APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

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): 21 July 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Jacksonville; Estuary Corporation; SAJ-2012-01575

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Florida County/parish/borough: Duval City: Jacksonville
Center coordinates of site (lat/long in degree decimal format) – Latitude: 30.2717 Longitude: -81.4415
Universal Transverse Mercator:
Name of nearest waterbody: Open Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Open Creek to Pablo Creek
Name of watershed or Hydrologic Unit Code (HUC): Lower Pablo Creek (030801031605)
☒ 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):

☒ Office (Desk) Determination Date: 21 July 2017
☒ Field Determination Date(s): 22 June 2012

SECTION II – SUMMARY OF FINDINGS:

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are "*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, 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 and are not "*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 waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ 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
      ☒ 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: ~2.67 acres
      Wetlands: ~32.78 acres

   c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual
      Elevation of established OHWM (if known):

[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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: A total of 2.95 acres of wetlands (A2: 0.65 acre, A3: 0.50 acre, A4: 0.12 acre, D1: 0.89 acre, D2: 0.60 acre, D3: 0.19 acre) have no direct hydrologic connection to downstream waters; and, do not appear to have any other nexus to downstream waters except, potentially, migratory birds (Supreme Court decision, *Solid Waste Agency of Northern Cook county v. U.S. Army Corps of Engineers, 531 Unites States 159 (2001)* (SWANCC)). This information was field verified. Upland pine plantations surround the three wetlands within Parcel A and prevent any hydrologic connection to neighboring jurisdictional wetlands, the closest of which is located approximately 1,500 feet to the north of Wetland A-2. The three proposed isolated wetlands within Parcel D are generally surrounded by topographically higher xeric uplands and have no hydrologic connection to neighboring jurisdictional wetlands, the closest of which is located approximately 500 feet to the east, and across San Pablo Parkway, of D2. These isolated depressions act as small sink features within the landscape and serve a unique and limited drainage area of surrounding uplands that is topographically isolated from the drainage of neighboring wetlands. Permanent standing water does not appear to occur in these areas. The wetlands appear to only stage water after storm events, and then percolate through sandy soils. The wetlands likely provide full life history support for a very limited assemblage of insects and small amphibians, but due to the physical isolation and habitat barriers does not support significant immigration or emigration of such species to or from neighboring wetlands. The wetlands may provide limited life-history support for larger amphibians and reptiles as breeding or foraging habitat, ephemeral foraging habitat to wading birds and small mammals, and temporary escape or bedding habitat for larger mammals. However, given their location in the landscape, limited and ephemeral hydrologic regime, and small sizes, the functions provided by these systems are insignificant when considered relative to the larger wetland complexes in the vicinity. These wetland systems are physically, chemically, and hydrologically isolated from neighboring wetlands; and, there is no clear significant nexus by which jurisdiction would be claimed.

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. Identify TNW**:** Open Creek

Summarize rationale supporting determination: Named tidal waterbody, reference the attached figures.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Wetland C1 is contiguous to the tidal marsh associated with Open Creek.

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). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW 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 that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, 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 the JD covers a tributary with adjacent wetlands, 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.

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

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

(i) General Area Conditions:
Watershed size: 35,469 acres
Drainage area: 3,380 acres
Average annual rainfall: 50-52 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:
☒ Tributary flows directly into TNW.
☐ Tributary flows through Pick List tributaries before entering TNW.

Project waters are 1 (or less) river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are 1 (or less) aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries.

Identify flow route to TNW[5]:
Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☒ Natural
☐ Artificial (man-made). Explain:
☐ Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):
Average width: 8 feet
Average depth: 3 feet
Average side slopes: 3:1

Primary tributary substrate composition (check all that apply):

☐ Silts	☒ Sands	☐ Concrete
☒ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☒ Vegetation	
☐ Other – Explain:		

Tributary condition/stability: Stable, vegetated creek system
Presence of run/riffle/pool complexes: no
Tributary geometry: relatively straight
Tributary gradient (approximate average slope): <1 %

(c) Flow:
Tributary provides for: seasonal flow
Estimate average number of flow events in review area/year: > 20
Describe flow regime: surface water runoff and precipitation create flow events
Other information on duration and volume:

Surface flow is: Discrete and confined. Characteristics: system is contained within a natural channelized route

Subsurface flow: Unknown. Explain findings:
☐ Dye (or other) test performed:

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (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

[5] 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.
[6] A 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.

☐ sediment deposition
☒ water staining
☐ other (list):
☒ multiple observed or predicted flow events
☒ abrupt change in plant community

☐ Discontinuous OHWM.[7] 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:
- ☐ oil or scum line along shore objects
- ☐ fine shell or debris deposits (foreshore)
- ☐ physical markings/characteristics
- ☐ tidal gauges
- ☐ other (list):

☐ Mean High Water Mark indicated by:
- ☐ survey to available datum;
- ☐ physical markings;
- ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: typical Florida tannic system
Identify specific pollutants, if known: unknown

(iv) Biological Characteristics. Channel supports (check all that apply):
- ☒ Riparian corridor: natural creek system with canopy vegetation paralleling it; corridor through adjacent development
- ☒ Wetland fringe: closer to the named channel of Open Creek, the RPW has extensive herbaceous vegetation paralleling it
- ☒ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☒ Aquatic/wildlife diversity: RPW provides multi-layered habitat and greenway corridor

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW – **N/A**

(i) Physical Characteristics:

(a) General Wetland Characteristics:
Properties:
Wetland size: acres
Wetland type. Explain:
Wetland quality. Explain:
Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:
Flow is: Pick List. Explain:

Surface flow is: Pick List
Characteristics:

Subsurface flow: Pick List. 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 Pick List river miles from TNW.
Project waters are Pick List aerial (straight) miles from TNW.
Flow is from: Pick List.
Estimate approximate location of wetland as within the Pick List 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:
Identify specific pollutants, if known:

[7]Ibid.

