Technical Memorandum

RE: Addendum to the Natural Resources Evaluation for the SR 16 PD&E Study from International Golf Parkway to I-95 FPID: 210447-5 ETDM Number: 14535	ERS Job No.: 23136
To: Kelsey Lucas, PE, RS&H	
From: Ken Ceglady, ERS	Date: 4 April 2025

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated May 26, 2022, and executed by Federal Highway Administration and FDOT.

INTRODUCTION

The Florida Department of Transportation, District 2 (FDOT) is conducting a Project Development and Environment (PD&E) Study for improvements to a 5.9-mile section of SR 16 from International Golf Parkway (IGP) to I-95 in St. Johns County, Florida.

A Natural Resources Evaluation (NRE) was prepared for this project in 2024 to document the natural resources analysis performed to support decisions related to the evaluation of project alternatives and to summarize potential impacts to conservation easements, federal and state protected species, critical habitats, wetlands, and Essential Fish Habitat (EFH).

The 2024 NRE evaluated widening the existing two-lane rural roadway to a four-lane divided urban roadway, the addition of multi-modal transportation improvements including continuous bicycle and pedestrian facilities, and the widening of the existing Bridge #780064 over Turnbull Creek.

The project study area for the 2024 NRE included a total of seventeen (17) stormwater pond site alternatives – Pond Site Alternatives 1A, 1B, 1C, 1D, 2A, 2B, 2C, 3A, 3B, 3C, 4A, 4B, 4C, 5A, 5B, 6A, and 6B. The project study area also included one floodplain compensation area adjacent to Pond Site Alternative 2C and a drainage easement near Pond Site Alternative 4A. Within this project study area, a Preferred Alternative was identified based on the selected preliminary design. The Preferred Alternative was defined as the roadway alignment, Pond Site Alternatives 2C, 3C, and 4C, a ROW extension leading to Pond Site Alternative 2C, the floodplain compensation area south of Pond Site Alternative 2C, and a drainage easement near Pond Site Alternative 4A. See the final NRE dated October 2024 for the full depiction and discussion of the project study area and the original Preferred Alternative.

In early 2025, three modifications were made to the Preferred Alternative: 1) Pond Site Alternative 2C was shifted to the south; 2) the separate floodplain compensation area adjacent to Pond Site Alternative 2C was eliminated; and 3) a new pond site, Pond Site Alternative 5C, was added on the south side of SR 16. See **Exhibit 1** for a depiction of how the modifications relate to the original project study area and the original

Preferred Alternative. In addition, there has been a change in the listing status of one listed species discussed in the NRE. This NRE Addendum discusses the changes that these modifications make to the project's potential impacts to conservation easements, wetlands, federal and state protected species, critical habitats, and EFH.

EXISTING CONDITIONS

A site visit was conducted on January 31, 2025, to evaluate the modifications made to the Preferred Alternative, namely the revised Pond Site Alternative 2C and the new Pond Site Alternative 5C.

Conservation Easements

See the October 2024 NRE for a full depiction and discussion of all recorded conservation easements (CEs) near the original project study area.

Geographic Information System (GIS) spatial data regarding regulatory CEs was obtained from St. Johns River Water Management District (SJRWMD). Based on this information, the CEs that occur closest to or possibly within the new Pond Site Alternative 2C boundary and the new Pond Site Alternative 5C were estimated. These include OR BK/PG 3431/1232 St. Johns County; OR BK/PG 5210/1090 Day Late Enterprises, Inc.; OR BK/PG 4422/646 Lennar Homes. LLC; OR BK/PG 4181/625 Lennar Homes, LLC. See **Exhibit 2** for the approximate location of these CEs. Data sources available during the time of this report may not reflect all CEs that could exist throughout the project study area.

Further research must be conducted to verify the presence or absence of CEs. The boundaries of any CEs that are found to be within or near the project study area must be located by a licensed surveyor in order to fully determine if and where they fall within the project study area. If CEs are verified to encumber parts of the project study area, further research will be necessary to determine their status and what implications (if any) they will have on the project. If CEs are to be released as a part of the proposed action, additional mitigation costs will be required to recover the cost of removing a CE over encumbered wetlands.

Land Use/Cover

All habitats and land uses within the modified areas were inspected and classified utilizing FDOT's Florida Land Use, Cover and Forms Classification System (FLUCFCS, 1999). Wetlands and waters were classified using both FLUCFCS and the Wetlands and Deepwater Habitats Classification System (the "USFWS Classification System").

The modifications to the Preferred Alternative in the vicinity of Pond Site Alternatives 2C and 5C do not result in the inclusion of any additional habitat types to those discussed in the 2024 NRE. All habitats that occur in the project study area are described in detail in the 2024 NRE. The habitats located within the Preferred Alternative in the vicinity of the two above-mentioned modified pond site alternatives are discussed below and are depicted on **Exhibit 3**.

Uplands

Pine Flatwoods (FLUCFCS 411; net change of +6.57 acres±)
The uplands within the new Pond Site Alternative 5C consist of this habitat type.

Wetlands and Other Surface Waters

Hydric Pine Flatwoods (FLUCFCS 411H; net change of +2.76 acres±)
This habitat type occurred in the overall project study area but was not identified within the original Preferred Alternative. The eight wetland polygons within the new Pond Site Alternative 5C consist of this habitat type.

Wetland Forested Mixed (FLUCFCS 630, USFWS PFO1/2/3/4; net change of +0.06 acres±)
The modifications to Pond Site Alternative 2C result in an increase in the acreage of this wetland habitat type.

Soils

The modifications to the Preferred Alternative in the vicinity of Pond Site Alternatives 2C and 5C are listed in **Table 1** below and are depicted on **Exhibit 4**. Soil classifications are taken from the *Soil Survey of St. Johns County, Florida* (USDA-NRCS). Note that Riviera fine sand, frequently ponded (61) is included in the project study area for the first time. See the 2024 NRE for a full list of all soils that occur within the original project study area.

Table 1. Summary of Soils that Occur in the Areas Added to the Preferred Alternative

Soil Type	NRCS Map Unit	NRCS Description	Hydric Status
Ona-Ona, wet, fine sand, 0 to 2 percent slopes	12	Sandy marine deposits, poorly drained, 6-18" to water table	Hydric
Samsula muck, frequently ponded, 0 to 1 percent slopes	26	Herbaceous organic material/sandy marine deposits, very poorly drained, 0" to water table	Hydric
Tocoi fine sand	34	Sandy marine deposits, poorly drained, 6-18" to water table	Sometimes hydric
Holopaw fine sand	46	Sandy and loamy marine deposits, poorly drained, 6-18" to water table	Sometimes hydric
Holopaw fine sand, frequently flooded	47	Sandy and loamy marine deposits, very poorly drained, 0" to water table	Hydric
Winder fine sand, frequently flooded	48	Sandy and loamy marine deposits, poorly drained, 0-12" to water table	Hydric
EauGallie fine sand	58	Sandy and loamy marine deposits, poorly drained, 6-18" to water table	Sometimes hydric
Riviera fine sand, frequently ponded	61	Sandy and loamy marine deposits, very poorly drained, 2” standing water to 1" to water table	Hydric
Placid fine sand	63	Sandy marine deposits, very poorly drained, 0-6" to water table	Sometimes hydric

PROTECTED SPECIES AND HABITAT

The October 2024 NRE includes a full discussion of all of the listed species that may occur in the original project study area and in the original Preferred Alternative. See that report for the complete list and analysis. No new listed species were observed during the January 31, 2025, site visit conducted for the modified areas and no new listed species require discussion due to these modifications. This NRE Addendum focuses on any changes to the project's potential effect on listed species due to the modifications.

