

**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): 8 December 2008**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Jacksonville; SAJ-2008-586 (SP-MRE)**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: Florida County/parish/borough: Duval City: Jacksonville  
Center coordinates of site (lat/long in degree decimal format): Lat. 30.204° **N**, Long. 81.826° **W**.  
Universal Transverse Mercator:

Name of nearest waterbody: Sal Taylor Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: North Fork Black Creek

Name of watershed or Hydrologic Unit Code (HUC): 03080103, Lower St. Johns River

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:

Field Determination. Date(s): 11 September 2008 and 7 November 2008.

**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) at the project site. [Required]

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (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: linear feet: width (ft) and/or acres.

Wetlands: (encompassed by project site) ~ 10 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):<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: .

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

<sup>2</sup> 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).

<sup>3</sup> Supporting documentation is presented in Section III.F.

## 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). 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<sup>4</sup> 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.

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

##### (i) General Area Conditions:

Watershed size: Black Creek Basin, 496 square miles

Drainage area: into the ~1 mile channelized tributary, 1.75 square miles

Average annual rainfall: 53 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. Channelized flow from the project area flows into Sal Taylor Creek, into Yellow Water Creek, into the North Fork Black Creek (a TNW, navigable in fact with tidal influence in its discharge record slightly, ~0.3 mile, upstream of its confluence with Big Branch).

Project waters are 5-10 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 5-10 aerial (straight) miles from TNW.

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

Project waters cross or serve as state boundaries: No

<sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW<sup>5</sup>: Wetlands encompassed by the project site are part of a larger flood zone formed by the ~ 5.5 acre wetland entirely encompassed by the project site, the system north of the project site (~ 65 acres in total size), the system west of the project site (~ 80 acres in total size), and the uplands juxtapositioned between these systems. This flood zone and other uplands and wetlands within the drainage area flow into channelized tributary (which form the unnamed RPW). This unnamed channelized flow has a direct hydrologic connection to Sal Taylor Creek, which flows into Yellow Water Creek, which flows into North Fork Black Creek (a TNW). North Fork Black Creek (a TNW) flows into Black Creek (a TNW), which flows into the St. Johns River (also a TNW)

Tributary stream order, if known:

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

Tributaries are:

- Natural – onsite system and the other systems associated with the tributary routinely support surface flow  
 Artificial (man-made) – Man-made tributaries include channelized tributaries contiguous to trail roads and silviculture roadways, which cut through uplands and wetlands that drain wetlands and facilitate direct flow to Sal Taylor Creek. Due to the neighboring wetland systems and lack of much change in elevation, the expansive drainage system appears to have been created to contain and drain several wetland systems, including the flood zone area spanning the project site, to alleviate flooding and facilitate silviculture operations.  
 Manipulated (man-altered) – Man-altered tributaries include channelized tributaries contiguous to trail roads through wetlands and silviculture roadways within wetlands, which cut through uplands and wetlands that drain wetlands and facilitate direct flow to Sal Taylor Creek.

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

Average width: 5 to 30 feet  
Average depth: variable  
Average side slopes: variable

Primary tributary substrate composition (check all that apply):

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Silts           | <input checked="" type="checkbox"/> Sands          | <input type="checkbox"/> Concrete        |
| <input type="checkbox"/> Cobbles         | <input type="checkbox"/> Gravel                    | <input checked="" type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock         | <input type="checkbox"/> Vegetation. Type/% cover: |  |
| <input type="checkbox"/> Other. Explain: |  |  |

Tributary condition/stability: tributary is maintained and fairly stable; slight erosion of banks during storm events

Presence of run/riffle/pool complexes. scattered riffle complexes occur along the tributary

Tributary geometry: **Meandering**

Tributary gradient (approximate average slope): 2 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: The review area is characterized by low infiltration soils and heavily inundated conditions. During precipitation events, the area experiences an increase in overland sheet flow. Evidence of this is observed on the aerial imagery attached and specifically from the multiple hydrologic channels/pathways that are formed under peak flow conditions when the primary channel volume is no longer adequate. These pathways are observed westward of the review area running east-west towards the RPW. Hydrologic connection between the review area and RPW Sal Taylor Creek suggests significant biological, chemical, and physical interdependence of systems. The hydrologic flow regime of the review area portrays slow moving to steady flow under dry conditions, and flood surged flow via multiple pathways under wet conditions.

Other information on duration and volume: Precipitation in the review area averages 52 to 54 inches annually.

Inundation in the review area appears constant even under dry conditions. Surge under wet conditions is predicted to enlarge flowways from 5 feet to 30 feet in width, with an estimated average depth around 5 feet. Surged flow is expected to follow a typical unit hydrograph per unit input of precipitation.

Surface flow is: **Discrete and confined**. Characteristics: overland sheetflow flows into channelized tributaries, surge conditions have formed several small overland pathways to the channelized tributaries. Majority of review area and surrounding lands inundated under dry conditions suggesting constant subsurface flow and steady to slow surface flow.

Subsurface flow: **Yes**. Explain findings: Flow and heavy inundation is observed on both sides of manmade obstructions suggesting constant subsurface flow. Extremely sandy soils allow for rapid movement of water subsurface. Sandy soils are present along all RPWs reviewed prior to reaching the TNW. The man-made tributary system receives water from and connects multiple wetlands that it traverses.

Dye (or other) test performed:

<sup>5</sup> 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 has (check all that apply):

- Bed and banks
- OHWM<sup>6</sup> (check all indicators that apply):
- |   |  |
|---|--|
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris                     |
| <input type="checkbox"/> changes in the character of soil                     | <input checked="" type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving   | <input type="checkbox"/> the presence of wrack line                            |
| <input checked="" type="checkbox"/> vegetation matted down, bent, or absent   | <input type="checkbox"/> sediment sorting                                      |
| <input type="checkbox"/> leaf litter disturbed or washed away                 | <input checked="" type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                  | <input checked="" type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining                                       | <input checked="" type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list):  |  |
- Discontinuous OHWM.<sup>7</sup> Explain:

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

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

**(iii) Chemical Characteristics:**

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

Explain: the water is generally clear but dark in color due to high levels of tannins and organic compounds, low lying areas of darker turbid water exist along the RPW, prolonged periods of inundation along the RPW are supported by FEMA FIRM zoning maps, wetland vegetation species, and sandy mucky soil classifications.

Identify specific pollutants, if known: potential petrochemical run-off from trail roads associated with vehicular use of these roadways; potential nitrate and phosphate pollution from area silviculture

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics: diverse habitat formed by emergent vegetation; ground-level herbaceous vegetation; shrub-layer vegetation; and canopy (trees along banks) vegetation.
- Habitat for:
- Federally Listed species. Explain findings:
- Fish/spawn areas. Explain findings: pool complexes form breeding ground for small feeder fish and other amphibian/reptilian species.
- Other environmentally-sensitive species. Explain findings: pool complexes form breeding ground for amphibian (toad/frog) species susceptible to pollutants.
- Aquatic/wildlife diversity. Explain findings: tributary forms ecological corridor and diverse habitat for local and transient species.

**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: the system totally encompassed by the project site is ~ 5.5 acres in size; ~ 4.3 acres of the northern system (that totals ~65 acres) protrudes onto the project site; other systems adjacent to the RPW range from 0.7 to 80 acres in size

Wetland type: The wetlands support diverse habitat consisting of mixed wetland hardwood, wetland forested mixed, and wet pine flatwoods. These wetlands are generally moderate to high quality; however, roads, light industry, commercial and medium density residential development are in close proximity to these systems. Therefore, because of the close proximity to potential pollution sources, these systems provide important functions to the TNW due to their ability to detain/retain stormwater and filter pollutants.

Wetland quality. Moderate to high quality wetlands.

Project wetlands cross or serve as state boundaries. Explain:

**(b) General Flow Relationship with Non-TNW:**

Flow is: **Intermittent flow**: Onsite system and other adjacent wetlands have intermittent flow into the channelized system forming the RPW. This flow increases during storm events as these systems fill and over-flow into the channelized system. Site visits during generally dry periods discovered areas of inundation in all of the wetlands systems inspected and gentle flow within the channelized system.

Surface flow is: **Discrete and confined** Characteristics: overland sheet flow contributes to the general flow within the channelized pathway with surge conditions increasing the volume and velocity of flow. Majority of review area and surrounding lands inundated under generally dry conditions suggesting constant subsurface flow and steady to slow surface flow.

<sup>6</sup>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.

<sup>7</sup>Ibid.

Subsurface flow: **Yes**. Explain findings: Flow and heavy inundation is observed on both sides of manmade obstructions suggesting constant subsurface flow

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting; several wetland systems directly abut the RPW

Not directly abutting, several wetland systems border or are neighboring to the RPW

Discrete wetland hydrologic connection: The ~ 5.5-acre onsite wetland system neighbors the RPW tributary and appears to have a hydrologic sub-surface connection. This hydrologic connection between this onsite wetland and the downstream TNW was determined to exist using topographic, aerial, infrared, FEMA FIRM maps, and other information garnered during a site visit and an inspection of the properties adjacent to the project site. It appears that a similar hydrologic connection is present between the RPW and several other offsite wetland systems. Confirmation of these other offsite connections could not be physically verified due to potential trespass concerns.

Ecological connection: Several wetlands neighboring the RPW are close enough to the RPW to provide ecological connections through amphibian, reptilian, avian, or mammalian species.

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **5-10** river miles from TNW.

Project waters are **5-10** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters.**

Estimate approximate location of wetland as within the **50 - 100-year** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.): The majority of the onsite ~ 5.5-acre system was inundated at the time of the site visit. Water color varied in different areas between clear or tannic brown. Low lying areas of dark turbid water with inundated flowlines (skidder trails, roadside swales, and disturbed silviculture sites) leading offsite to the adjacent RPW were observed during site visits. Prolonged periods of inundation are supported by the FEMA FIRM zoning maps, wetland vegetation species, and sandy mucky soil classifications.

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: 38% mixed wetland hardwood, 25% wetland forested mixed, and 63% wet pine.

Diverse habitat formed by emergent vegetation; ground-level herbaceous vegetation; shrub-layer vegetation; and canopy (trees along banks) vegetation.

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas: pool complexes form breeding ground for small feeder fish and other amphibian/reptilian species.

Other environmentally-sensitive species: pool complexes form breeding ground for amphibian (toad/frog) species

susceptible to pollutants.

Aquatic/wildlife diversity: tributary forms ecological corridor and diverse habitat for local and transient species.

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

All wetland(s) being considered in the cumulative analysis: **19**

Approximately (231) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following: (Based on 1999 Infrared Aerial Imagery DOQQ);

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Yes	80	Yes	65
Yes	3.2	Yes	1.1
Yes	28.4	Yes	3.3
Yes	6.3	No	5.5
No	11.7	No	0.7
No	8.6	No	2.3
No	1.8	No	1.4
No	4.4	No	3.5
No	1.8	No	1.0
No	1.0		

Summarize overall biological, chemical and physical functions being performed: a) the wetlands within the proposed drainage area provide detention and attenuation of run-off and floodwaters from the site, the neighboring landscape, and the adjacent developments; b) these wetlands convey and filter sediments and other pollutants from the surrounding developments and roads to the TNW; c) these wetlands provide base flow to the TNW during the drier months of the year; d) these wetlands support the food chain of the TNW through the creation and transfer of organic carbon and nutrients; e) these wetlands provide breeding ground and habitat for a variety of amphibian, reptilian, avian, and small mammalian species that utilize the local systems and downstream systems; and, f) these wetlands provide feeding, staging and resting habitat for water birds that also utilize the downstream systems (Sal Taylor Creek, Yellow Creek, North Fork Black Creek, Black Creek, and the St. Johns River).