(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:

3. Characteristics of all wetlands adjacent to the tributary (if any) – **N/A**

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 wetlands adjacent to an RPW but that do not directly abut the RPW. 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:

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: 14.08 acres (Wetland C2 – open water and tidal marsh associated with Open Creek)
   - ☒ Wetlands adjacent to TNWs: 0.09 acre (Wetland C1 – palustrine system contigous to Wetland C2)

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:
   - ☒ 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: Water levels during site visits were low or absent in portions of Wetland A1, Wetland B1, and Wetland C1; however, evidence of higher water levels were observed in some areas. Water levels appear to depend on seasonal rainfall.

     Provide estimates for jurisdictional waters in the review area (check all that apply):
     - ☒ Tributary waters: Wetland A1 (Parcel A): 13.64 acres; Wetland B1 (Parcel B): 4.96 acres
     - ☐ Other non-wetland waters: N/A

3. Non-RPWs[8] that flow directly or indirectly into TNWs. – **N/A**
   ☐ 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. – **N/A**
   ☐ 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:

   ☐ 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:

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. – **N/A**
   ☐ 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. – **N/A**
   ☐ 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.

7. Impoundments of jurisdictional waters.[9] – **N/A**
   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):[10]
   ☐ 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:

   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): .

---

[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior 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.

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), using best professional judgment (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams):
☐ Lakes/ponds:
☐ Other non-wetland waters:
☒ Wetlands: 2.95 acres

After a complete investigation, it was determined that 6 wetlands totaling 2.95 acres (A2: 0.65 acre, A3: 0.50 acre, A4: 0.12 acre, D1: 0.89 acre, D2: 0.60 acre, D3: 0.19 acre) have no direct physical, chemical or biological influence on any waters of the U.S. and do not appear to have any other nexus to downstream waters except, potentially, migratory birds. This information has been field verified and is conveyed below:

Wetlands A2, A3, and A4 are surrounded on all sides by managed pine plantation, which prevents any hydrologic connection to neighboring jurisdictional wetlands, the closest of which is located approximately 1,500 feet to the north of Wetland A2. The three proposed isolated wetlands within Parcel D are generally surrounded by topographically higher xeric uplands and have no hydrologic connection to neighboring jurisdictional wetlands, the closest of which is located approximately 500 feet to the east, and across San Pablo Parkway, of D2. These wetlands are cut off from any historic contributing basin, with no ditches to convey water from the subject wetlands. The on-site trailroads are at-grade with no associated ditches. The wetlands receive water only through direct rainfall and any minor groundwater flow, and this water percolates back into the groundwater. As the wetlands are topographically lower than the surroundings, water is essentially unable to stage up and exit. These isolated depressions act as small sink features within the landscape and serve a unique and limited drainage area of surrounding uplands that is topographically isolated from the drainage of neighboring wetlands. Permanent standing water does not appear to occur in these areas. The wetlands appear to only stage water after storm events, and then percolate through sandy soils. The wetlands likely provide full life history support for a very limited assemblage of insects and small amphibians, but due to the physical isolation and habitat barriers, do not support significant immigration or emigration of such species to or from neighboring wetlands. The wetlands may provide limited life-history support for larger amphibians and reptiles as breeding or foraging habitat, ephemeral foraging habitat to wading birds and small mammals, and temporary escape or bedding habitat for larger mammals. However, given their location in the landscape, limited and ephemeral hydrologic regime, and small sizes, the functions provided by these systems are insignificant when considered relative to the larger wetland complexes in the vicinity. These wetland systems are physically, chemically, and hydrologically isolated from neighboring wetlands; and, there is no clear significant nexus by which jurisdiction would be claimed.