At the time the 2024 NRE was finalized, the monarch butterfly (*Danaus plexippus*) was designated as a candidate species for federal listing by U.S. Fish and Wildlife Service (USFWS) and was given a moderate probability of occurrence in the project study area and in the original Preferred Alternative. Since that time, the federal listing status of this species has been changed to proposed threatened. It remains unlisted by the state. The modifications to the Preferred Alternative do not alter this species' probability of occurrence and it remains moderately probable to occur. No adult or larval individuals of this species were observed during the field investigations. The proposed project will not permanently eliminate all potential milkweed or wildflower habitats, nor will it alter the maintenance schedule to prevent flowering and seed set. Therefore, the project is unlikely to affect the monarch butterfly. If the monarch butterfly becomes listed by USFWS as threatened or endangered and the project may affect the species, FDOT commits to re-initiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species. An update regarding the monarch butterfly is included in this NRE Addendum only due to its change in listing status.

Documented bald eagle (*Haliaeetus leucocephalus*) nest #SJ056 is located within the original boundary of Pond Site Alternative 2C as depicted and discussed in the 2024 NRE. The approximate nest location and its primary (330') and secondary (660') activity zones are depicted on **Exhibits 3A** and **3B**. This nest was observed to be active during the site visit on January 31, 2025. The boundaries of Pond Site Alternative 2C have been altered to avoid taking the eagle nest, and the footprint of the pond no longer encroaches into the primary (330') activity zone around the nest. This reduces the project's potential effects to this individual nesting pair of eagles and their young. Portions of the pond still encroach into the secondary (660') activity zone. If the nest is present when the project is to be constructed, FDOT commits to implementing Special Provision 0070104-2 to provide protections to nesting bald eagles.

There are no other changes to the project's potential effects on other listed species or critical habitats due to the modifications to the Preferred Alternative.

WETLANDS AND JURISDICTIONAL SURFACE WATERS

Wetlands and waters within the vicinity of Pond Site Alternatives 2C and 5C were evaluated during the site visit on January 31, 2025. The boundaries of jurisdictional wetlands and waters within these areas were estimated in accordance with Chapter 62-340, Florida Administrative Code (F.A.C.), and the U.S. Army Corps of Engineers' (USACE) Corps of Engineers Wetlands Delineation Manual (1987) and its regional supplements. The jurisdictional boundaries of wetlands were flagged in the field and located using a Trimble GPS device. The revised wetlands and potential wetland impacts in the vicinity of Pond Site Alternatives 2C

and 5C are depicted on **Exhibit 3**. Not all surface waters such as upland cut ditches have been identified in this report and they will require identification during the permitting phase.

All jurisdictional wetland and water boundaries identified in the 2024 NRE and in this NRE Addendum were based on conditions observed at the times of the site visits. Wetland lines may not match jurisdictional boundaries made in the past for other projects that occur within the currently identified project study area or reflect conditions that may develop in the future. As in the 2024 NRE, all wetland lines, acreages, quality scores, and anticipated required function gain amounts are estimated for this report and are subject to change pending agency verification, survey, and jurisdictional determinations made in coordination with the regulatory agencies during the permitting phase.

The modifications to the Preferred Alternative in the vicinity of Pond Site Alternatives 2C and 5C result in several changes to the estimated wetland impacts of the revised Preferred Alternative.

At Pond Site Alternative 2C, the impact to W63 has been reduced and impacts to the edge of the Turnbull Creek wetland system were increased and are now identified as W64A and W64B. Overall, the net change to the estimated wetland impacts in the vicinity of Pond Site Alternative 2C increased by 0.06 acre.

The new Pond Site Alternative 5C contains eight new wetland areas labeled W70 through W77. Together, these new wetland areas add 2.76 acres to the estimated wetland impacts of the Preferred Alternative.

The Uniform Mitigation Assessment Method (UMAM) wetland impact assessment conducted for the Preferred Alternative in the 2024 NRE was updated to include the revised wetland impact areas described above. All of the revised wetland impact areas occur in the Sixmile & Julington Creeks Basin. **Table 2** below summarizes the revised wetland impacts, UMAM scores, and estimated required functional gain for the portion of the project in the Sixmile & Julington Creeks Basin.

Table 2. UMAM Functional Gain Expected to be Required for Impacts in the Sixmile & Julington Creeks Drainage Basin

Type	Impacts (acres)	UMAM Score	Required Standard Freshwater Functional Gain
Streams and Waterways	0.46	0.70	0.33
Wetland-cut Ditches	0.79	0.70	0.56
Hydric Coniferous Plantations	2.76	0.50	1.38
Streams and Lake Swamps	2.19	0.77	1.68
Wetland Forested Mixed	14.87	0.57	8.43
Freshwater Marshes	3.16	0.57	1.80
Wet Prairies	0.49	0.57	0.28
Totals	**24.72**	**-**	**14.46**
NOTE: All figures in this table are taken from the attached UMAM Summary Sheet.			

The modifications to the Preferred Alternative do not affect the small portion of the project that is located in the Pellicer Creek & Matanzas River Basin. Therefore, the expected required functional gain in that basin remains 0.20 standard freshwater units. UMAM summary sheets for both basins are attached.

It is estimated that the wetlands and waterways in the revised Preferred Alternative will require a total of approximately 14.66 units of standard freshwater wetland functional gain (the revised 14.46 in the Sixmile & Julington Creeks Basin and the unchanged 0.20 in the Pellicer Creek & Matanzas River Basin) to offset the impacts in both drainage basins. This is an increase of 1.41 units more than the amount estimated in the 2024 NRE.

A Wetlands Finding was made in accordance with Executive Order 11990 in the 2024 NRE. It remains valid after the modifications to the Preferred Alternative. It is as follows:

1. The proposed project will have no significant short-term or long-term adverse impacts to wetlands;
2. There is no practicable alternative to construction in wetlands; and
3. Measures have been taken to minimize harm to wetlands.

ESSENTIAL FISH HABITAT

The original project study area and the original Preferred Alternative contained no EFH and no Habitat Areas of Particular Concern (HAPCs). The modifications made to the Preferred Alternative in the vicinity of Pond Site Alternative 2C and Pond Site Alternative 5C do not result in the inclusion of either of these resources. Therefore, EFH and HAPCs remain unaffected by the project.

ANTICIPATED PERMITS

Listed Species

Since Pond Site Alternative 2C has been modified to avoid directly taking the adjacent bald eagle nest; it is no longer anticipated that the project may require an Incidental Take Permit from USFWS.