### 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 food-webs?
- 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: a) the wetlands within the proposed drainage area provide detention and attenuation of run-off and floodwaters from the site, the neighboring landscape, and the adjacent developments; b) these wetlands convey and filter sediments and other pollutants from the surrounding developments and roads to the TNW; c) these wetlands provide base flow to the TNW during the drier months of the year; d) these wetlands support the food chain of the TNW through the creation and transfer of organic carbon and nutrients; e) these wetlands provide breeding ground and habitat for a variety of amphibian, reptilian, avian, and small mammalian species that utilize the local systems and downstream systems; and, f) these wetlands provide feeding, staging and resting habitat for water birds that also utilize the downstream systems (Sal Taylor Creek, Yellow Creek, North Fork Black Creek, Black Creek, and the St. Johns River).

### 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:
- 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: Examination of aerial photography (true color and infrared) indicating the presence of inundation during several years combined with the presence of inundation and flow during both site visits supports the conclusion that the channelized flow way has, at a minimum, seasonal flow.  
Provide estimates for jurisdictional waters in the review area (check all that apply):
  - Tributary waters: ~5,700 linear feet ~5-30 width (ft).
  - Other non-wetland waters:            acres.Identify type(s) of waters: .

**3. Non-RPWs<sup>8</sup> 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:.
  - 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: as noted above and depicted on the supportive drawings and figures.

Provide acreage estimates for jurisdictional wetlands in the review area: ~187acres.

**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.3.

Provide acreage estimates for jurisdictional wetlands adjacent but not directly abutting the RPW: ~ 34 acres not encompassed by the project site.

Provide acreage estimates for jurisdictional wetlands adjacent but not directly abutting the RPW at the project site: ~ 5.5 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.<sup>9</sup>**

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).

<sup>8</sup>See Footnote # 3.

<sup>9</sup>To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

**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):<sup>10</sup>**

- 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): .

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): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

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): 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: FEMA FIRM Map, Soils Map.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- U.S. Geological Survey Hydrologic Atlas: NHD Flowlines 1:24K.
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Jacksonville Heights, FL, (1"=2000').
- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of City of Jacksonville, Duval County, Florida and National Resource Conservation Service (Internet).
- National wetlands inventory map(s). Cite name: Jacksonville Heights, FL.
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: Maps 120077 125E and 120077 150E.
- 100-year Floodplain Elevation is: 2' (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): 1995 Infrared Aerial DOQQ, 1999 Infrared Aerial DOQQ, 2006 Duval County Aerial DOQQ, LiveMaps (Internet), GoogleEarth (Internet).
  - or  Other (Name & Date): ground-level at project site.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): site visit to onsite system/property; site visit on all local roadways around the site property to determine potential offsite connections and habitats.

<sup>10</sup> 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.

## **B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Due to *Robison* decision, SAJ conducted a significant nexus determination for the RPW and the wetlands adjacent (abutting and neighboring) the RPW.

The channelized flowway associated with the wetland encompassed by the project site supports emergent vegetation including *Sagittaria* spp., *Pontedaria cordata*, and *Typha* spp.; all of which are obligate emergent vegetation requiring the constant presence of water to survive. In addition, surface water was observed as present and/or flowing during both site visits. The channelized system flows directly into waters of Sal Taylor Creek, a natural stream system supporting divergent wetland vegetation and Florida Land Use, Cover and Forms Classification System (FLUCFCS) communities. Sal Taylor Creek flows directly into waters of Yellow Water Creek, another natural stream system supporting divergent wetland vegetation and FLUCFCS communities. Yellow Water Creek flows directly into waters of North Fork Black Creek, which is navigable in fact within an upstream segment and tidal downstream. North Fork Black Creek flows into Black Creek. Both of these natural stream systems support divergent wetland vegetation and FLUCFCS communities. Wetland habitat is found along the banks and tributaries of all of these stream systems, forming a generally unbroken wetland community between the project area and the downstream TNWs. This overall wetland community corridor is only broken by culvert crossings under roadways and the culverted passage of Sal Taylor Creek under a runway at Cecil Airfield.

North Fork Black Creek is navigable in fact with tidal influence in its discharge record slightly upstream of its confluence with Big Branch. The tidal gauge located 0.3 mi upstream from Big Branch indicates that the stage-discharge relation is affected by tide on many days as quoted from the USGS Internet site. Due to the direct and continuous shallow subsurface and surface water connection that flows without barrier directly to the TNW, North Fork Black Creek, the relevant reach, consisting of the channelized flow way, in combination with its adjacent wetlands (including the wetlands encompassed by the project site), has the capacity to filter pollutants and flood waters to the TNW. During both flood and drought, the channelized flow way and its adjacent wetlands act as a wetland filter conveying cleaner water downstream.

The project area is one of several drainage areas contributing to the ecological health of the Black Creek Drainage Basin. The following information was obtained from the Florida Department of Environmental Protection (DEP) Basin Status Report for the Lower St. Johns River Basin and supports the ecological significance of the overall drainage basin and the determination that the wetlands associated with the project site are affiliated with environmentally significant habitat:

- The greatest number of rare and protected plants and animals occurs in the Black Creek and Etonia Creek planning units
- The Black Creek crayfish (*Procambarus pictus*) is an endemic species of special concern restricted to the upper reaches of Black Creek.
- The North Fork of Black Creek was designated as "special water" by the State of Florida on 8 November 1990.
- Upper Black Creek encompasses Conservation and Recreation Lands (CARL) established by the State of Florida on 8 August 1994.

In addition, during flood storms, the channelized flow way within the proposed drainage basin quickly directs water from the vicinity of the project area, thus reducing the risk of flooding in the project area and adjacent residential development.

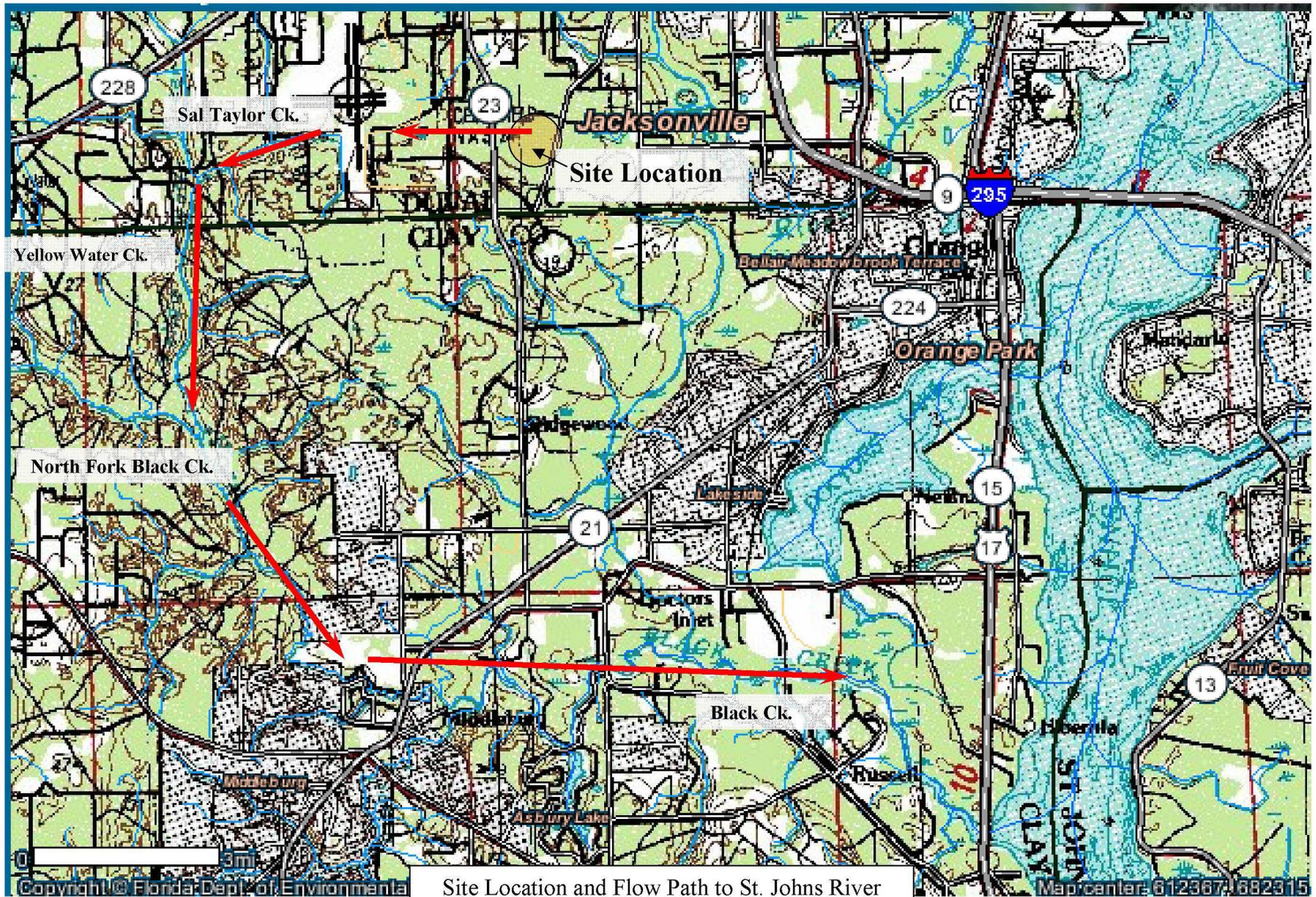
The channelized flow way, in combination with its adjacent wetlands (including the wetland encompassed by the project site) has the capacity to transfer nutrients and organic carbon and provide a seed source that supports downstream food-webs; since the tributary collects water and organic materials from over 200 acres of mixed forested, herbaceous and shrub communities and conveys these benefits downstream.

