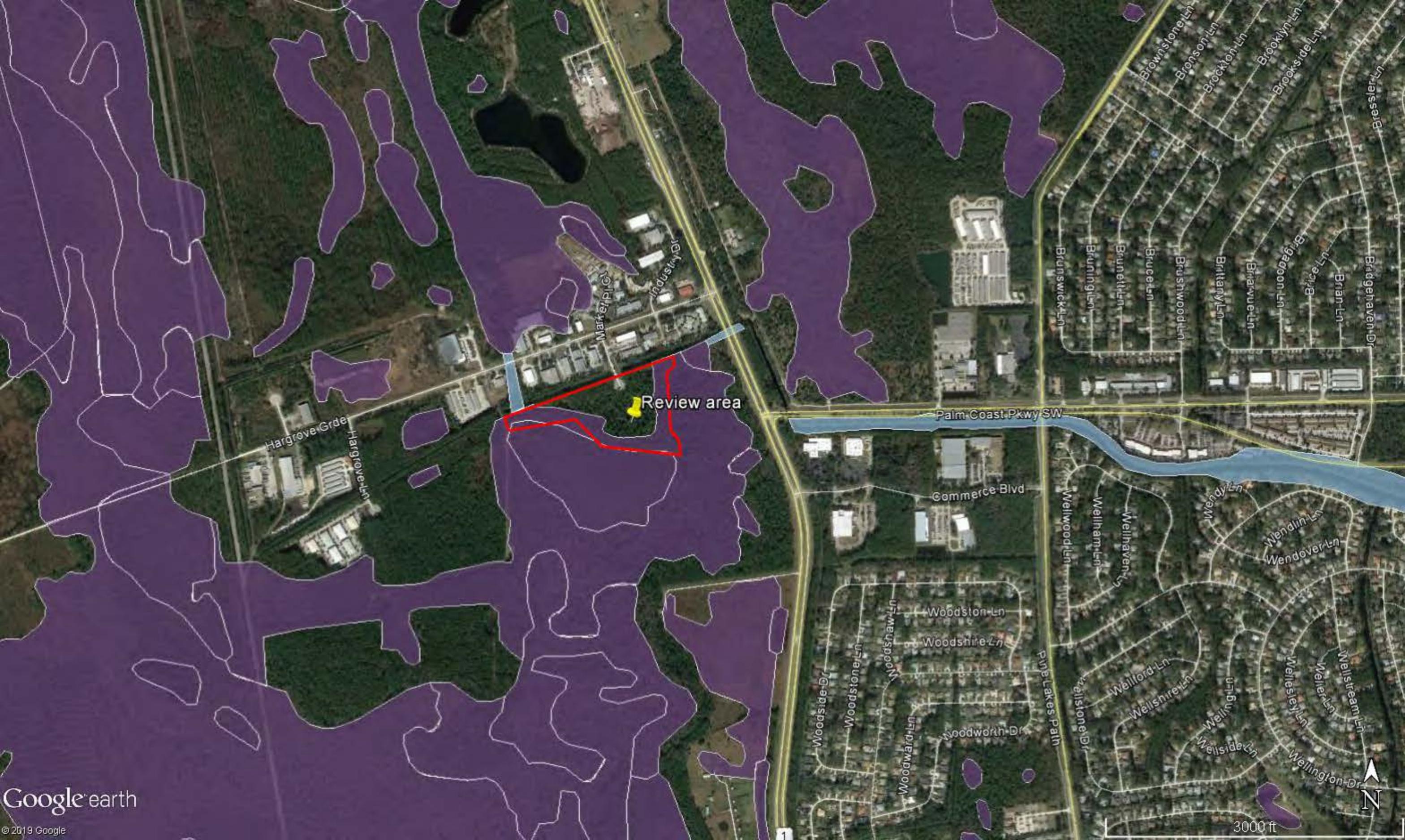
A1A

Google earth

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Data SIO, NOAA, U.S. Navy, NGA, GEBCO



3 mi



Review area

Hargrove Grde
Hargrove Ln

Market Pl
Industry Dr

Palm Coast Pkwy SW

Commerce Blvd

Woodston Ln
Woodshire Ln

Woodworth Dr

Wellwood Ln
Wellham Ln
Wellhaven Ln
Wendy Ln
Wendlin Ln
Wendover Ln
Wellford Ln
Wellshire Ln
Wellside Ln
Wellstream Ln
Wellers Ln
Wellington Dr