Wetlands

The type of state permit required for the revised Preferred Alternative remains unchanged from that detailed in the 2024 NRE. The project is expected to require either an Individual Environmental Resource Permit (ERP) from SJRWMD for the wetland impacts and stormwater system or be considered a modification to one or more existing ERPs. State wetland mitigation is expected to be required for all impacts to wetlands and jurisdictional waters.

The types of federal wetland impact permits for which the revised Preferred Alternative may qualify for remains unchanged from those detailed in the 2024 NRE. Federal wetland permitting is the responsibility of USACE. The project may qualify for Regional General Permit (RGP) SAJ-92 from USACE. The potential use of RGP SAJ-92 is dependent on FDOT approval of the PD&E document and that its status remains current.

In addition, qualification for the use of the RGP would depend on multiple factors, such as total project dredge and fill impacts, maximum impact acreage per mile, whether the project is determined to include "new alignment", and whether USACE agrees to allow it to be processed under that permit. Importantly, the use of RGP SAJ-92 is limited to projects that have less than five acres of impact for any one-mile segment. The total impacts per mile of this project can only be determined when final federal jurisdiction is established and when final pond site selection is made. If the project does not qualify for the RGP, then an Individual Permit from USACE will be required by Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Regardless of the type of permit issued by USACE, all wetland impacts are expected to require federal wetland mitigation.

A discussion of potential mitigation banks and the credits available was included in the 2024 NRE and this information remains valid.

EFH

The conclusion reached in the 2024 NRE that no permit to impact EFH is required remains valid.

CONCLUSION

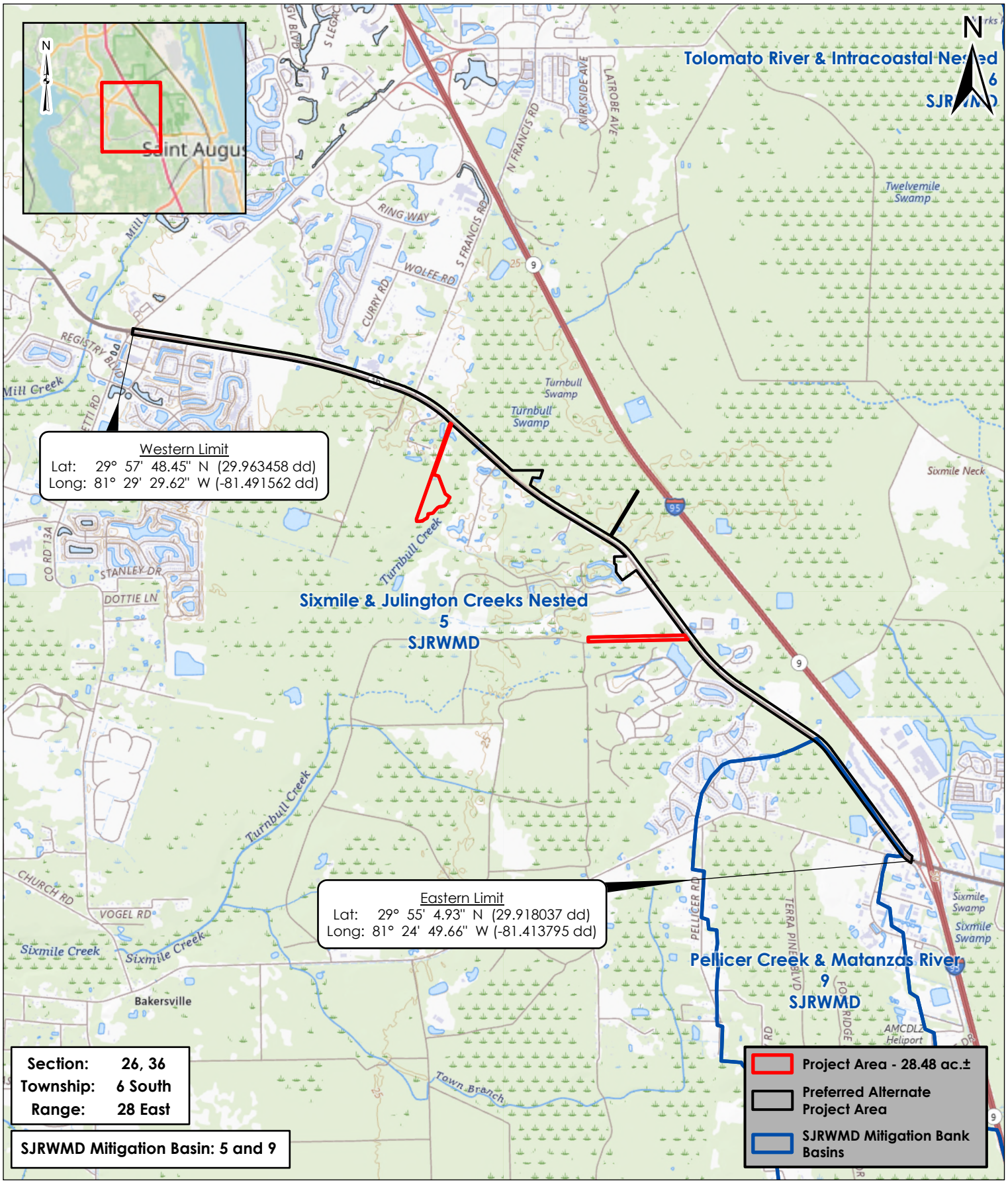
See the 2024 NRE for a full depiction of the project study area, the original Preferred Alternative, and the potential effects to natural resources.

Modifications made to the Preferred Alternative in 2025 include changing the boundary of Pond Site Alternative 2C, the elimination of the adjacent floodplain compensation area, and the addition of the new Pond Site Alternative 5C. A site visit was conducted on January 31, 2025, for the NRE Addendum.

The CEs that occur closest to or possibly within the new Pond Site Alternative 2C boundary and the new Pond Site Alternative 5C include OR BK/PG 3431/1232 St. Johns County; OR BK/PG 5210/1090 Day Late Enterprises, Inc.; OR BK/PG 4422/646 Lennar Homes. LLC; OR BK/PG 4181/625 Lennar Homes, LLC.

The revised Preferred Alternative does not affect additional listed species or critical habitats. Since the 2024 NRE was completed, the federal listing status of the monarch butterfly has been changed from candidate to proposed threatened. The probability of occurrence and the project's potential effect on this species remain unchanged. Since Pond Site Alternative 2C has been redesigned to avoid directly taking the nearby active bald eagle nest, an Incidental Take Permit from USFWS to take this nest is no longer anticipated. Since portions of the Preferred Alternative still occur within the 660' secondary activity zone around the nest, work restrictions may still apply. If the nest is present when the project is to be constructed, FDOT commits to implementing Special Provision 0070104-2 to provide protections to nesting bald eagles.

The types of wetland impact permits that the project will require and/or may qualify for remain unchanged. It is estimated that the wetlands and waterways in the revised Preferred Alternative will require a total of approximately 14.66 units of standard freshwater wetland functional gain to offset the impacts in both drainage basins. This is an increase of 1.41 units more than the amount estimated in the 2024 NRE.