### Summary:

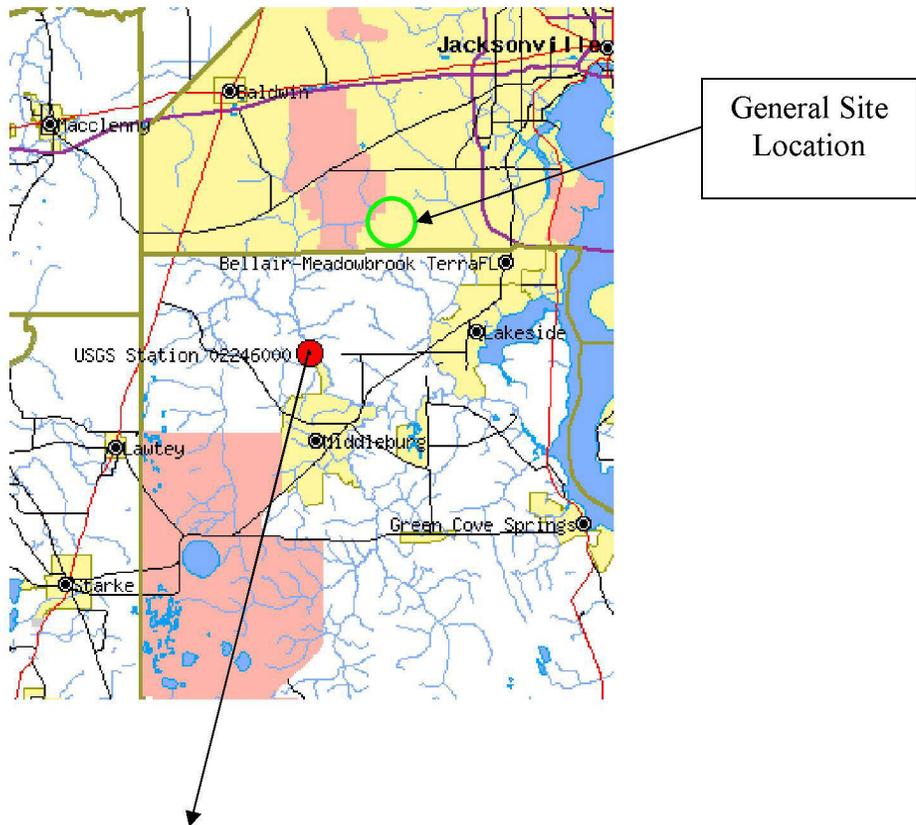
The Corps has determined that the channelized flow way, in combination with all of its adjacent wetlands (including the wetland encompassed by the project site), is jurisdictional based on the following three existing conditions:

1. the path formed by the channelized flow way downstream to the TNW supports wetlands (hydrophytic vegetation, hydrology and hydric soils) along its entire length with the limited exceptions of small segments where the flow passes through culverts under roadways or the Cecil Field airstrip;
2. the ~5.5-acre onsite wetland system is adjacent (neighbors) the channelized flow way (RPW), which remains an RPW all the way to the TNW and the ~4.3 acre portion of the ~65-acre wetland (extending offsite to the north) has a direct hydrologic connection to the RWP; and
3. the channelized flow way together with all of its adjacent wetlands (including the wetland areas encompassed by the project site) have a significant nexus to the downstream TNW.

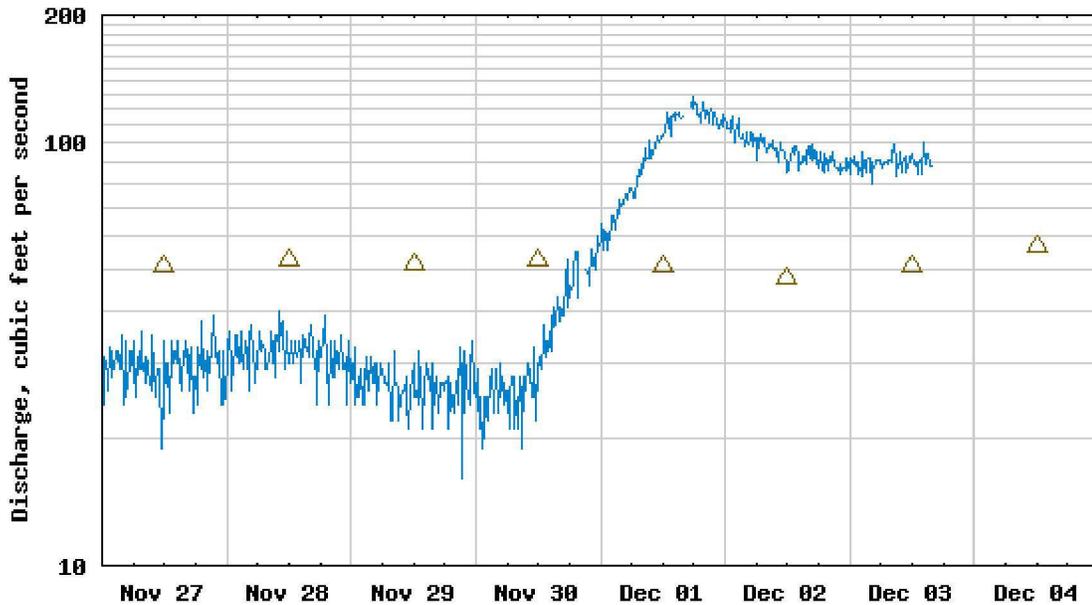
This determination is based on site inspections, field observations, topographic maps, aeriels, hydrological studies, soil maps, and information within the DEP Basin Study for the Lower St. Johns River Basin. The channelized flow way, in combination with its adjacent wetlands (including the system encompassed by the project site), provides flood attenuation for property in southwestern Duval and northwestern Clay Counties and filters out chemical pollutants prior to their reaching the TNW, maintaining downstream water quality for wildlife and fisheries, thus providing a significant nexus to Black Creek and the St. Johns River.



Site Location and Flow Path to St. Johns River

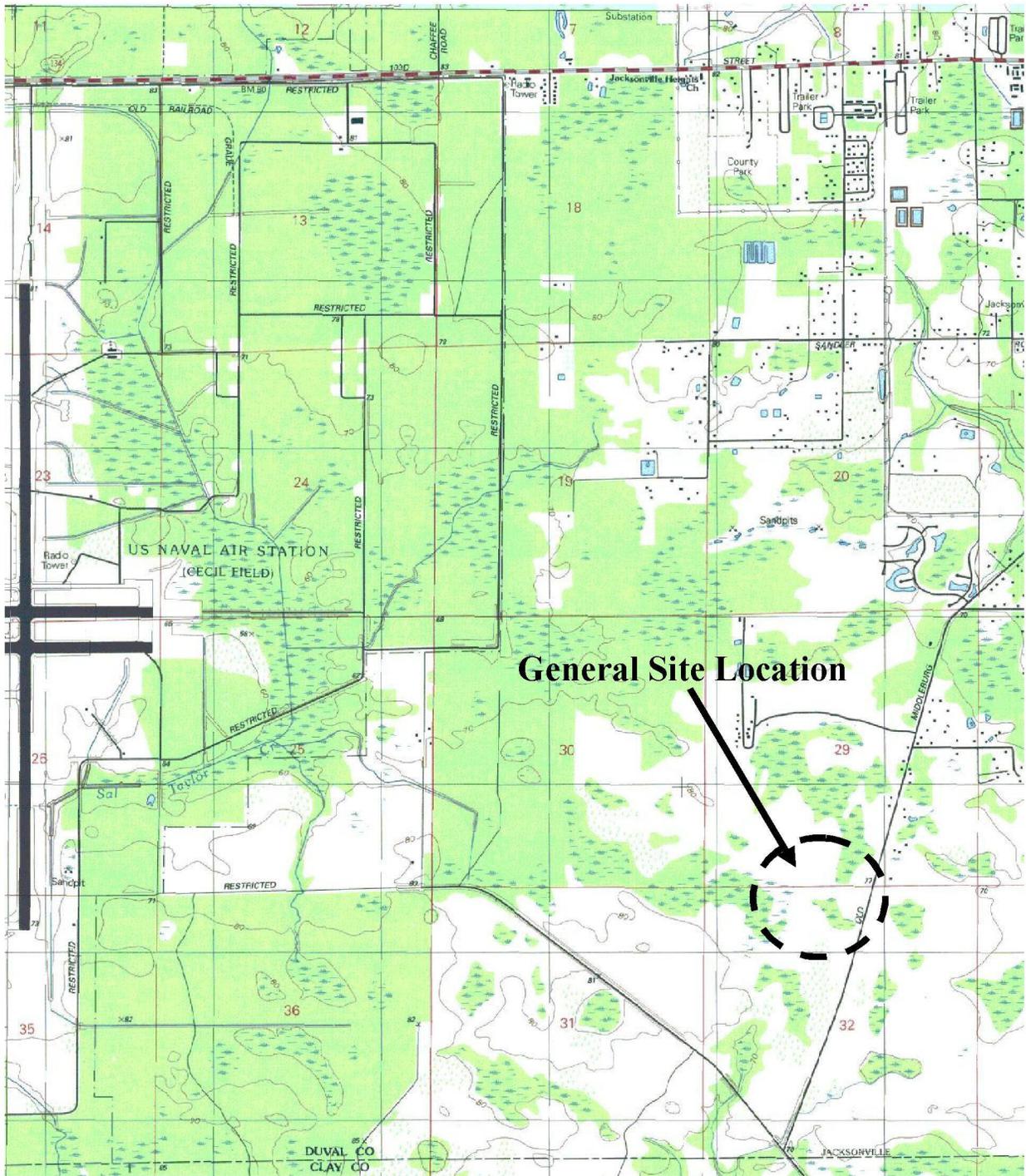


**USGS 02246000 NORTH FORK BLACK CREEK NEAR MIDDLEBURG, FL**



△ Median daily statistic (76 years) — Discharge

USGS information regarding gauge station 022460000 for North Fork Black Creek; per USGS this station demonstrated tidal influence on many days