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

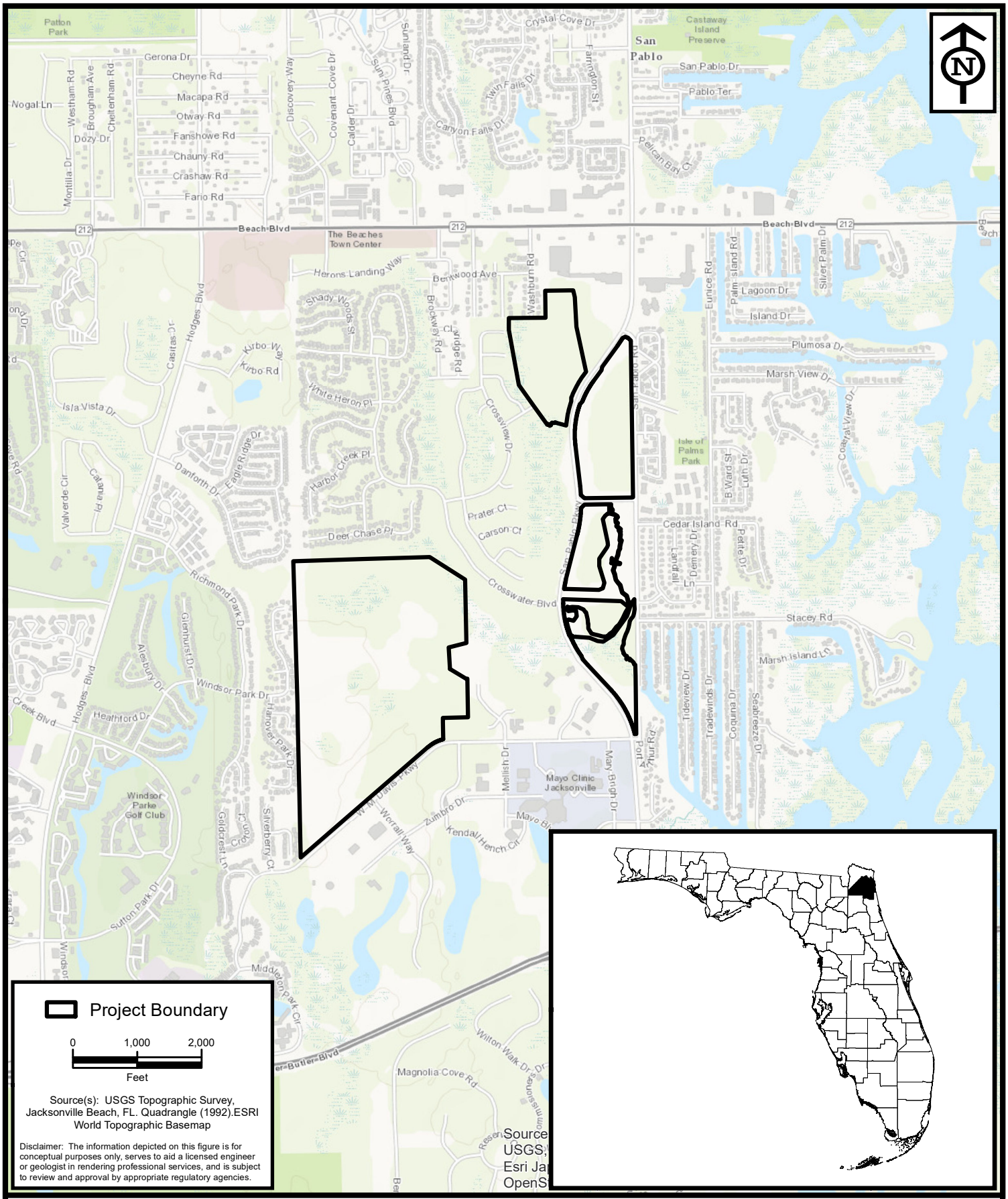
☐ Non-wetland waters (i.e., rivers, streams):
☐ Lakes/ponds:
☐ Other non-wetland waters:
☐ Wetlands:

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:
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  ☒ Office concurs with data sheets/delineation report. – submitted in conjunction with original jurisdictional determination
  ☐ 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:
  ☐ USGS NHD data
  ☒ USGS 8 and 12 digit HUC maps
☒ U.S. Geological Survey map
☒ USDA Natural Resources Conservation Service Soil Survey
☒ National wetlands inventory map
☐ State/Local wetland inventory map(s):
☐ FEMA/FIRM maps:
☐ 100-year Floodplain Elevation
☒ Photographs: ☒ Aerial: as supplied by applicant's agent
☒ Previous determination: SAJ-2012-01575
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: This action is a re-verification of the previous jurisdictional determination.



ENVIRONMENTAL SERVICES, INC.
7220 Financial Way, Suite 100
Jacksonville, Florida 32256
(904) 470-2200
(904) 470-2112 Fax
www.environmentalservicesinc.com