0 2,000 4,000
Feet

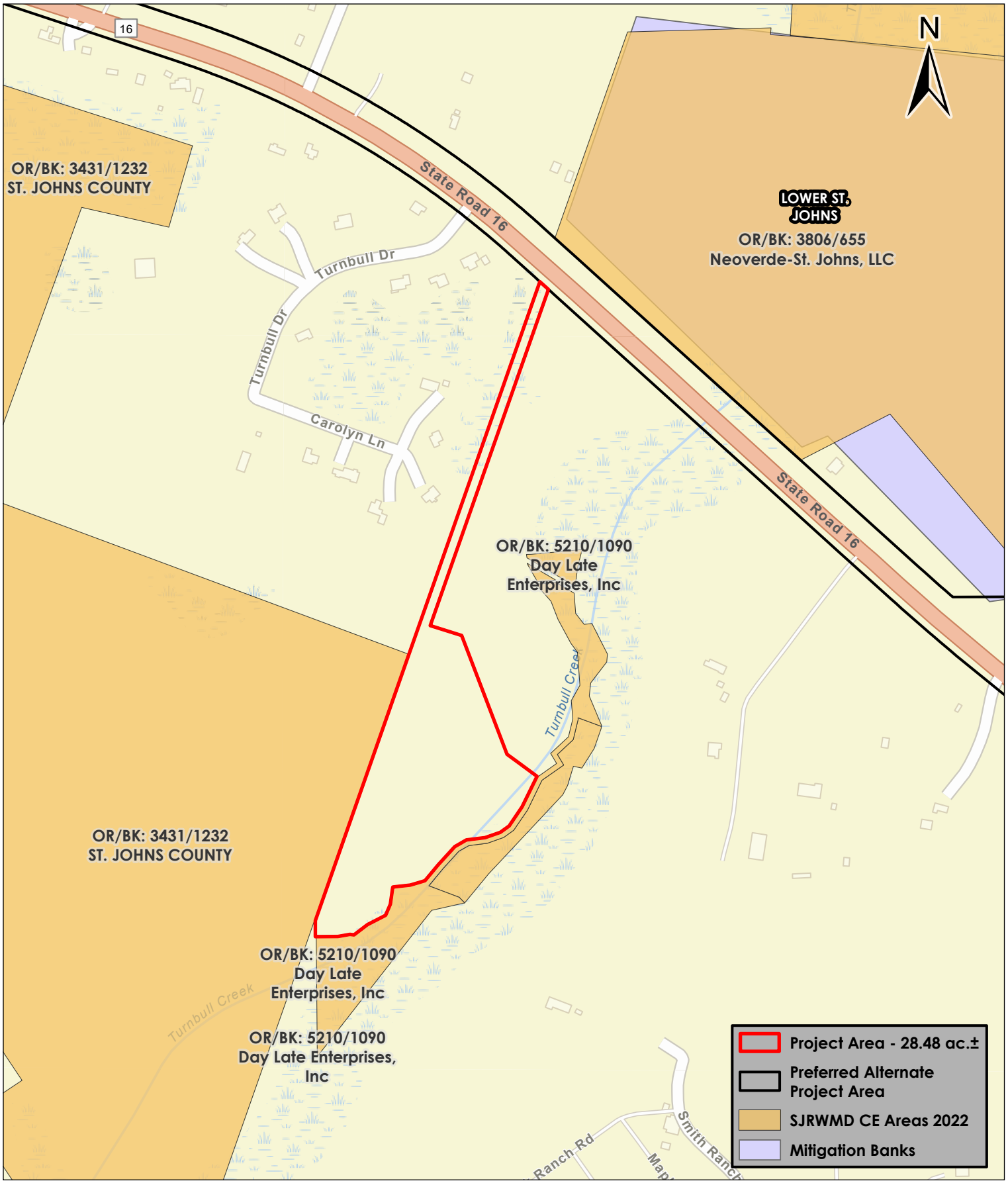
DATA SOURCE(S):
ESRI WMS - World Topography Basemap; Bakersville, FL Quadrangle

USGS Topographic Map

SR 16: I-95 to IGP: NRE Addendum
FIP 210447-5
St. Johns County, Florida

SES Project No:	2P001.1095.0001.18
ERS Project No:	23136
Date:	Feb 2025
Drawn By:	DF
Reviewed By:	MS
Approved By:	KAC
EXHIBIT NUMBER	1

<LINK>J:\ERS</LINK> - Company\Projects\2023\23136 SR 16 I-95 to IGP PD&E\05-Graphics\SR16_I95_IGP.aprx