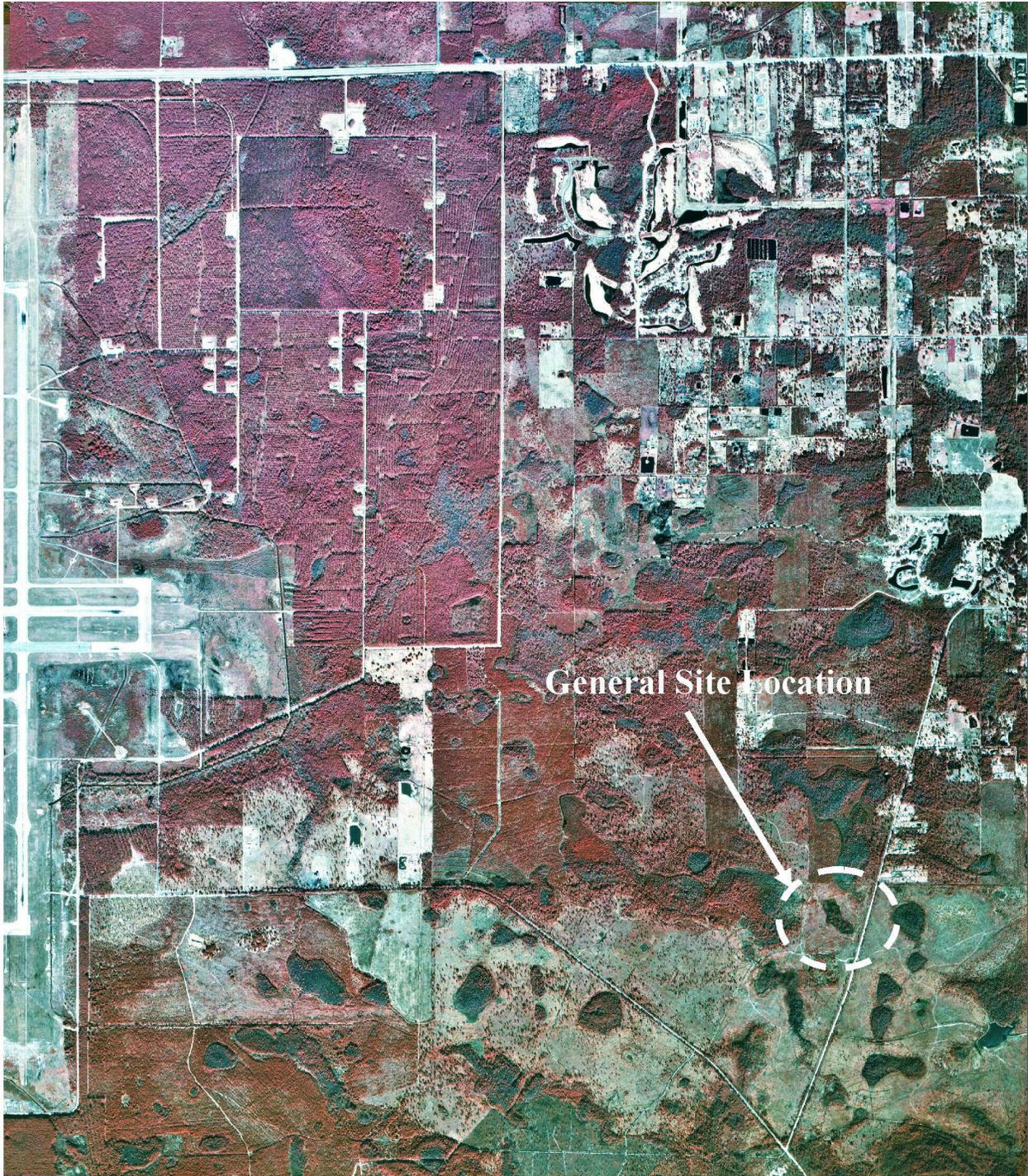


**General Site Location**

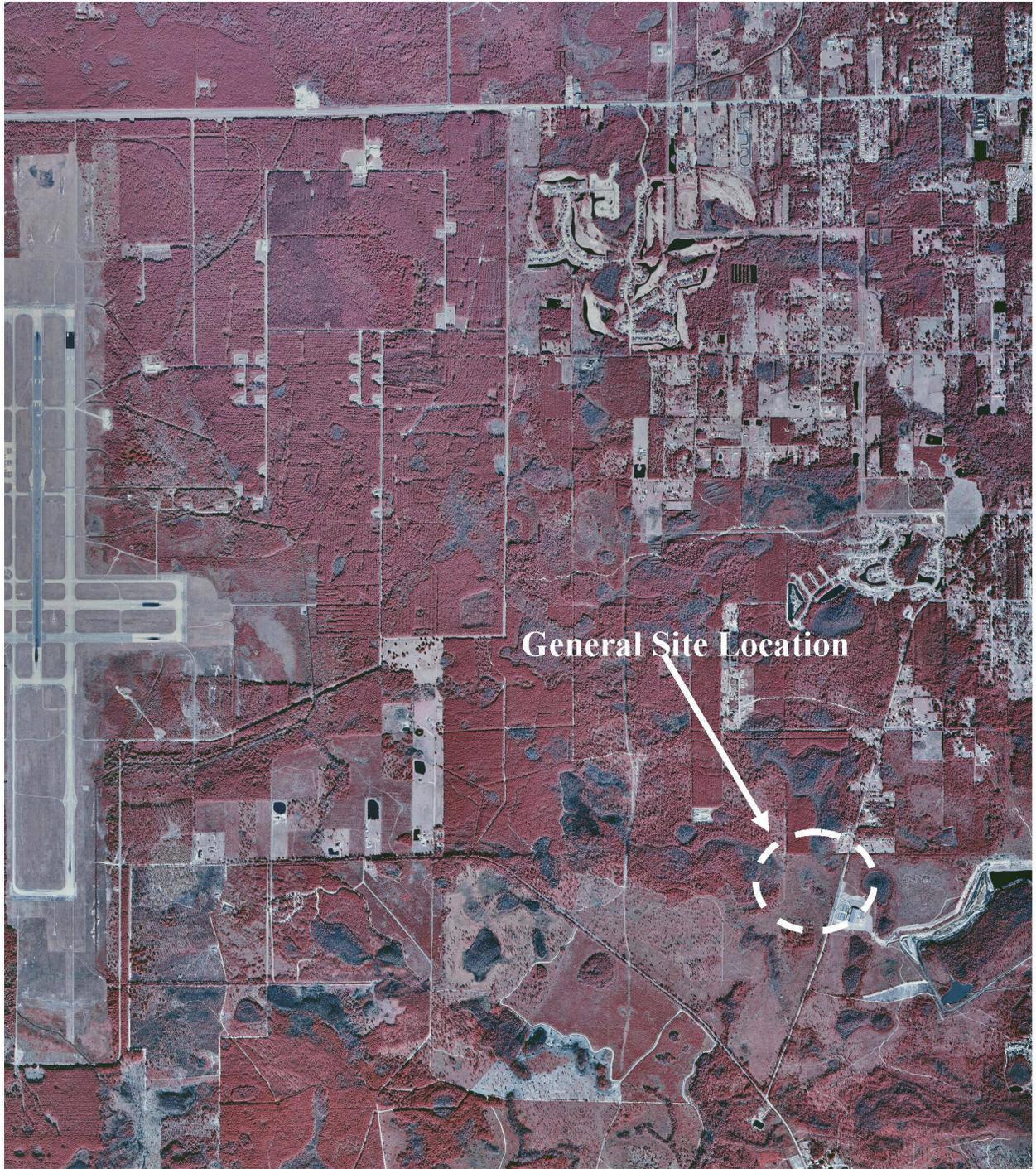
Jacksonville Heights, FL NW Quadrangle 1:2K



Aerial Imagery of General Site Location taken from Microsoft Live Maps.

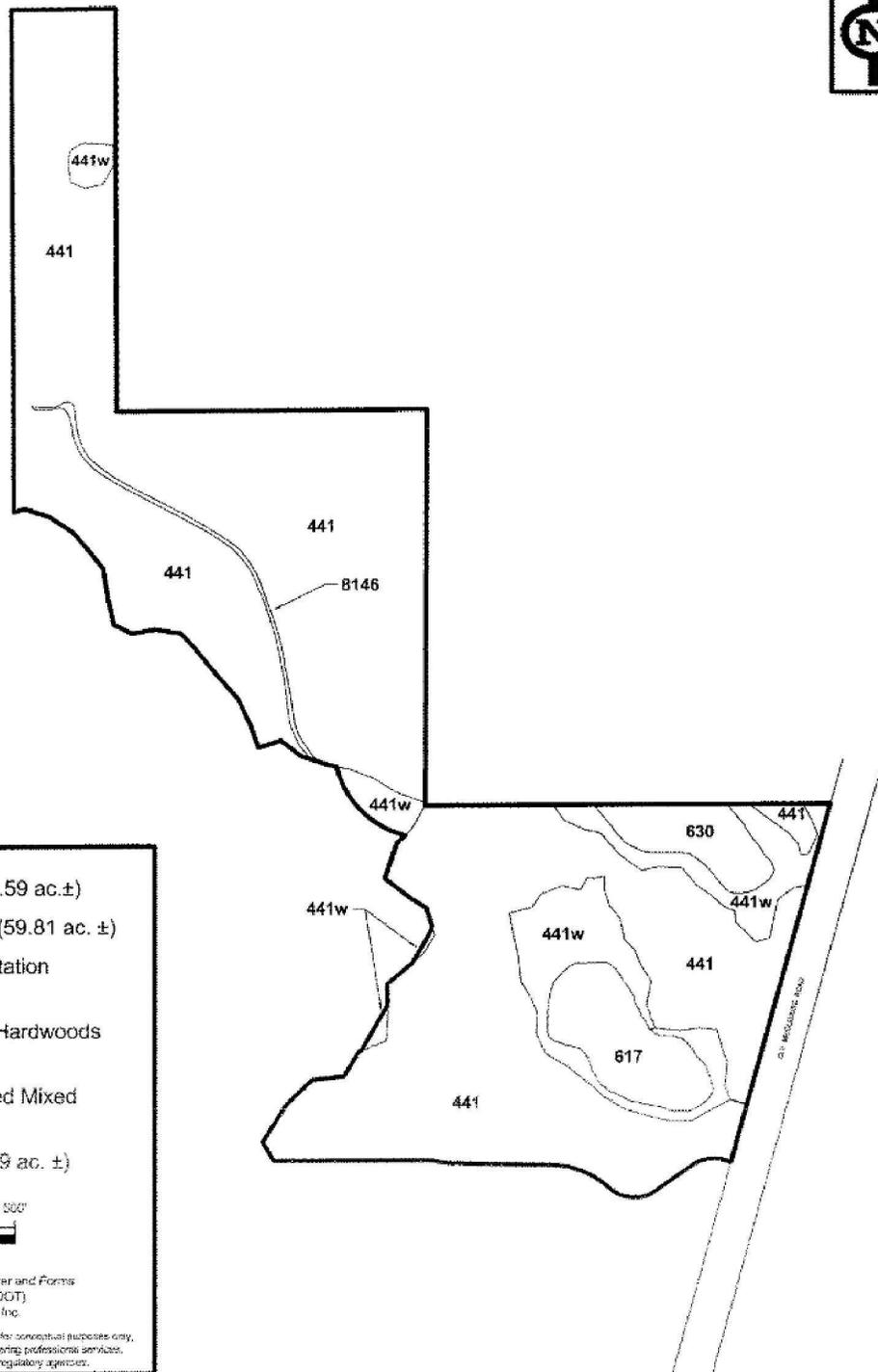


1995 Infrared Aerial Imagery DOQQ



General Site Location

1999 Infrared Aerial Imagery DOQQ



 Project Boundary (72.59 ac.±)

441, Pine Plantation (59.81 ac. ±)

441w, Wet Pine Plantation (6.96 ac. ±)

617, Mixed Wetland Hardwoods (3.26 ac. ±)

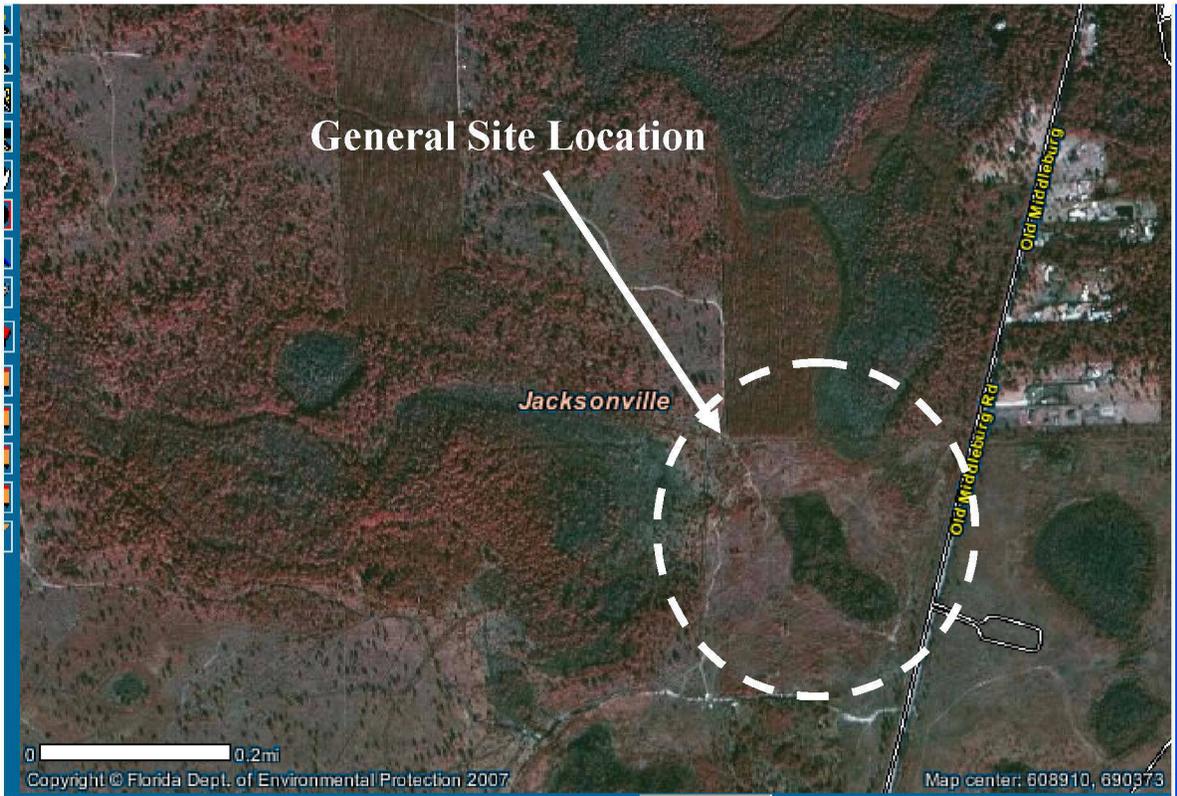
630, Wetland Forested Mixed (2.07 ac. ±)