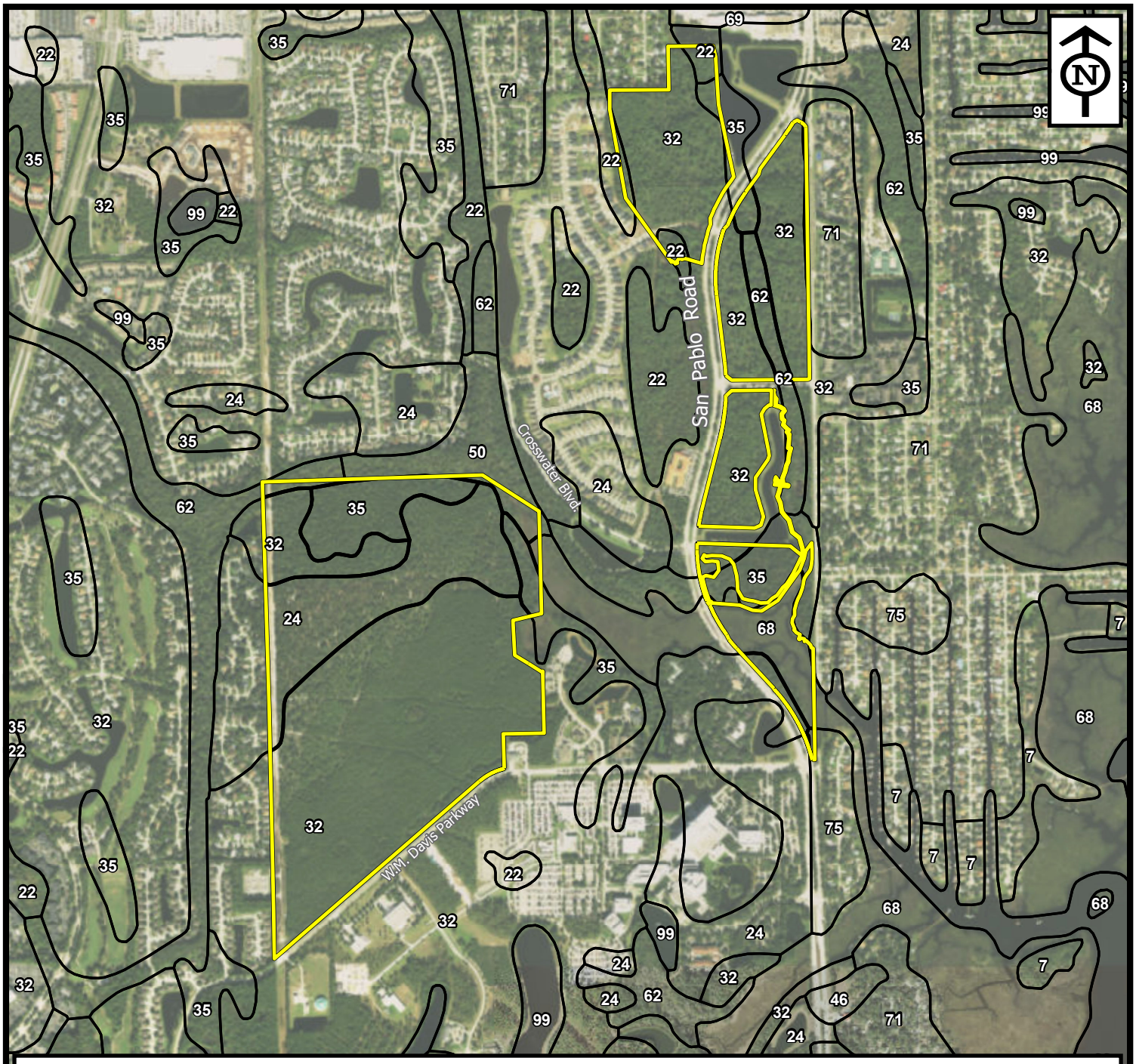
Project Location

Estuary Corporation/San Pablo Parcels

Duval County, Florida

Project:	EJ11298.03
Date:	Jul 2017
Drwn/Chkd:	JRN/MH
Figure:	1

Path: P:\GIS_Projects\EJ\2011\298\03\fig\ACOE\Location v02.mxd Date: 8/1/2017 10:26:34 AM



Project Boundary

Soils

- 24 - Hurricane And Ridgewood Soils, 0 To 5 Percent Slopes
- 32 - Leon Fine Sand, 0 To 2 Percent Slopes
- 35 - Lynn Haven Fine Sand, 0 To 2 Percent Slopes
- 50 - Pamlico Muck, 0 To 2 Percent Slopes, Frequently Flooded
- 62 - Rutlege Mucky Fine Sand, 0 To 2 Percent Slopes, Frequently Flooded
- 68 - Tisonia Mucky Peat, 0 To 1 Percent Slopes, Very Frequently Flooded
- 71 - Urban Land-Leon-Boulogne Complex, 0 To 2 Percent Slopes
- 75 - Urban Land-Hurricane-Albany Complex, 0 To 5 Percent Slopes

0 600 1,200

Feet

Source(s): USDA Soil Survey - Duval County, Florida; ESRI World Imagery (2015); Robert M. Angas Associates, Inc. (RMA)

Disclaimer: The information depicted on this figure is for conceptual purposes only, serves to aid a licensed engineer or geologist in rendering professional services, and is subject to review and approval by appropriate regulatory agencies.

ENVIRONMENTAL SERVICES, INC.
7220 Financial Way, Suite 100
Jacksonville, Florida 32256
(904) 470-2200
(904) 470-2112 Fax
www.environmentalservicesinc.com