Aerial photographs of Flagler County - Flight 2C (1943)

DESCRIPTION | ALL VOLUMES | SEARCH RESULTS | THUMBNAILS | PAGE IMAGES | DOWNLOADS

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Review area

95

A1A

1

13

Google earth

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Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Beverly Beach



100

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Palm Coast Industrial Park City/County: Palm Coast/Flagler Co. Sampling Date: 9/20/2019
 Applicant/Owner: 1225 Port Houston, LLC State: FL Sampling Point: DP1
 Investigator(s): Travis Richardson Section, Township, Range: 15, 11S, 30E
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 3
 Subregion (LRR or MLRA): LRR U, MLRA 155 Lat: 29.55248 Long: -81.26823 Datum: WGS 84
 Soil Map Unit Name: Hicoria, Riviera, and Gator soils, depressional NWI classification: PFO3/4C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	--

Remarks:
 Rainfall conditions in Flagler County were slightly below normal for August and the prior 12 months. In addition the site is adjacent to the St. Joe Canal and the hydrology has been permanently altered. Subsidence is evident from exposed roots, muck that has turned to hydrophobic powder, a top soil layer composed of firm aggregates, and loss of masking in the upper part of the soil. In addition, cypress trees have fallen over, no regeneration of cypress was observed, Vitis and Gordonia lasianthus are dominating the remaining wetland, and upland species are encroaching into the wetland. An auger boring was completed in the lowest part of Wetland B and saturation was observed at 38" with a water table at 51".

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T,U)
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Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: DP1

Tree Stratum (Plot size: <u>10m x 10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Pinus elliotii</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Gordonia lasianthus</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
	<u>60</u> =Total Cover		
	50% of total cover: <u>30</u>	20% of total cover: <u>12</u>	

Sapling/Shrub Stratum (Plot size: <u>10m x 10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Gordonia lasianthus</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Persea palustris</u>	<u>5</u>	<u>No</u>	<u>FACW</u>
3. <u>Lyonia ferruginea</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
4. <u>Lyonia lucida</u>	<u>10</u>	<u>No</u>	<u>FACW</u>
5. <u>Serenoa repens</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
	<u>70</u> =Total Cover		
	50% of total cover: <u>35</u>	20% of total cover: <u>14</u>	

Herb Stratum (Plot size: <u>10m x 10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Gordonia lasianthus</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Persea palustris</u>	<u>5</u>	<u>No</u>	<u>FACW</u>
3. <u>Osmundastrum cinnamomeum</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
4. <u>Pteridium aquilinum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
	<u>30</u> =Total Cover		
	50% of total cover: <u>15</u>	20% of total cover: <u>6</u>	

Woody Vine Stratum (Plot size: <u>10m x 10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>10</u> =Total Cover		
	50% of total cover: <u>5</u>	20% of total cover: <u>2</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>120</u>	x 2 = <u>240</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>40</u>	x 4 = <u>160</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>170</u> (A)	<u>430</u> (B)
Prevalence Index = B/A = <u>2.53</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 2/1	70					Sandy	remaining soil unmasked 6/1
2-5	10YR 2/1	60					Sandy	remaining soil unmasked 6/1
5-7	10YR 4/1	50					Sandy	remaining soil unmasked 6/1
7-9	10YR 6/2	50					Sandy	remaining soil unmasked 6/1
9-17	10YR 7/2	90	10YR 7/1	10	D	M	Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1) ? Thin Dark Surface (S9) **(LRR S, T, U)**
- Histic Epipedon (A2) Barrier Islands 1 cm Muck (S12)
- Black Histic (A3) **(MLRA 153B, 153D)**
- Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) **(LRR O)**
- Stratified Layers (A5) Loamy Gleyed Matrix (F2)
- ? Organic Bodies (A6) **(LRR, P, T, U)** Depleted Matrix (F3)
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)** Redox Dark Surface (F6)
- Muck Presence (A8) **(LRR U)** Depleted Dark Surface (F7)
- 1 cm Muck (A9) **(LRR P, T)** Redox Depressions (F8)
- Depleted Below Dark Surface (A11) Marl (F10) **(LRR U)**
- Thick Dark Surface (A12) Depleted Ochric (F11) **(MLRA 151)**
- Coast Prairie Redox (A16) **(MLRA 150A)** Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Sandy Mucky Mineral (S1) **(LRR O, S)** Umbric Surface (F13) **(LRR P, T, U)**
- Sandy Gleyed Matrix (S4) Delta Ochric (F17) **(MLRA 151)**
- Sandy Redox (S5) Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ? Stripped Matrix (S6) Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ? Dark Surface (S7) **(LRR P, S, T, U)** Anomalous Bright Floodplain Soils (F20)
- Polyvalue Below Surface (S8) **(LRR S, T, U)** **(MLRA 149A, 153C, 153D)**
- Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Coast Prairie Redox (A16) **(outside MLRA 150A)**
- Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(LRR P, T)**
- Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