8146, Trail Road (0.49 ac. ±)

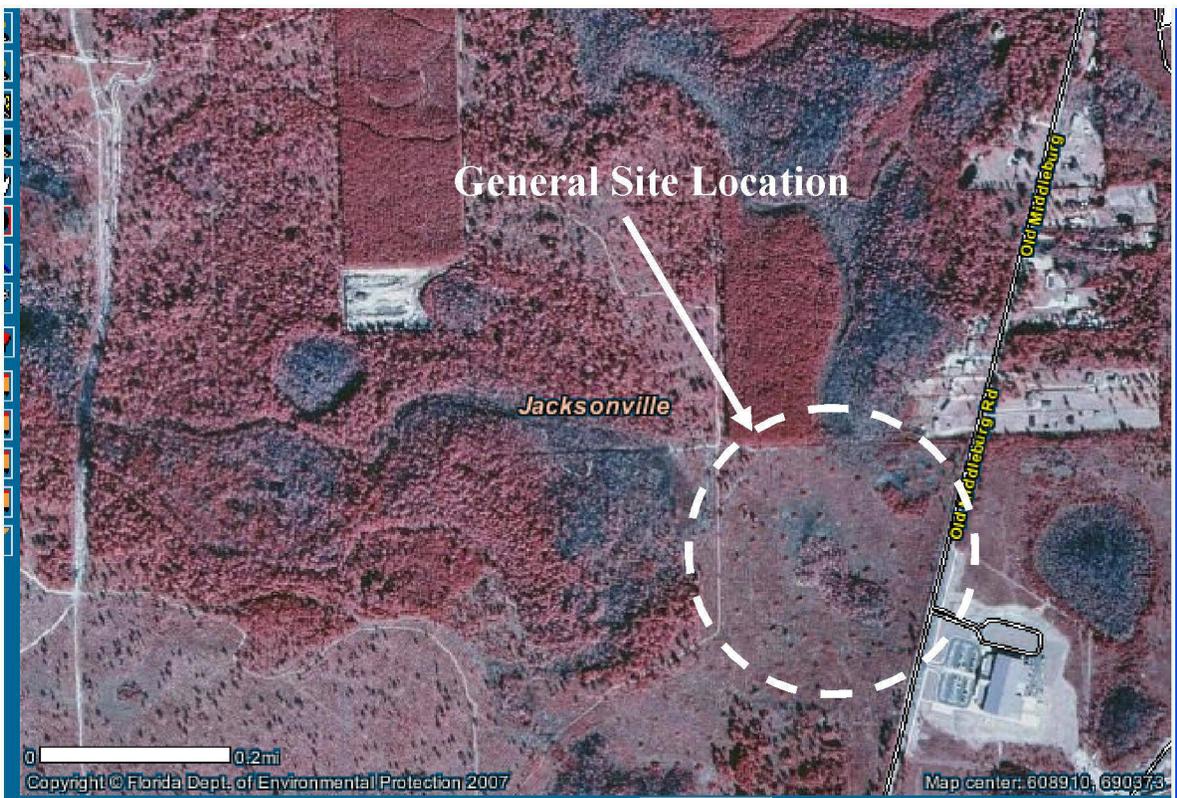
0 250 500  
Feet

Source(s): Florida Land Use, Cover and Forms Classification System (FOOT)  
England Thims & Miller, Inc.

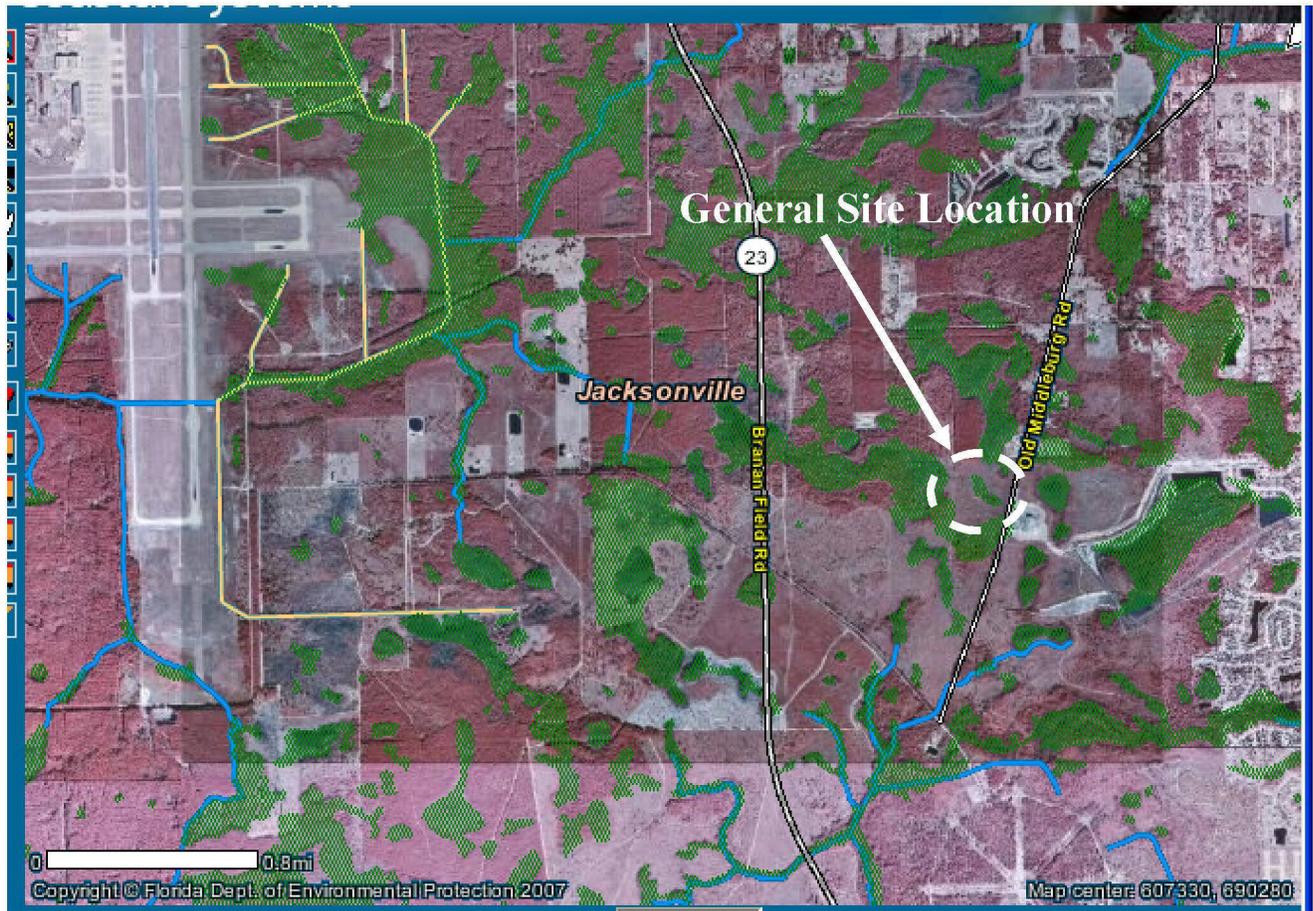
Disclaimer: The information depicted on this figure is for conceptual purposes only, serves to aid a licensed engineer or geologist in rendering professional services, and is subject to review and approval by appropriate regulatory agencies.



Small Scale 1995 Infrared Aerial Imagery DOQQ of Site location



Small Scale 1999 Infrared Aerial Imagery DOQQ of Site location



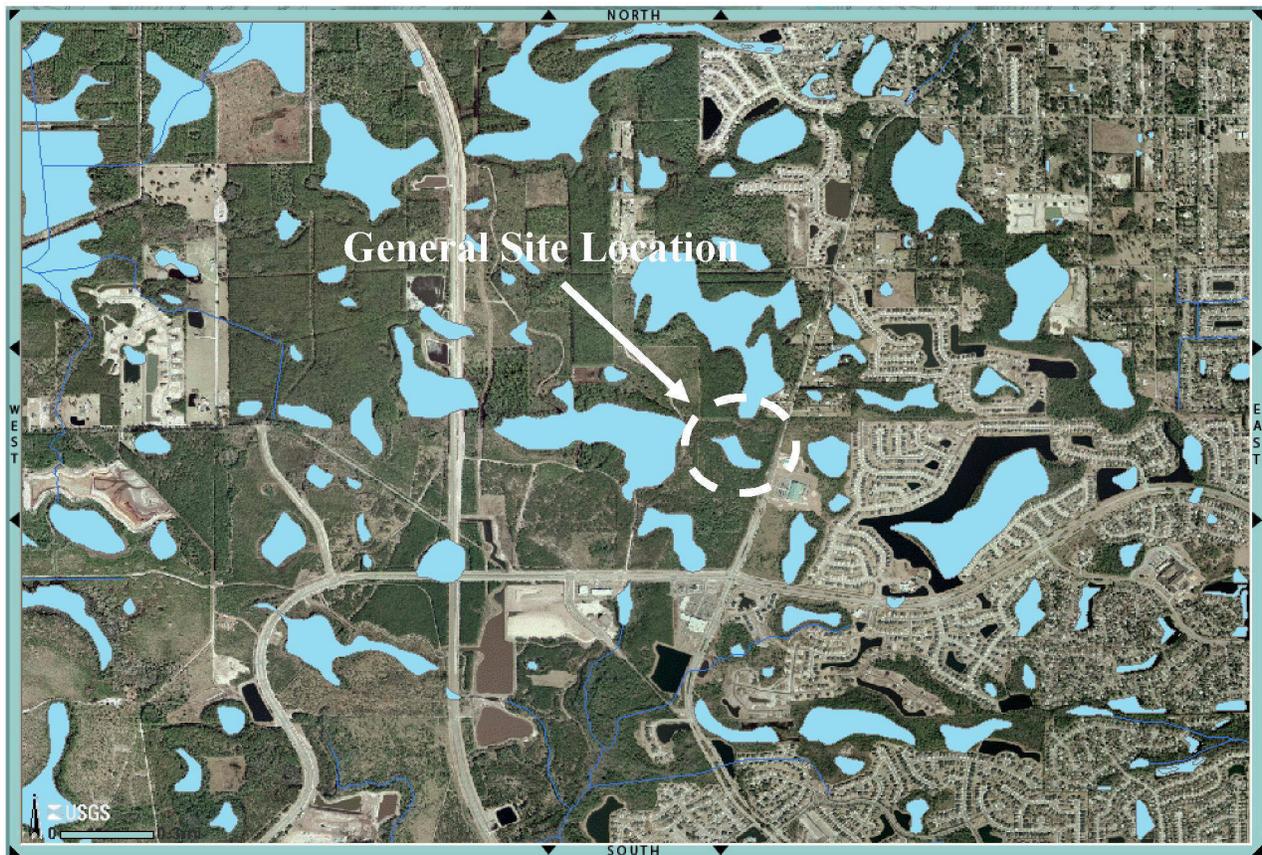
Above: 1999 Infrared Aerial Imagery DOQQ with National Hydrography Database (NHD) 1:24k Flowlines (blue and yellow) and National Wetlands Inventory (green).