0 300 600
Feet

DATA SOURCE(S):
ESRI WMS - World Aerial Imagery; USDA-NRCS Web Soil Survey

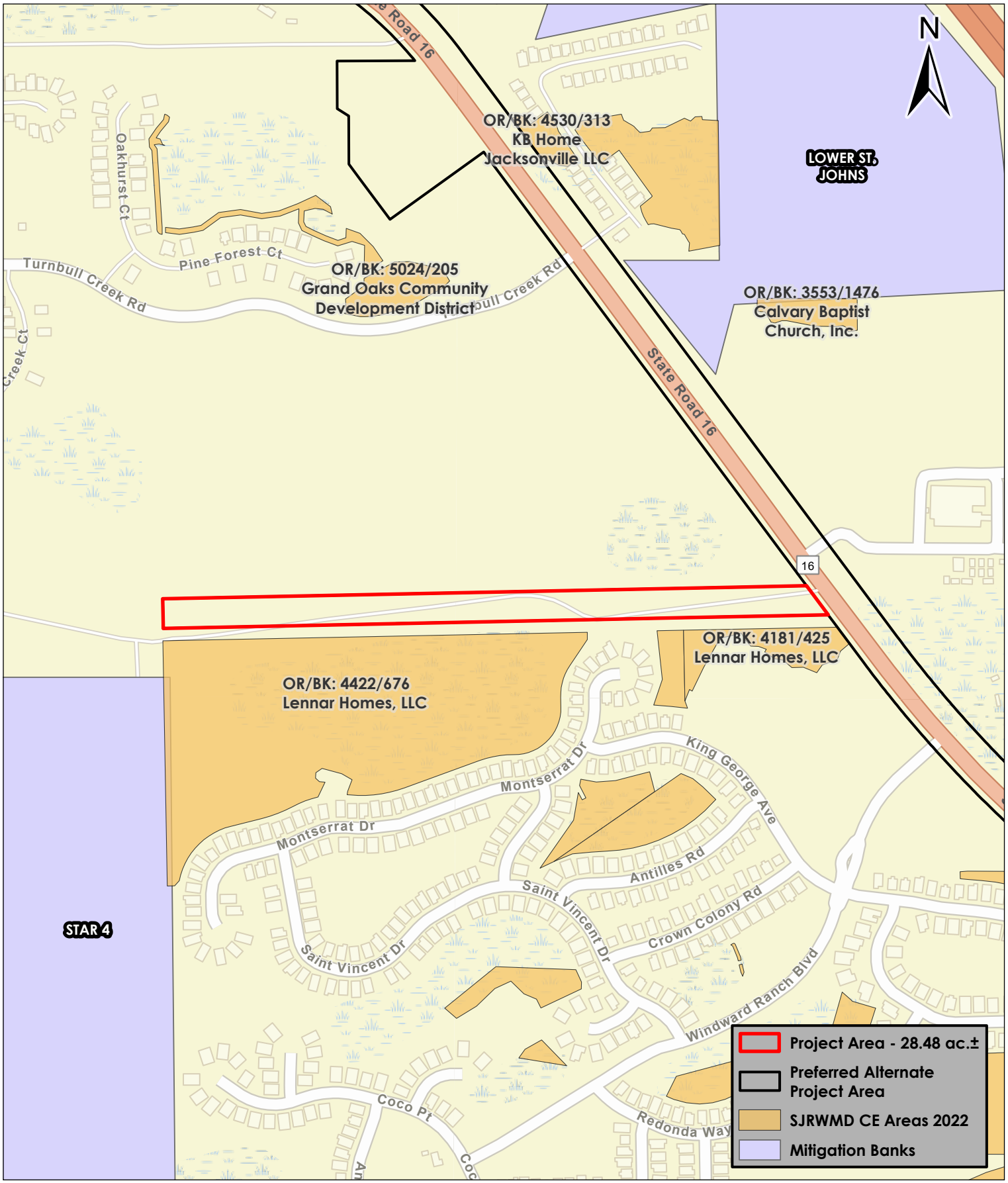
Adjacent Conservation Easements

SR 16: I-95 to IGP: NRE Addendum
FIP 210447-5

St. Johns County, Florida

SES Project No:	2P001.1095.0001.18
ERS Project No:	23136
Date:	Feb 2025
Drawn By:	DF
Reviewed By:	MS
Approved By:	KAC
EXHIBIT NUMBER	2A

<LINK>J:\ERS</LINK> - Company\Projects\2023\23136 SR 16 I-95 to IGP PD&E\05-Graphics\SR16_I95_IGP.aprx



0 300 600
Feet

DATA SOURCE(S):
ESRI WMS - World Aerial Imagery; USDA-NRCS Web Soil Survey

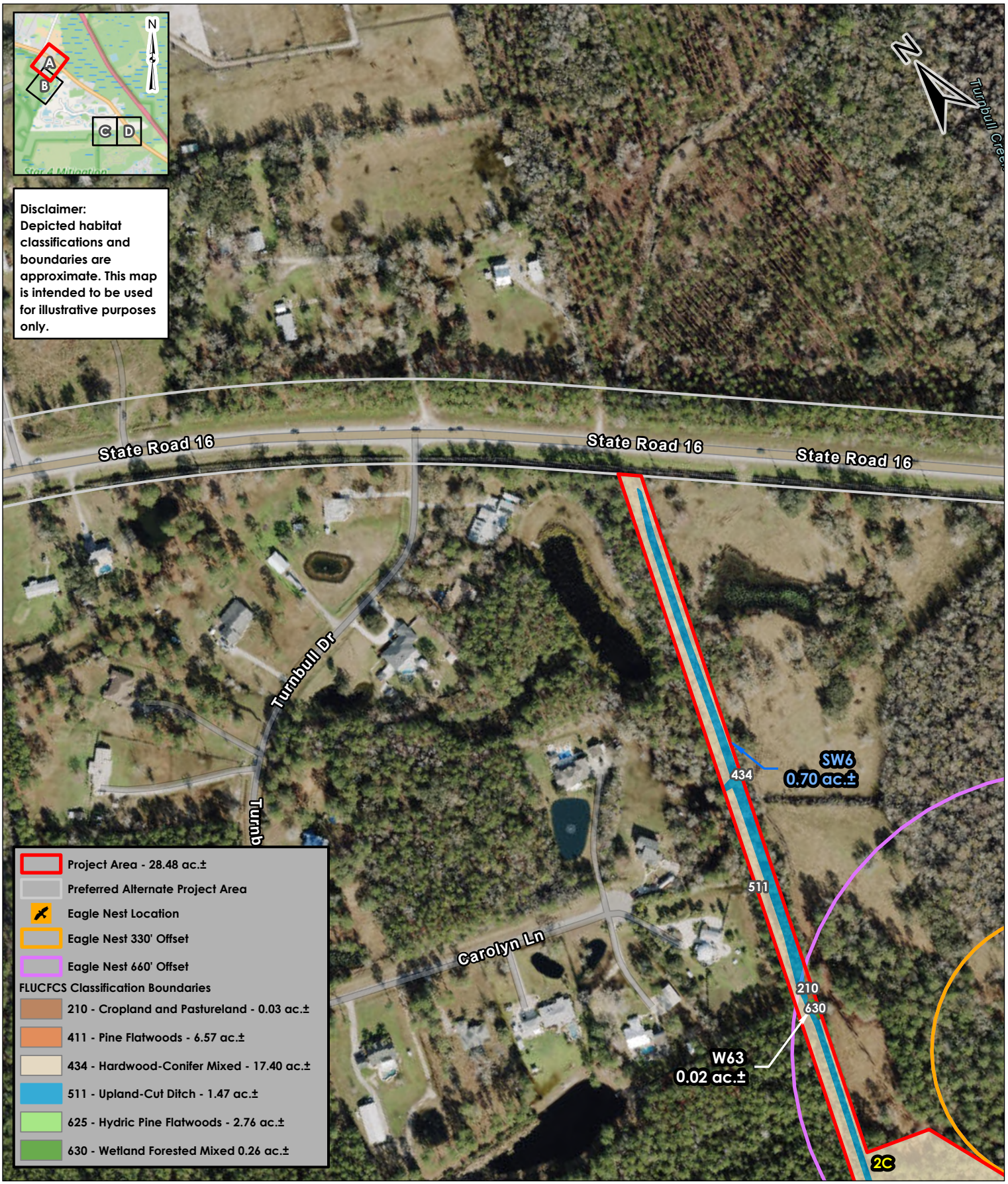
Adjacent Conservation Easements

SR 16: I-95 to IGP: NRE Addendum
FIP 210447-5

St. Johns County, Florida

SES Project No:	2P001.1095.0001.18
ERS Project No:	23136
Date:	Feb 2025
Drawn By:	DF
Reviewed By:	MS
Approved By:	KAC
EXHIBIT NUMBER	2B

<LINK>J:\ERS</LINK> - Company\Projects\2023\23136 SR 16 I-95 to IGP PD&E\05-Graphics\SR16_I95_IGP.aprx



0 150 300
Feet

DATA SOURCE(S):
ESRI WMS - World Aerial Imagery; Florida Land Use, Cover, and Forms Classification System (FDOT, 1999)