This data form is revised from Atlantic and Gulf Coastal Plain Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.
 +5-0 Oe

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Palm Coast Industrial Park City/County: Palm Coast/Flagler Co. Sampling Date: 9/20/2019
 Applicant/Owner: 1225 Port Houston, LLC State: FL Sampling Point: DP2
 Investigator(s): Travis Richardson Section, Township, Range: 15, 11S, 30E
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Slight Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR U, MLRA 155 Lat: 29.55264 Long: -81.26815 Datum: WGS 84
 Soil Map Unit Name: Hicoria, Riviera, and Gator soils, depressional NWI classification: PFO3/4C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Remarks:
 Rainfall conditions in Flagler County were slightly below normal for August and the prior 12 months. In addition the site is adjacent to the St. Joe Canal and the hydrology has been permanently altered. Subsidence is evident from exposed roots, muck that has turned to hydrophobic powder, a top soil layer composed of firm aggregates, and loss of masking in the upper part of the soil. In addition, cypress trees have fallen over, no regeneration of cypress was observed, Vitis and Gordonia lasianthus are dominating the remaining wetland, and upland species are encroaching into the wetland. An auger boring was completed in the lowest part of Wetland B and saturation was observed at 38" with a water table at 51".

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input checked="" type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T,U)
---	---

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 The soil at this location show a loss of hydrology and the muck is a hydrophobic powder. The mineral soil at 4 inches is still >70% masked by organic matter indicating that sufficient hydrology may persist to maintain a hydric soil and a wetland condition.

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: DP2

Tree Stratum (Plot size: <u>10m x 10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Gordonia lasianthus</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Nyssa sylvatica</u>	<u>10</u>	<u>No</u>	<u>FAC</u>
3. <u>Taxodium ascendens</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>
4. <u>Ilex cassine</u>	<u>10</u>	<u>No</u>	<u>FACW</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
	<u>70</u> =Total Cover		
	50% of total cover: <u>35</u>	20% of total cover: <u>14</u>	

Sapling/Shrub Stratum (Plot size: <u>10m x 10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Gordonia lasianthus</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Ilex cassine</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
	<u>40</u> =Total Cover		
	50% of total cover: <u>20</u>	20% of total cover: <u>8</u>	

Herb Stratum (Plot size: <u>10m x 10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Gordonia lasianthus</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Lyonia lucida</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>
3. <u>Osmundastrum cinnamomeum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>
4. <u>Persea palustris</u>	<u>5</u>	<u>No</u>	<u>FACW</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
	<u>35</u> =Total Cover		
	50% of total cover: <u>18</u>	20% of total cover: <u>7</u>	

Woody Vine Stratum (Plot size: <u>10m x 10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	_____ =Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>20</u>	x 1 = <u>20</u>
FACW species <u>115</u>	x 2 = <u>230</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>145</u> (A)	<u>280</u> (B)
Prevalence Index = B/A = <u>1.93</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: DP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 2/1	100					Muck	Muck is powder, color is 5YR 2/1
2-4	10YR 2/1	60					Sandy	40% 6/1 krotovina
4-7	10YR 2/1	90					Sandy	10% 6/1 krotovina
7-13	10YR 2/1	60					Sandy	25% 5/1; 10% 6/1; 5% 3/2

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR, P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Barrier Islands 1 cm Muck (S12) (MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Coast Prairie Redox (A16) (outside MLRA 150A)
- Reduced Vertic (F18) (outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (LRR P, T)
- Anomalous Bright Floodplain Soils (F20) (MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) (outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7) (MLRA 153B, 153D)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No _____

Remarks:

This data form is revised from Atlantic and Gulf Coastal Plain Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.
 +5-0 Oi/Oe Although soil morphology consistent with hydric soil indicators is present, the soil appears be losing C and may not represent the exsiting hydrologic conditions (i.e. the soil morphology may indicate wetter conditions that actually occur).