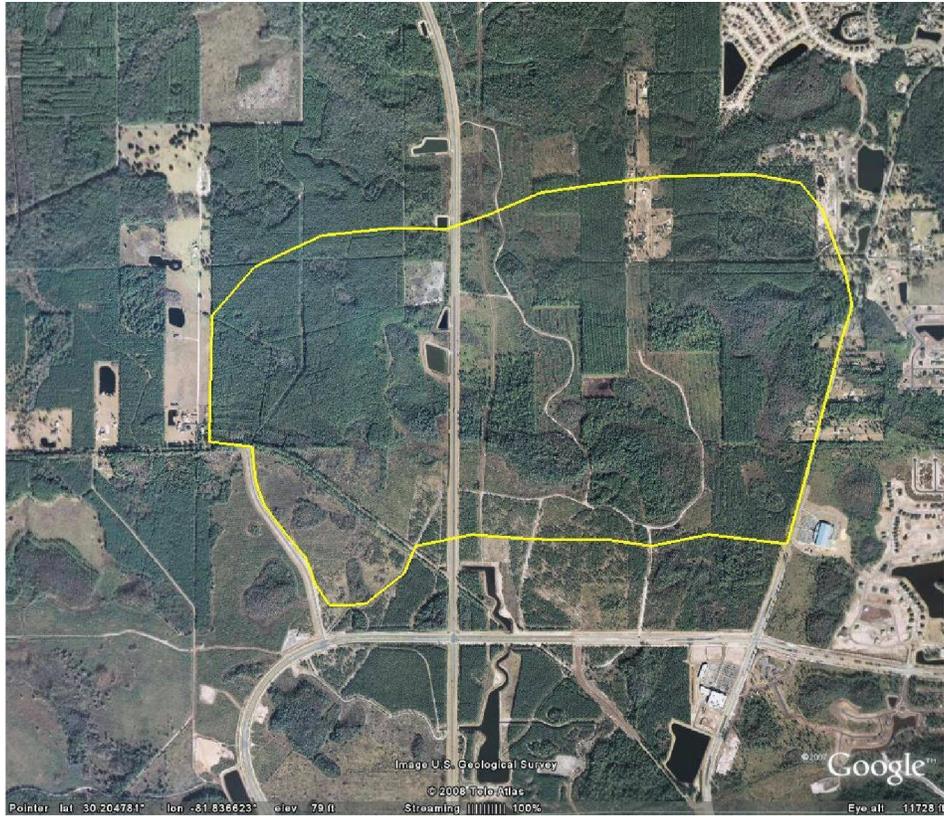
National Wetlands Inventory of Site Location with Classification Scheme.



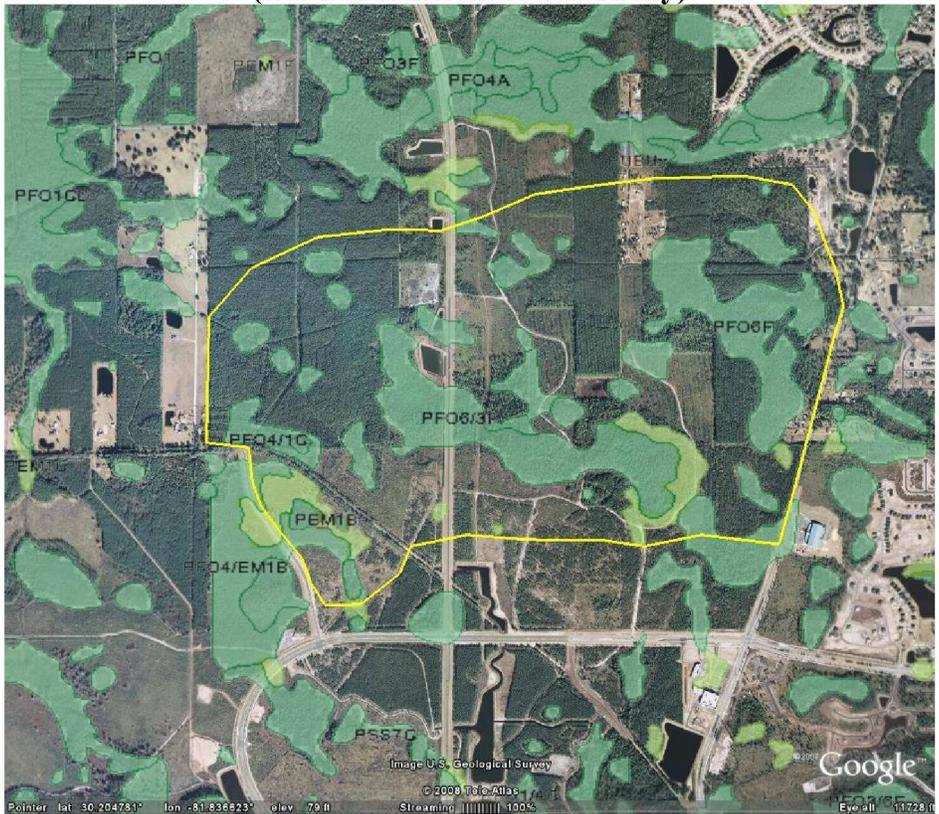
**NHD 1:24k Flowlines and USGS Hydrologic Unit Classification (HUC).**

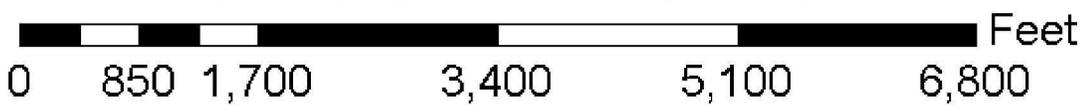
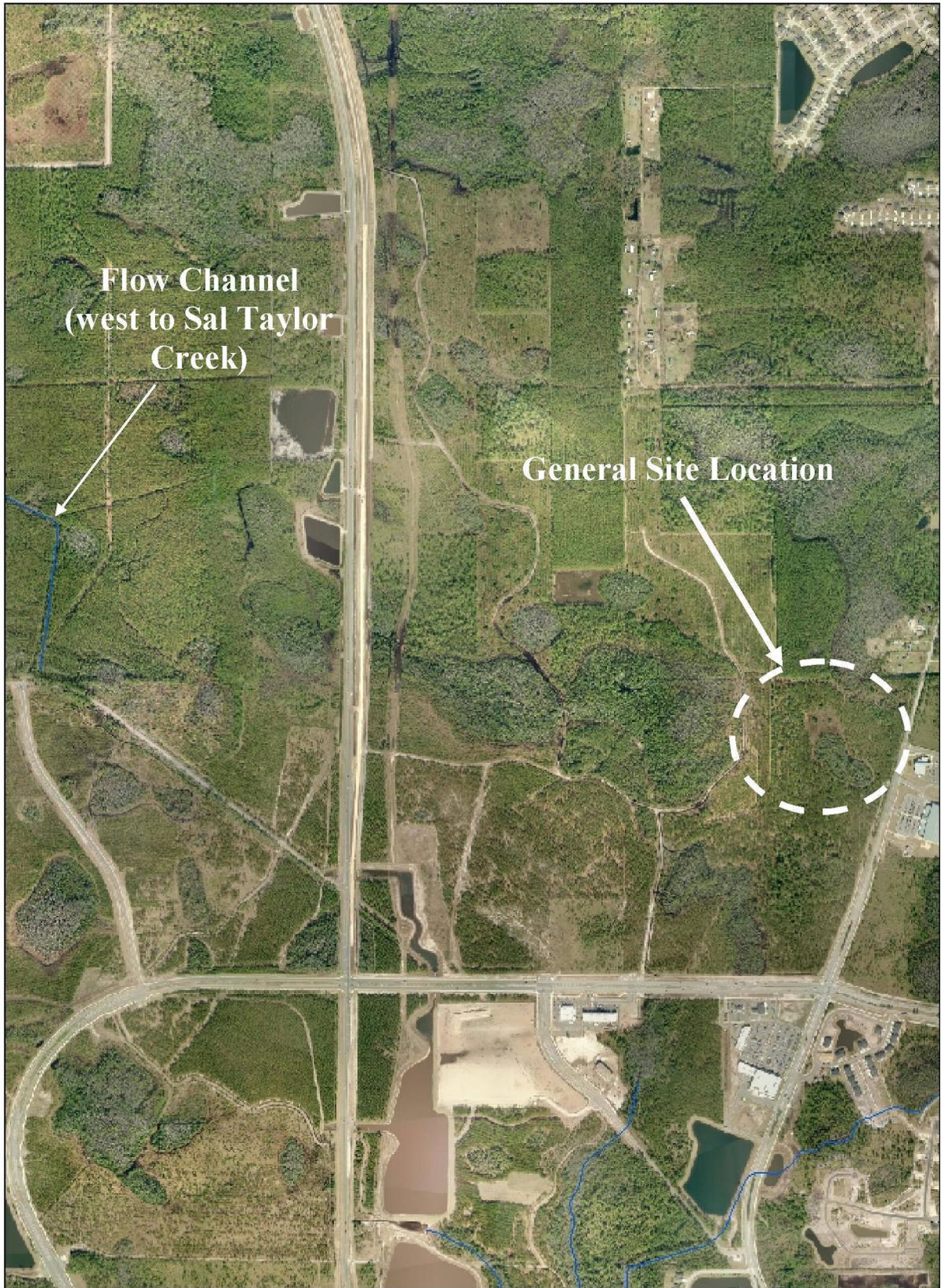