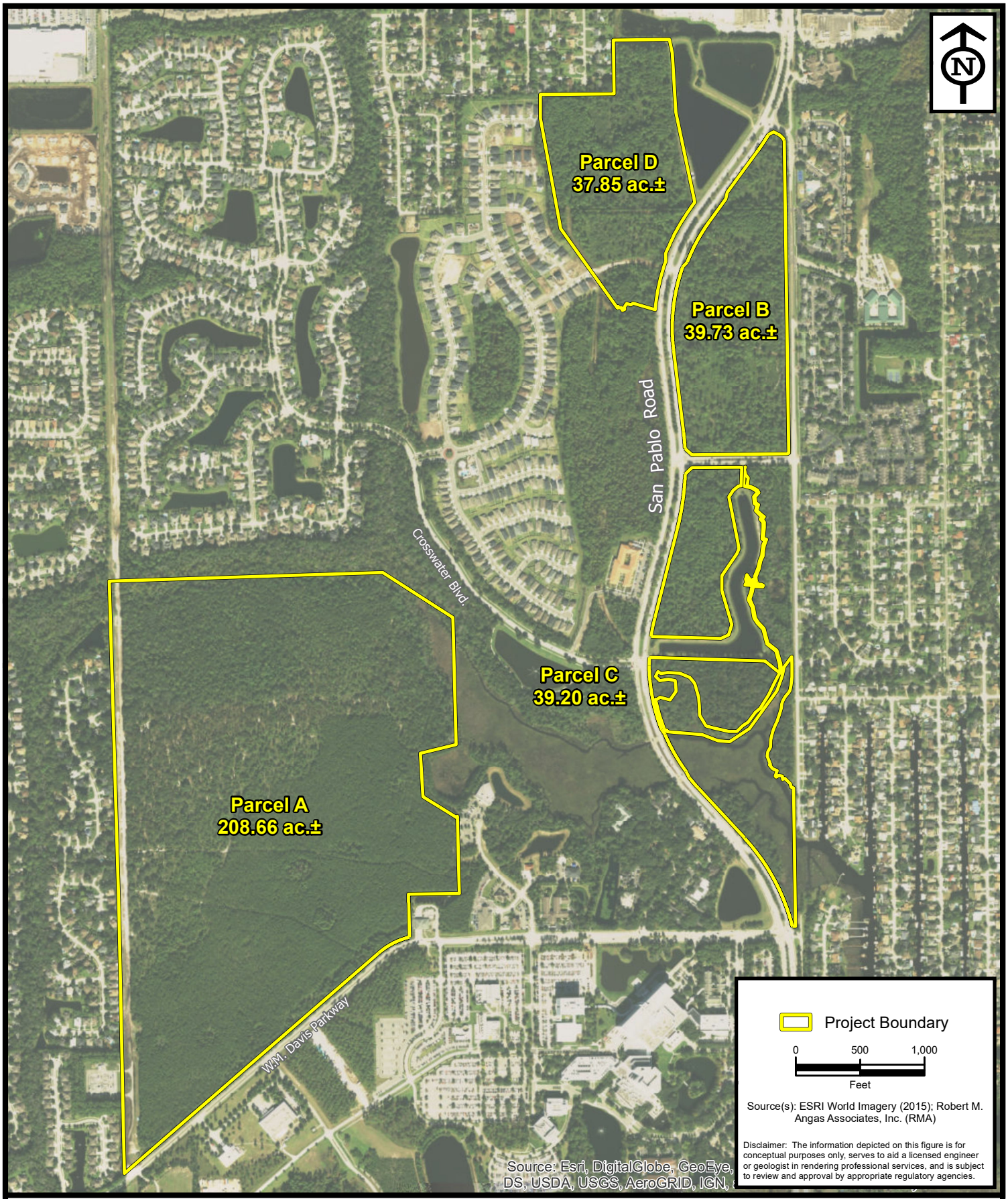
NRCS Soils

Estuary Corporation/San Pablo Parcels

Duval County, Florida

Project:	EJ11298.03
Date:	Jul 2017
Drwn/Chkd:	JRN/MH
Figure:	2

Path: P:\GIS_Projects\EJ\2011\298\03\fig\ACOE\Soils v02.mxd Date: 8/1/2017 10:29:39 AM



ENVIRONMENTAL SERVICES, INC.
7220 Financial Way, Suite 100
Jacksonville, Florida 32256
(904) 470-2200
(904) 470-2112 Fax
www.environmentalservicesinc.com