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

October 28, 2005

Regulatory Division
North Permits Branch
Atlantic Permits Section
SAJ-2002-8108-MLH

Mr. Abe Green
Premier Brands
39 NW 166th Street, Suite 5
Miami, Florida 33169

Dear Mr. Green:

Reference is made to your request for a review of the U.S. Army Corps of Engineers' (Corps) jurisdictional determination on your property located on the south side of Hargrove Grade, approximately 2,000 feet west of United States Highway 1, in Section 15, Township 11 South, Range 30 East, Flagler County, Florida. The submitted request and enclosed drawing depicts three distinct wetland systems as existing within the reviewed area; a portion of the St. Joe Canal, the main wetland system that lies along the easterly and southerly boundaries and a small isolated system located in the central portion of the property.

The Supreme Court decision, Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001) (SWANCC) involved the scope of the Corps' regulatory authority under Section 404 of the Clean Water Act. The court held that "non-navigable, isolated, intrastate" waters, based solely on the use of such waters by migratory birds, are not considered waters of the United States under the Clean Water Act.

The Corps has determined there is no apparent connection between wetland "I" and navigable waters of the United States either physically or through an interstate commerce connection other than through use by migratory birds. Therefore, in accordance with SWANCC, the centrally located wetland "I" as depicted on the enclosed drawings is considered isolated and will not be regulated by the Corps.

The Corps has determined there is an apparent connection between all other onsite wetlands and navigable waters of the United States either physically or through an interstate commerce connection. Therefore all onsite wetlands as depicted on the enclosed drawings, with the exception of "I", are subject to regulation by the Corps and you are cautioned that proper authorization should be gained prior to any deposition of dredged or fill material in waters of the United States as a result of but not limited to dredging, filling, mechanical clearing, etc.

A Corps' "Basis for Jurisdiction" form is enclosed for your information and file. You are hereby advised that you have certain options available to you. These are outlined in the attached "Notification of Administrative Appeal Options and Process and Request for Appeal" form. It is very important that you read and understand the options provided. Failure to notify the Corps within 60 days of the date of this letter means that you accept this approved jurisdictional determination in its entirety, and waive all rights to the appeal and approved jurisdictional determination. Instructions are provided for you in part D on the enclosed form. Your appeal should be directed to Commander, South Atlantic Division, U.S. Army Corps of Engineers, Attention: Appeals Review Officer, CESAD-CM-CO-R, Room 9M15, 60 Forsyth St., SW., Atlanta, Georgia 30303-8801.

This delineation/determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Please be advised this determination reflects current policy and regulations and is valid for a period of no longer than 5 years from the date of this letter unless new information warrants a revision of the determination before the expiration date. If after the 5-year period, the Corps has not

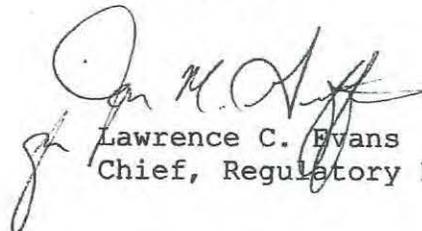
specifically revalidated this determination, it shall automatically expire. Any reliance upon this determination beyond the expiration date may lead to possible violation of current Federal laws and/or regulations.

Additionally, your project site may contain species protected by the Endangered Species Act (ESA) of 1972, as amended. You should contact your local U.S. Fish and Wildlife Service (FWS) office to determine if Federally listed species or their habitat are present on your project site. FWS offices can be contacted by the following telephone numbers: Jacksonville at 904-232-2580, Panama City at 805-763-2177, St. Petersburg at 727-570-5398, or Vero Beach at 772-562-3909.

This letter does not obviate the requirement to obtain any other Federal, State, or local permits, which may be necessary for your project. Should you have any questions, please contact Marie Huber at the letterhead address or by telephone at 904-232-1683.