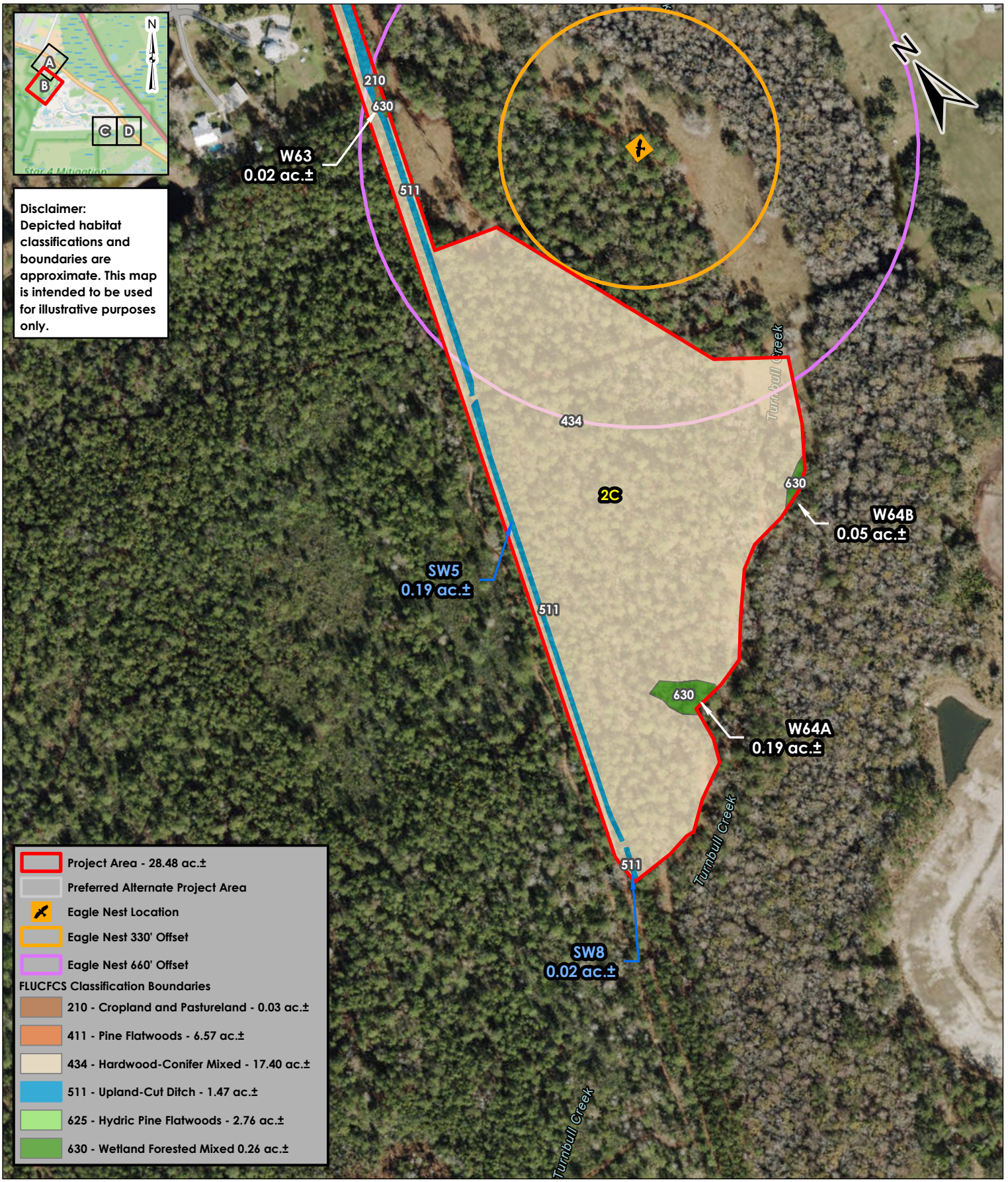
Habitats/Wetland Impacts

SR 16: I-95 to IGP: NRE Addendum
FIP 210447-5

St. Johns County, Florida

SES Project No:	2P001.1095.0001.18		
ERS Project No:	23136	Date:	Feb 2025
Drawn By:	DF	EXHIBIT NUMBER	3A
Reviewed By:	MS		
Approved By:	KAC		

<LINK>J:\ERS</LINK> - Company\Projects\2023\23136 SR 16 I-95 to IGP PD&E\05-Graphics\SR16_I95_IGP.aprx



0 150 300
Feet

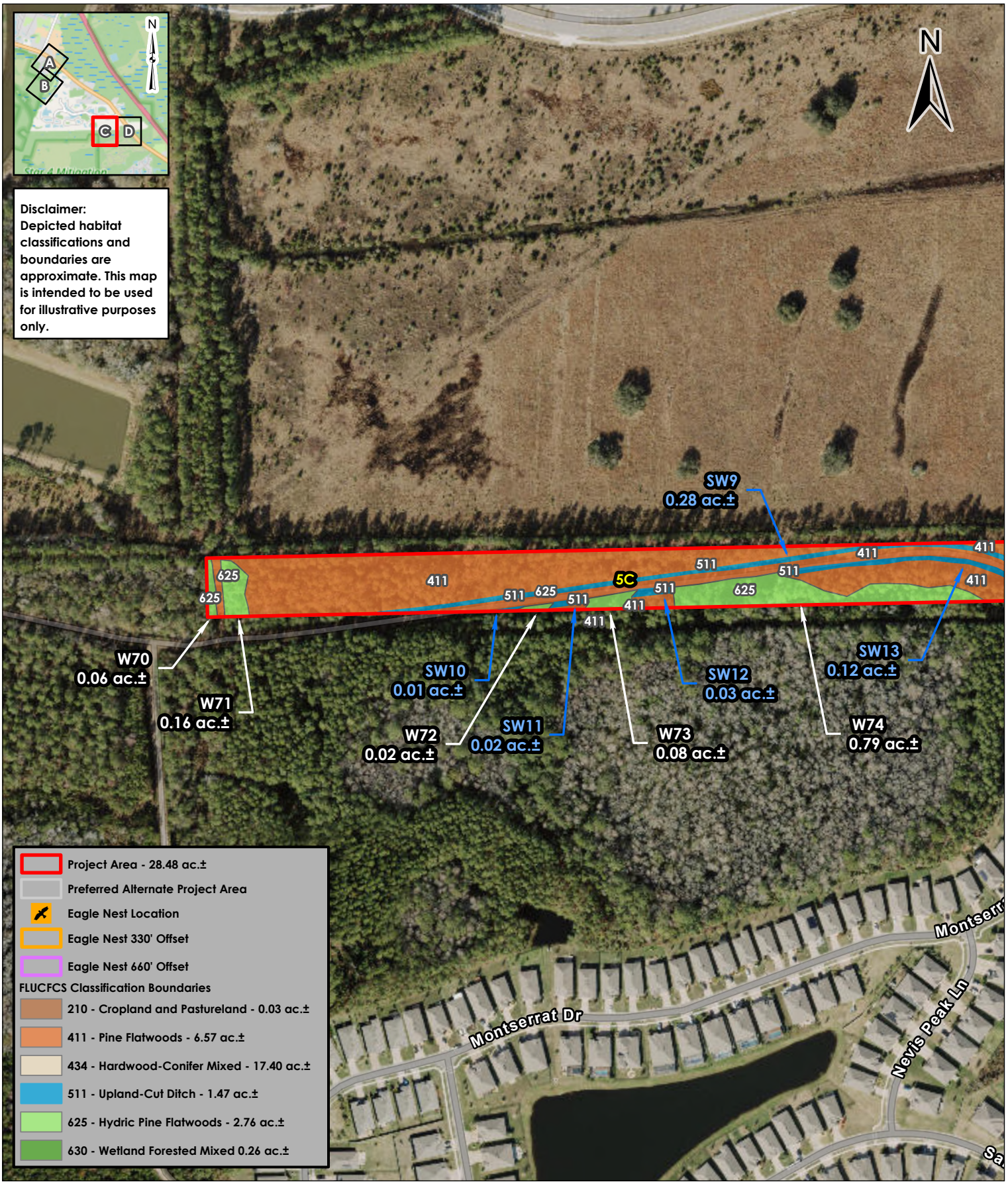
DATA SOURCE(S):
ESRI WMS - World Aerial Imagery; Florida Land Use, Cover, and Forms Classification System (FDOT, 1999)