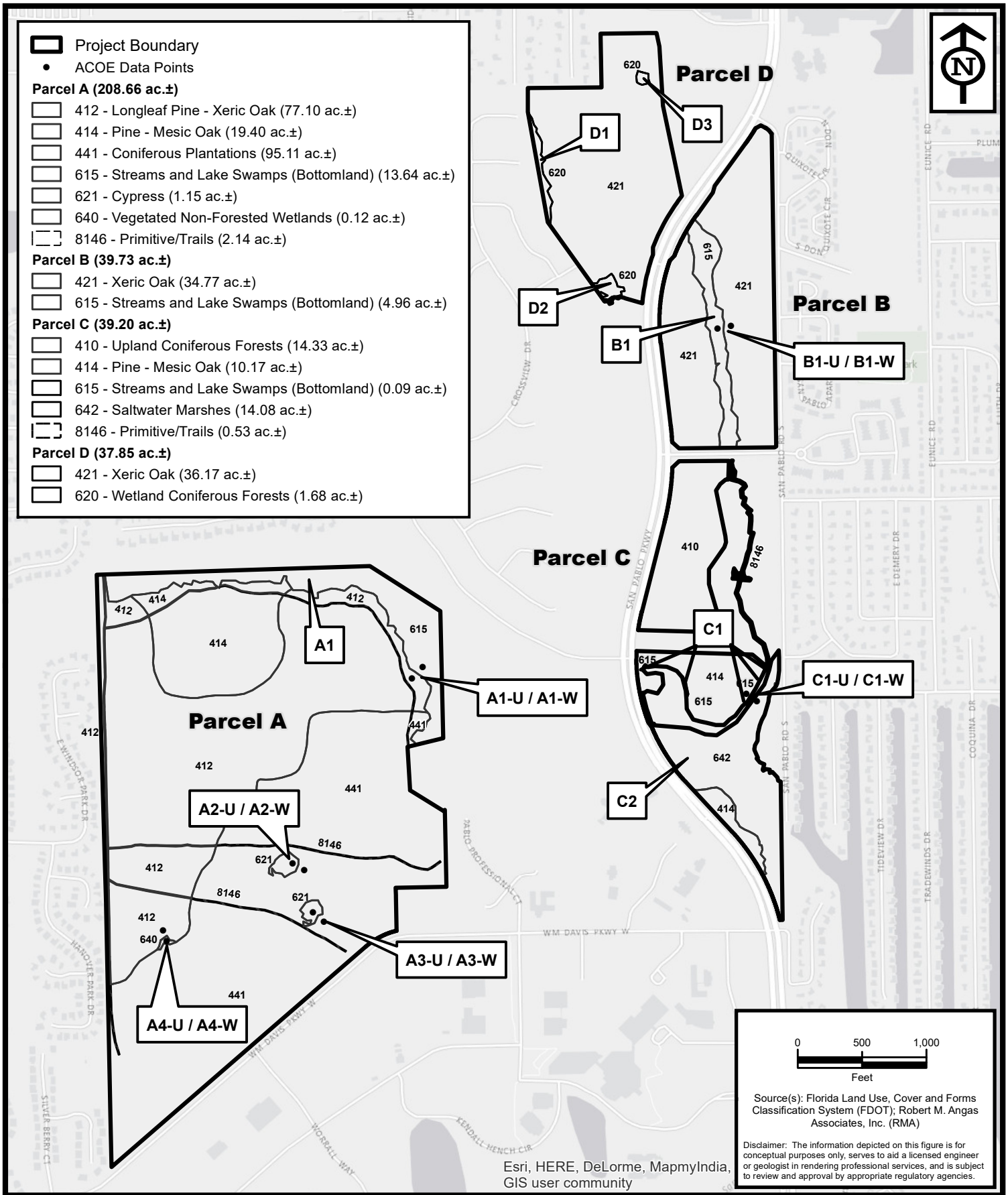
2015 Aerial Photograph

Estuary Corporation/San Pablo Parcels

Duval County, Florida

Project:	EJ11298.03
Date:	Jul 2017
Drwn/Chkd:	JRN/MH
Figure:	3

Path: P:\GIS_Projects\EJ\2011\298\03\fig\ACOE\Aerial v02.mxd Date: 8/1/2017 10:33:41 AM



ENVIRONMENTAL SERVICES, INC.
7220 Financial Way, Suite 100
Jacksonville, Florida 32256
(904) 470-2200
(904) 470-2112 Fax
www.environmentalservicesinc.com