Thank you for your cooperation with our regulatory program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to take a few minutes to visit the following link and complete our automated Customer Service Survey:
http://www.saj.usace.army.mil/permit/forms/customer_service.htm.
Your input is appreciated - favorable or otherwise.

Sincerely,


Lawrence C. Evans
Chief, Regulatory Division

Enclosures

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Premier Brands		File Number: SAJ-2002-8108-MLH	Date: Oct 28, 2005
Attached is:		See Section below	
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
X	APPROVED JURISDICTIONAL DETERMINATION	D	
	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** *If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.*
- **OBJECT:** *If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.*

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** *If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.*
- **APPEAL:** *If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.*

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** *You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.*
- **APPEAL:** *If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.*

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:
Project Manager as noted in letter

If you only have questions regarding the appeal process you may also contact:
Stuart Santos
904-232-2018

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:

JURISDICTIONAL DETERMINATION

U.S. Army Corps of Engineers

Revised 8/13/04

DISTRICT OFFICE: CESAJ-RD-NA-J
FILE NUMBER: 2002-8108

PROJECT LOCATION INFORMATION:

State: Florida
County: Flagler
Center coordinates of site (latitude/longitude): 295545/-81.2687
Approximate size of area (parcel) reviewed, including uplands: 16.92 acres.
Name of nearest waterway: St. Joe Canal
Name of watershed:

JURISDICTIONAL DETERMINATION

Completed: Desktop determination Date:
Site visit(s) Date(s): 3-25-04

Jurisdictional Determination (JD):

- Preliminary JD - Based on available information, there appear to be (or) there appear to be no "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).
Check all that apply:
- There are "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area.
Approximate size of jurisdictional area:
- There are "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area:
- There are "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

BASIS OF JURISDICTIONAL DETERMINATION:

- A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":
- The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
- B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":
- (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (2) The presence of interstate waters including interstate wetlands¹.
- (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
- (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
- (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- (4) Impoundments of waters otherwise defined as waters of the US.
- (5) The presence of a tributary to a water identified in (1) - (4) above.
- (6) The presence of territorial seas.
- (7) The presence of wetlands adjacent² to other waters of the US, except for those wetlands adjacent to other wetlands.

Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above). If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination: All onsite wetlands contain all 3 wetland parameters and are connected to or within 200 feet of waters of the United States.

Lateral Extent of Jurisdiction: (Reference: 33 CFR parts 328 and 329)

- | | |
|---|--|
| <input type="checkbox"/> Ordinary High Water Mark indicated by: | <input type="checkbox"/> High Tide Line indicated by: |
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> oil or scum line along shore objects |
| <input type="checkbox"/> the presence of litter and debris | <input type="checkbox"/> fine shell or debris deposits (foreshore) |
| <input checked="" type="checkbox"/> changes in the character of soil | <input type="checkbox"/> physical markings/characteristics |
| <input type="checkbox"/> destruction of terrestrial vegetation | <input type="checkbox"/> tidal gages |
| <input type="checkbox"/> shelving | <input type="checkbox"/> other: |

- other:
- Mean High Water Mark indicated by:
 - survey to available datum; physical markings; vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by: Ryan Carter of Environmental Services, Inc.

Basis For Not Asserting Jurisdiction:

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
 - Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
 - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
 - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
 - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
 - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
 - Isolated, intrastate wetland with no nexus to interstate commerce.
 - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
 - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
 - Other (explain):

DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
 - This office concurs with the delineation report, dated , prepared by (company):
 - This office does not concur with the delineation report, dated , prepared by (company):
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
- U.S. Geological Survey 7.5 Minute Topographic maps:
- U.S. Geological Survey 7.5 Minute Historic quadrangles:
- U.S. Geological Survey 15 Minute Historic quadrangles:
- USDA Natural Resources Conservation Service Soil Survey:
- National wetlands inventory maps:
- State/Local wetland inventory maps:
- FEMA/FIRM maps (Map Name & Date):
- 100-year Floodplain Elevation is: (NGVD)
- Aerial Photographs (Name & Date):
- Other photographs (Date):
- Advanced Identification Wetland maps:
- Site visit/determination conducted on:
- Applicable/supporting case law:
- Other information (please specify):

¹Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

²The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.