Habitats/Wetland Impacts

SR 16: I-95 to IGP: NRE Addendum
FIP 210447-5
St. Johns County, Florida

SES Project No:	2P001.1095.0001.18
ERS Project No:	23136
Date:	Feb 2025
Drawn By:	DF
Reviewed By:	MS
Approved By:	KAC
EXHIBIT NUMBER	3B

<LINK>J:\ERS</LINK> - Company\Projects\2023\23136 SR 16 I-95 to IGP PD&E\05-Graphics\SR16_I95_IGP.aprx



0 150 300
Feet

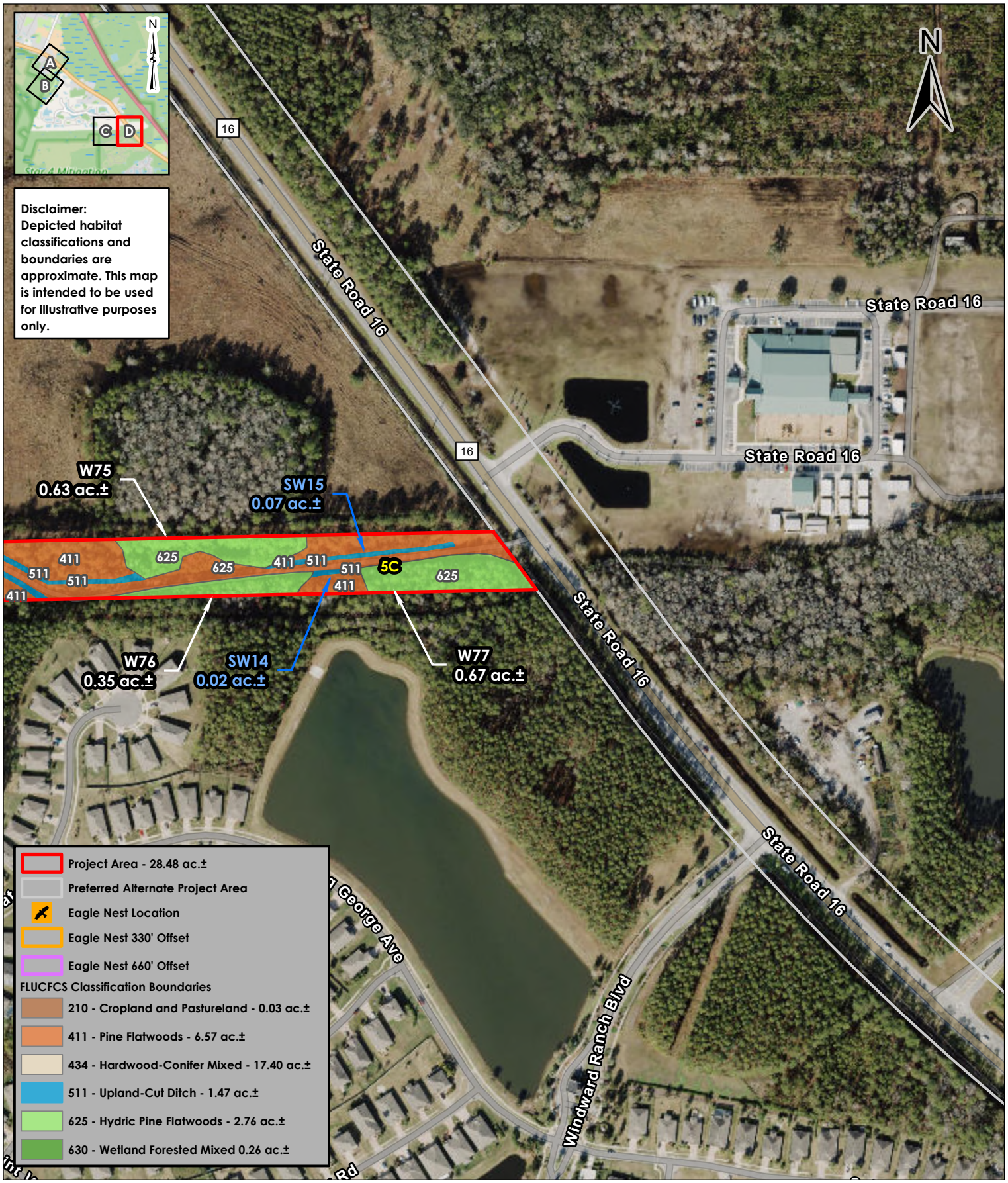
DATA SOURCE(S):
ESRI WMS - World Aerial Imagery; Florida Land Use, Cover, and Forms Classification System (FDOT, 1999)

Habitats/Wetland Impacts

SR 16: I-95 to IGP: NRE Addendum
FIP 210447-5
St. Johns County, Florida

SES Project No:	2P001.1095.0001.18
ERS Project No:	23136
Date:	Feb 2025
Drawn By:	DF
Reviewed By:	MS
Approved By:	KAC
EXHIBIT NUMBER	3C

<LINK>J:\ERS</LINK> - Company\Projects\2023\23136 SR 16 I-95 to IGP PD&E\05-Graphics\SR16_I95_IGP.aprx