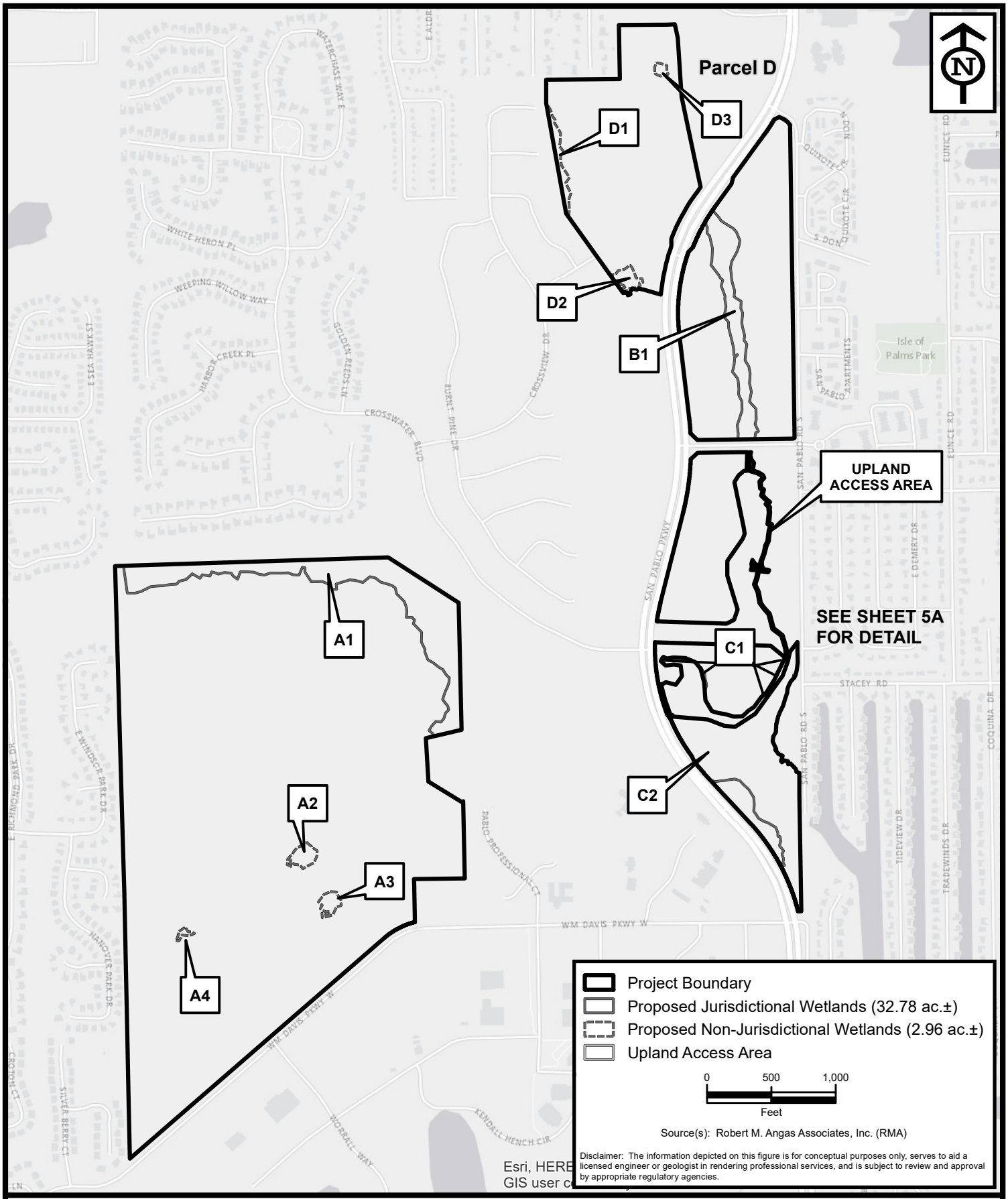
Existing Site Conditions

Estuary Corporation/San Pablo Parcels

Duval County, Florida

Project:	EJ11298.03
Date:	Jul 2017
Drwn/Chkd:	JRN/MH
Figure:	4

Path: P:\GIS_Projects\EJ\2011\298\03\fig\ACOE\ESC v02.mxd Date: 8/1/2017 10:31:12 AM



ENVIRONMENTAL SERVICES, INC.
7220 Financial Way, Suite 100
Jacksonville, Florida 32256
(904) 470-2200
(904) 470-2112 Fax
www.environmentalservicesinc.com

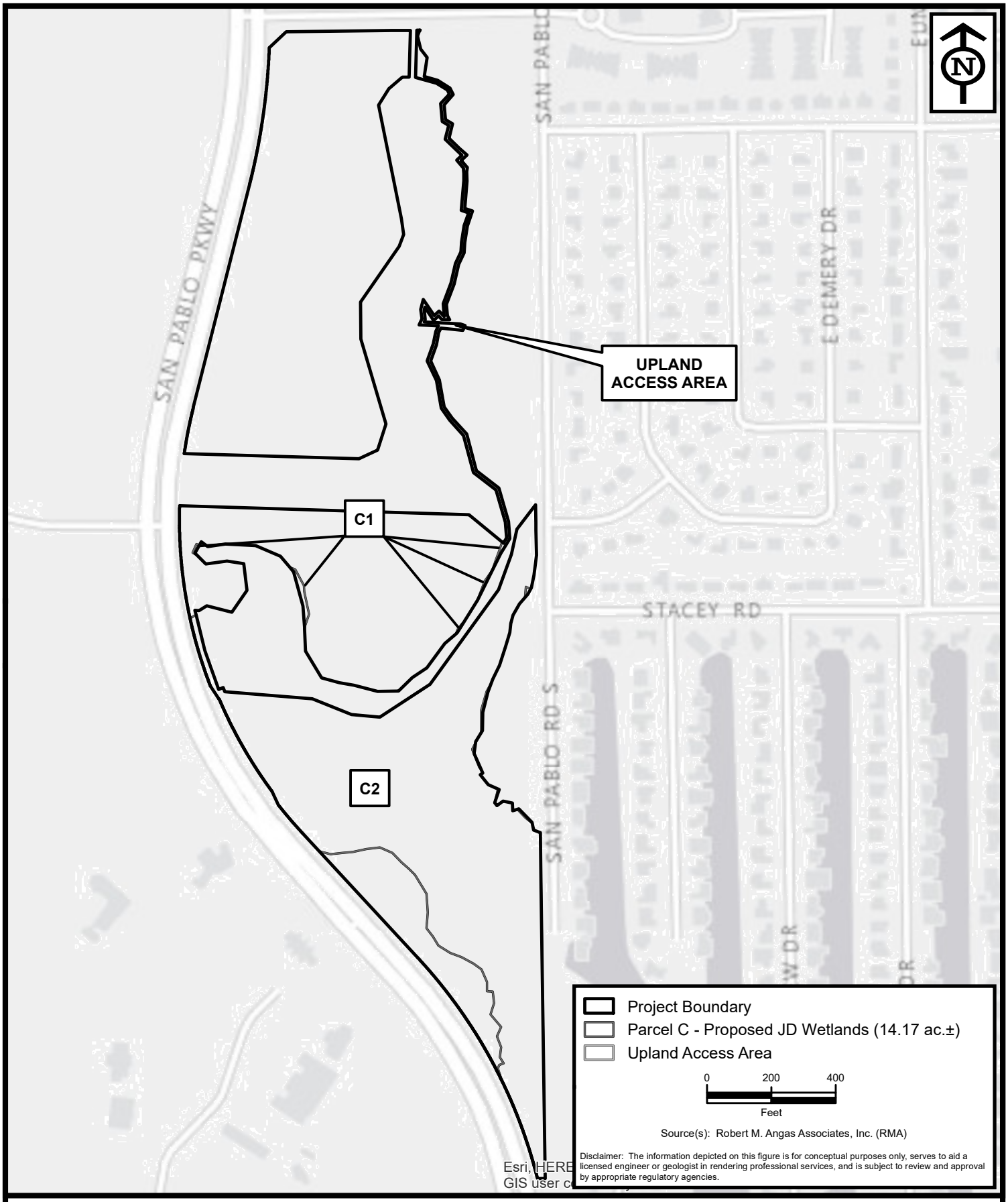
Proposed Jurisdictional Determination

Estuary Corporation/San Pablo Parcels

Duval County, Florida

Project:	EJ11298.03
Date:	Jul 2017
Drwn/Chkd:	JRN/MH
Figure:	5

Path: P:\GIS_Projects\EJ\2011\298\03\fig\ACOE\JD Key v02.mxd Date: 8/1/2017 10:36:39 AM