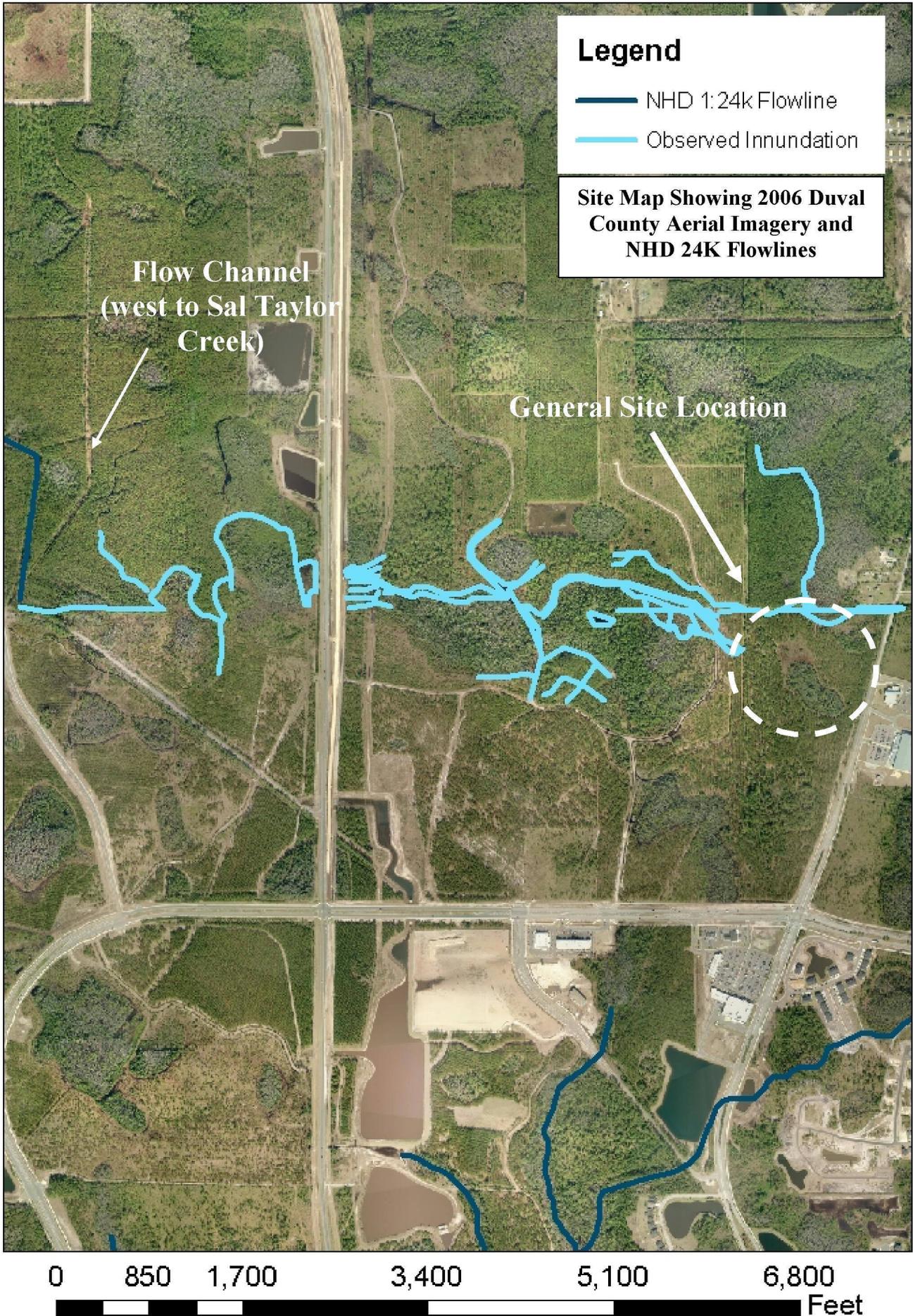


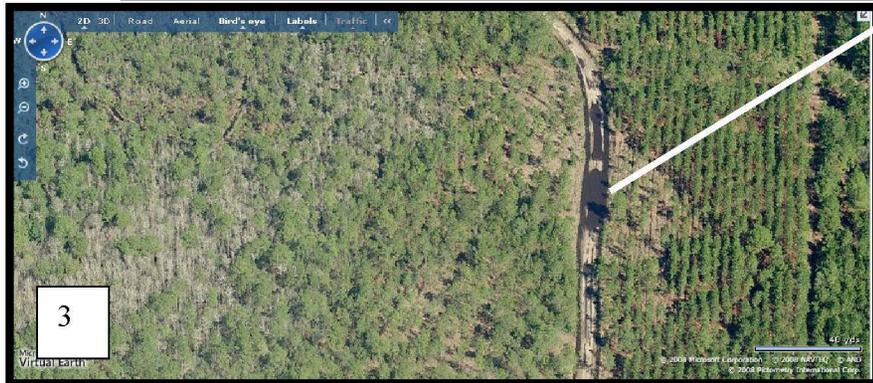
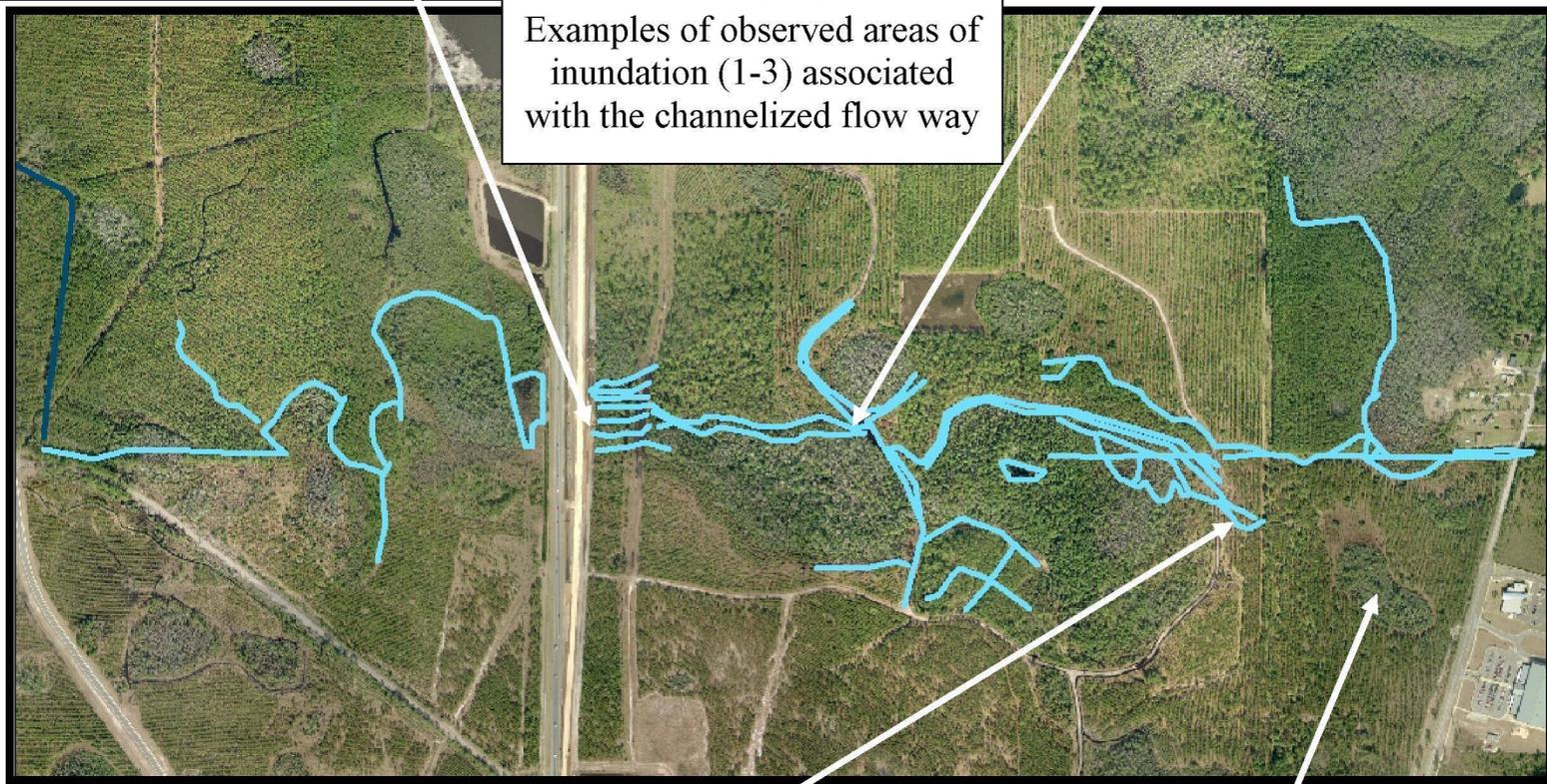
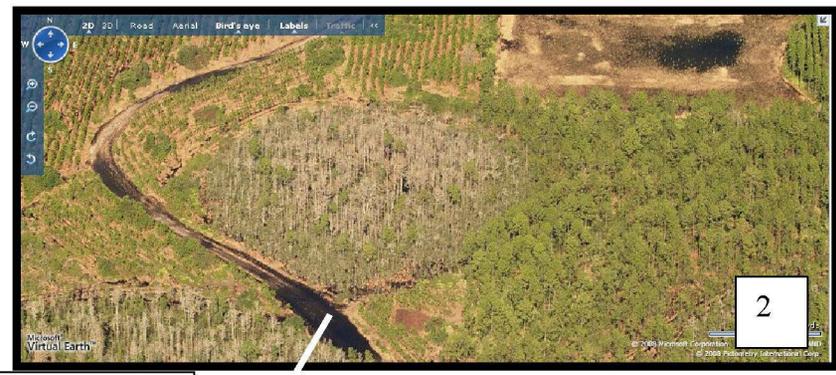
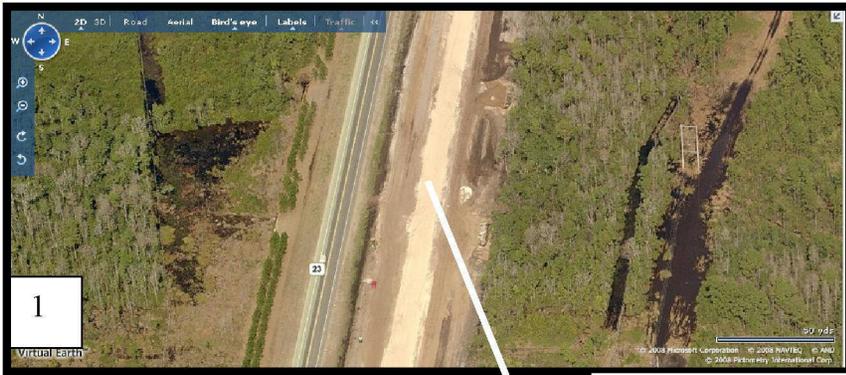
**Proposed Drainage Area Associated with the Channelized Flow Way  
(without and with NWI overlay)**