ENVIRONMENTAL SERVICES, INC.
7220 Financial Way, Suite 100
Jacksonville, Florida 32256
(904) 470-2200
(904) 470-2112 Fax
www.environmentalservicesinc.com

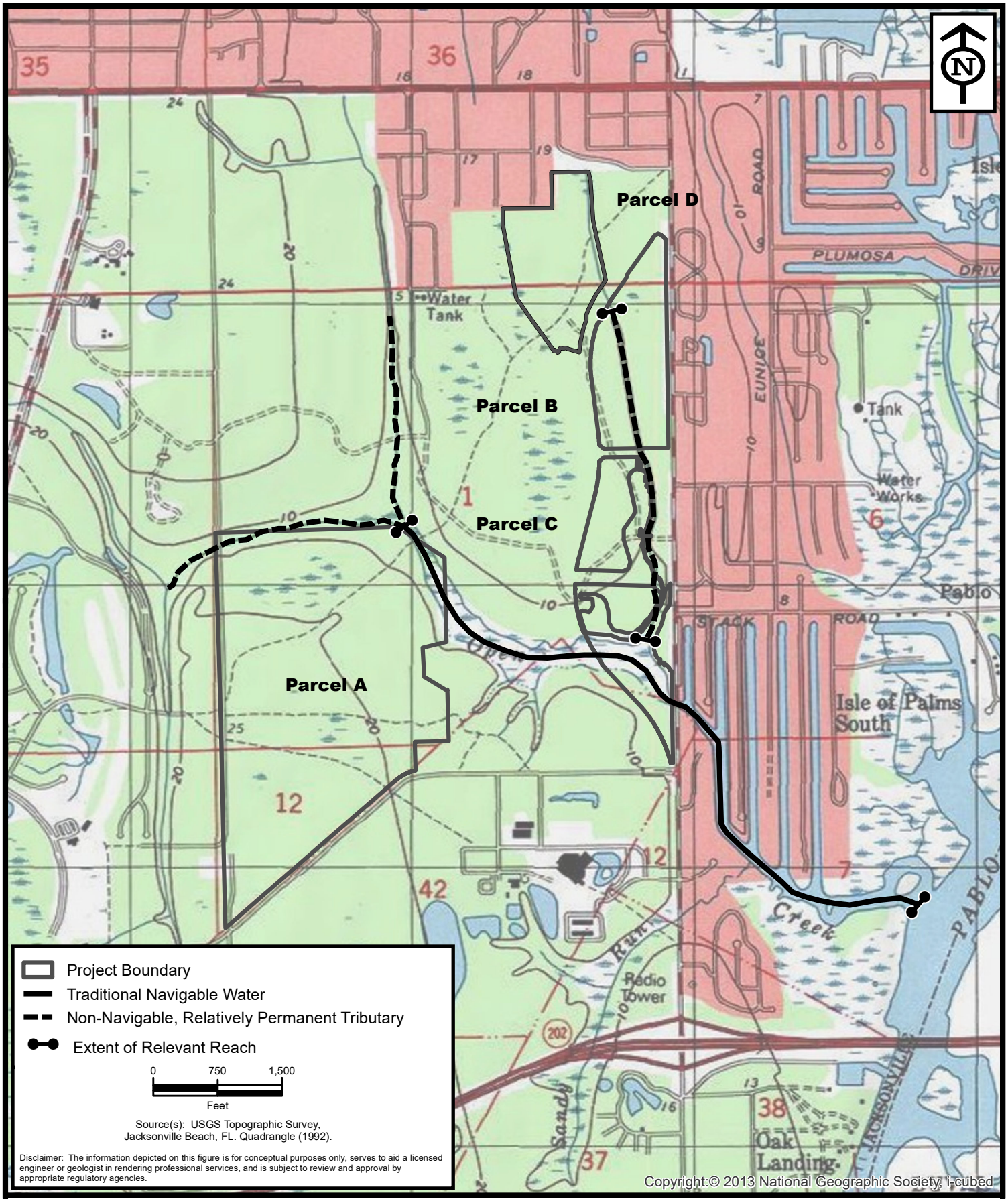
Proposed Jurisdictional Determination - Parcel C Detail

Estuary Corporation/San Pablo Parcels

Duval County, Florida

Project:	EJ11298.03
Date:	Jul 2017
Drwn/Chkd:	JRN/MH
Figure:	**5A**

Path: P:\GIS_Projects\EJ\2011\298\03\fig\ACOE\JD Parcel C.mxd Date: 8/1/2017 10:38:57 AM



ENVIRONMENTAL SERVICES, INC.
7220 Financial Way, Suite 100
Jacksonville, Florida 32256
(904) 470-2200
(904) 470-2112 Fax
www.environmentalservicesinc.com

Relevant Reach

Estuary Corporation/San Pablo Parcels

Duval County, Florida

Project:	EJ11298.03
Date:	Jul 2017
Drwn/Chkd:	JRN/MH
Figure:	6

Path: P:\GIS_Projects\EJ\2011\298\03\fig\ACOE\Relevant Reach v02.mxd Date: 8/1/2017 8:15:04 PM