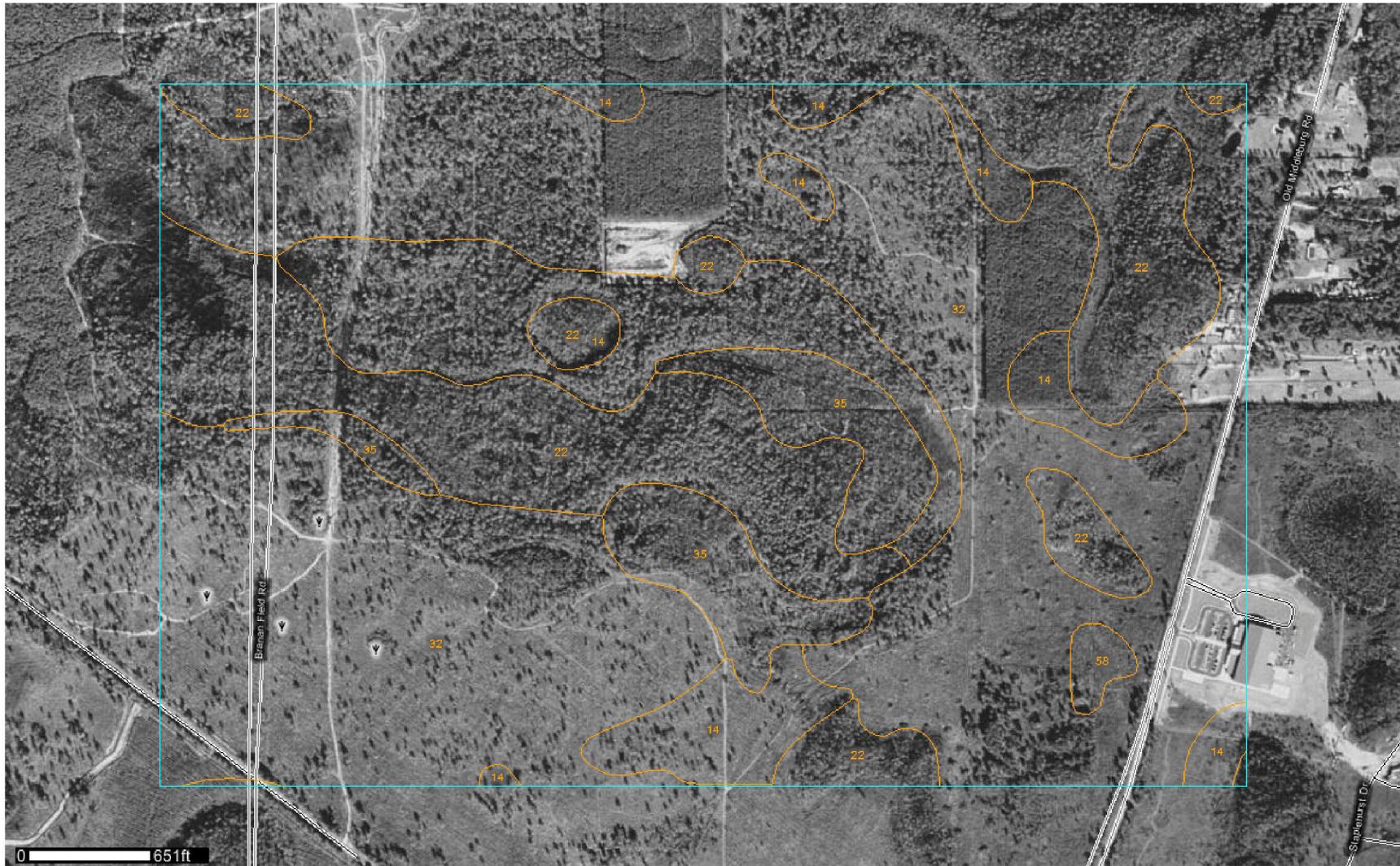




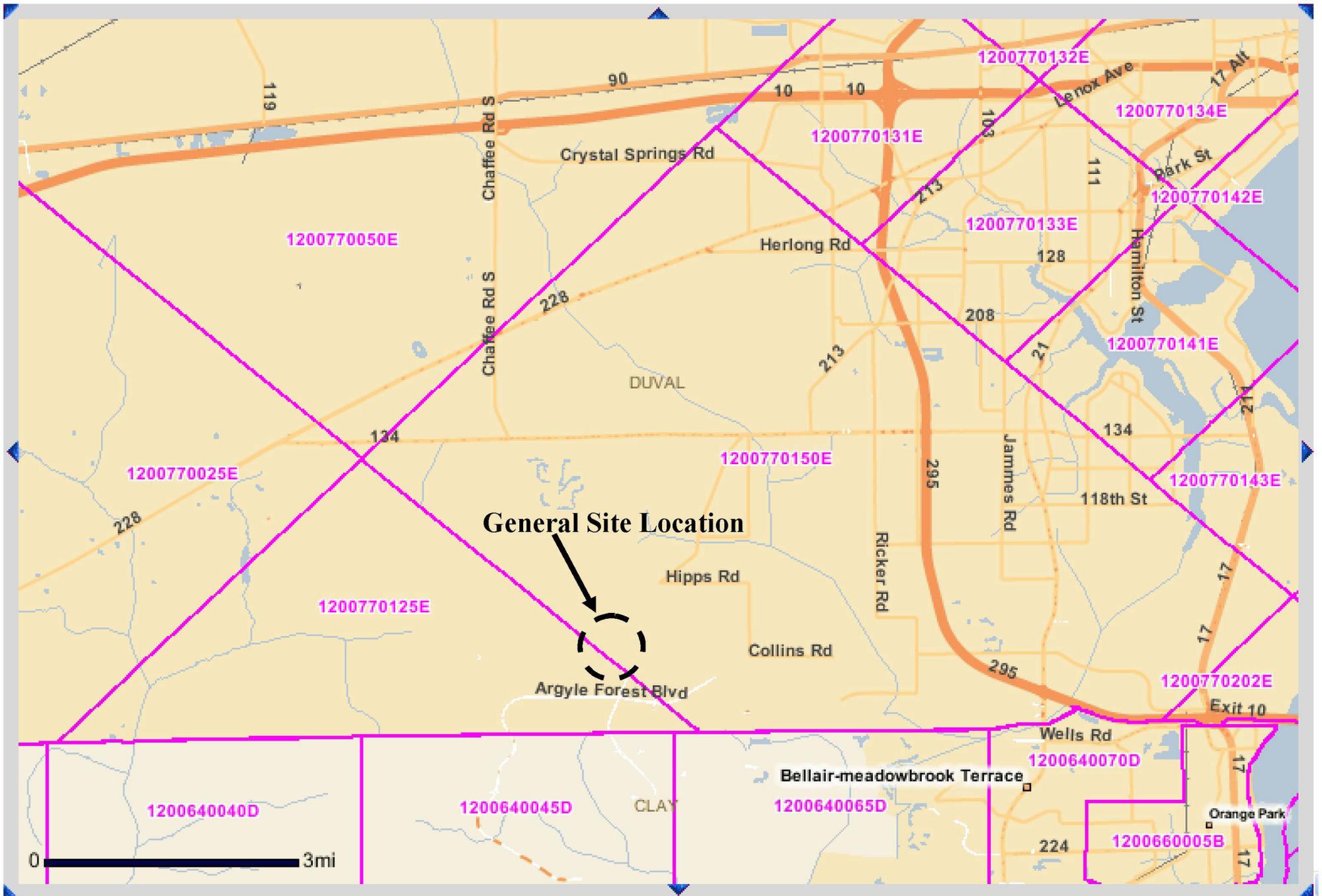
Site Map Showing 2006 Duval County Aerial Imagery and NHD 24K Flowlines







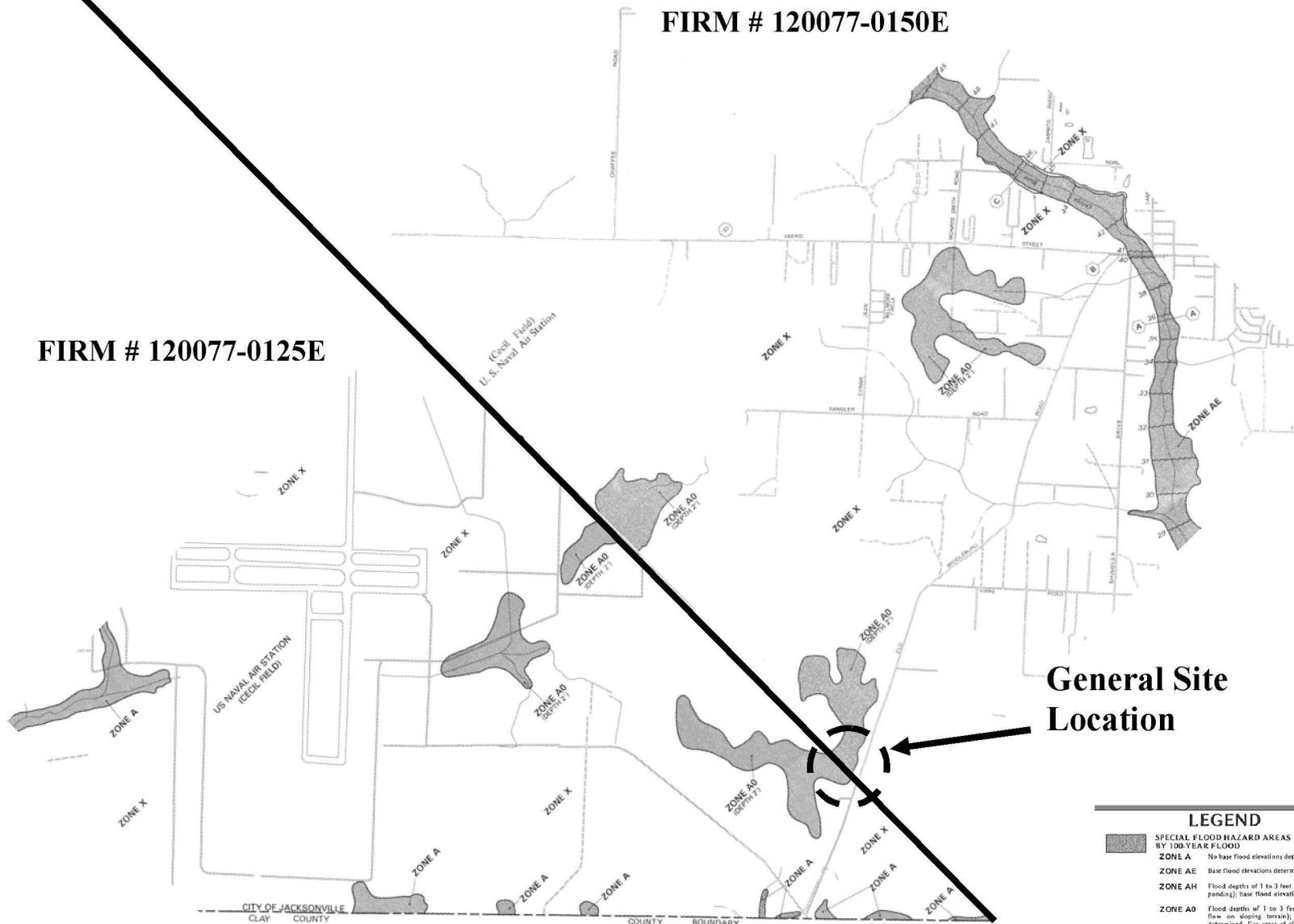
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	Hydric Y/N
14	Boulogne fine sand, 0 to 2 % slopes	72.0	14.6%	Y
22	Evergreen-Wesconnett complex, depressional, 0 to 2 % slopes	105.2	21.4%	Y
32	Leon fine sand, 0 to 2 % slopes	280.3	56.9%	Y
35	Lynn Haven fine sand, 0 to 2 % slopes	32.4	6.6%	Y
58	Pottsburg fine sand, high, 0 to 3 % slopes	2.6	0.5%	N
Totals for Area of Interest (AOI)		492.5	100.0%	



FEMA FIRM Maps from FEMA Online Mapping Server

FIRM # 120077-0150E

FIRM # 120077-0125E



General Site Location

**LEGEND**

-  SPECIAL FLOOD HAZARD AREAS INUNDED BY 100-YEAR FLOOD
- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE A0** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99** To be protected from 100-year flood by Federal flood protection systems under construction; no base elevations determined.
- ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.
-  FLOODWAY AREAS IN ZONE AE
- OTHER FLOOD AREAS**
-  **ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

FEMA FIRM Maps from FEMA Online Mapping Server