0 150 300
Feet

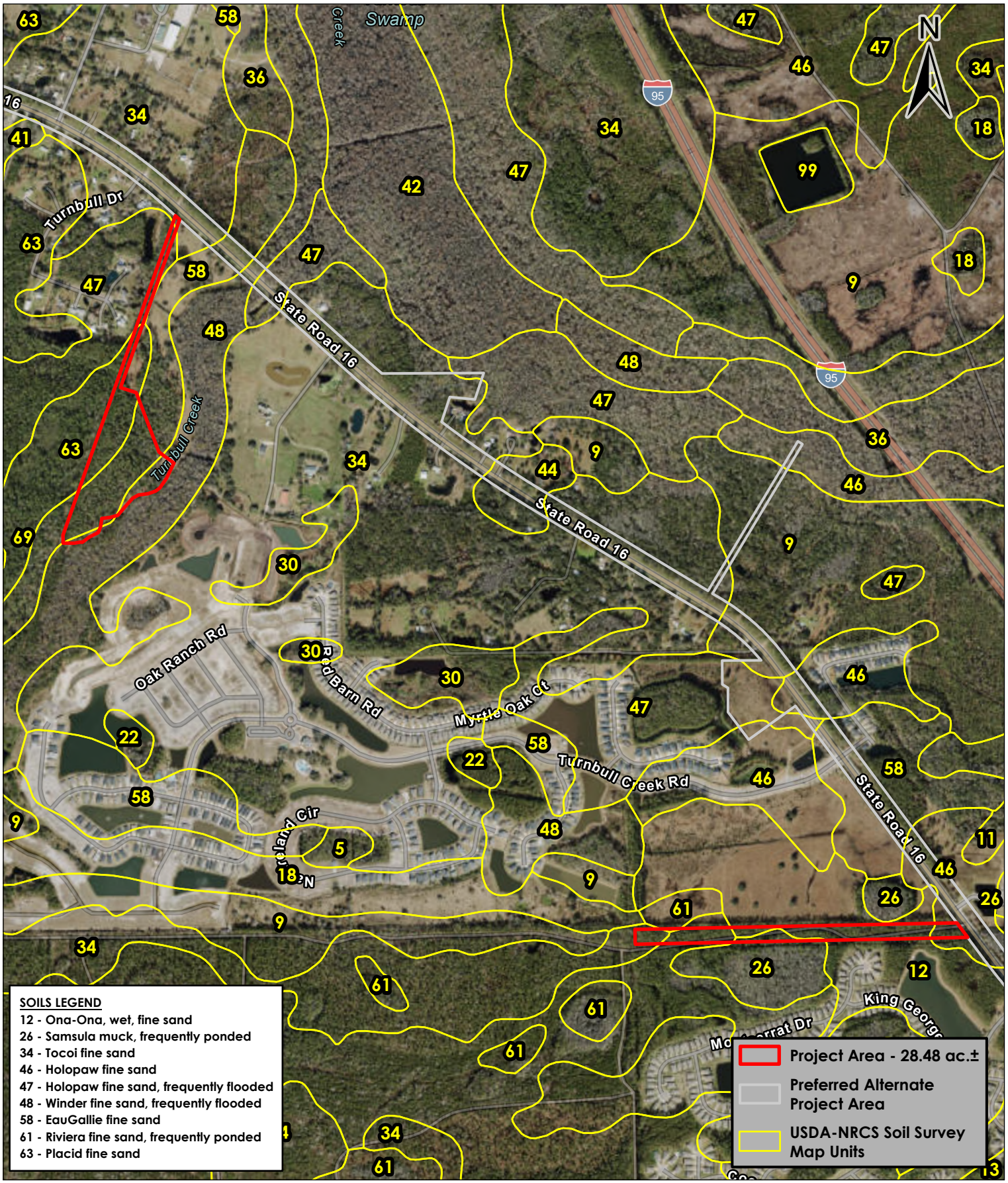
DATA SOURCE(S):
ESRI WMS - World Aerial Imagery; Florida Land Use, Cover, and Forms Classification System (FDOT, 1999)

Habitats/Wetland Impacts

SR 16: I-95 to IGP: NRE Addendum
FIP 210447-5
St. Johns County, Florida

SES Project No:	2P001.1095.0001.18
ERS Project No:	23136
Date:	Feb 2025
Drawn By:	DF
Reviewed By:	MS
Approved By:	KAC
EXHIBIT NUMBER	3D

<LINK>J:\ERS</LINK> - Company\Projects\2023\23136 SR 16 I-95 to IGP PD&E\05-Graphics\SR16_I95_IGP.aprx



0 550 1,100
Feet

DATA SOURCE(S):
ESRI WMS - World Aerial Imagery; USDA-NRCS Web Soil Survey

Soils

SR 16: I-95 to IGP: NRE Addendum
FIP 210447-5
St. Johns County, Florida

SES Project No:	2P001.1095.0001.18
ERS Project No:	23136
Date:	Feb 2025
Drawn By:	DF
Reviewed By:	MS
Approved By:	KAC
EXHIBIT NUMBER	4

<LINK>J:\ERS</LINK> - Company\Projects\2023\23136 SR 16 I-95 to IGP PD&E\05-Graphics\SR16_I95_IGP.aprx

Sixmile & Julington Basin

Site: **SR 16 Improvements Preferred Alternative** **Date: 2-24-25**

Impacts	Habitat Type	Location and Landscape Support before	Location and Landscape Support after	Water Environment before	Water Environment after	Community Structure before	Community Structure after	Acres	Functional Loss	Rounded Functional Loss
W	441H	5	0	5	0	5	0	2.76	1.3800	1.38
SW	510	7	0	7	0	7	0	0.46	0.3220	0.33
SW	524	5	0	7	0	7	0	0	0.0000	0.00
W	615	7	0	8	0	8	0	2.19	1.6790	1.68
W	630	5	0	6	0	6	0	14.87	8.4263	8.43
W	641	5	0	6	0	6	0	3.16	1.7907	1.80
W	643	5	0	6	0	6	0	0.49	0.2777	0.28
SW	512	7	0	7	0	7	0	0.79	0.5530	0.56
		0	0	0	0	0	0	0	0.0000	0.00
		0	0	0	0	0	0	0	0.0000	0.00
									0.0000	
									0.0000	
									0.0000	

Total Impact Acres **24.72**

Each line is rounded up to the next hundreth.

Total Functional Loss	Total Rounded Functional Loss	Total Functional Gain Units
14.429	**14.46**	**0.000**

Mitigation Preservation	Habitat Type	Location and Landscape Support before	Location and Landscape Support after	Water Environment before	Water Environment after	Community Structure before	Community Structure after	Time Lag	Risk Factor	Preservation Adjustment Factor	Relative Functional Gain	Acres Provided	Functional Gain Units
1								1	1.00		0.0000		0.0000
2								1	1.00		0.0000		0.0000
3								1	1.00		0.0000		0.0000
4								1	1.00		0.0000		0.0000
5								1	1.00		0.0000		0.0000
6								1	1.00		0.0000		0.0000
7								1	1.00		0.0000		0.0000
creation													
1								1	1.00		0.0000		0.0000
2								1	1.00		0.0000		0.0000
uplands													
11				x	x x			1	1.00		0.0000		0.0000
12				x	x x			1	1.00		0.0000		0.0000
13				x	x x			1	1.00		0.0000		0.0000
14				x	x x			1	1.00		0.0000		0.0000
15				x	x x			1	1.00		0.0000		0.0000

Pellicer & Matanzas Basin

Site: **SR 16 Improvements Preferred Alternative** **Date: 7-23-24**

Impacts	Habitat Type	Location and Landscape Support before	Location and Landscape Support after	Water Environment before	Water Environment after	Community Structure before	Community Structure after	Acres	Functional Loss	Rounded Functional Loss
W	441H	5	0	5	0	5	0	0	0.0000	0.00
SW	510	7	0	7	0	7	0	0	0.0000	0.00
SW	524	5	0	7	0	7	0	0	0.0000	0.00
W	615	7	0	8	0	8	0	0.25	0.1917	0.20
W	630	5	0	6	0	6	0	0	0.0000	0.00
W	641	5	0	6	0	6	0	0	0.0000	0.00
W	643	5	0	6	0	6	0	0	0.0000	0.00
		0	0	0	0	0	0	0	0.0000	0.00
		0	0	0	0	0	0	0	0.0000	0.00
		0	0	0	0	0	0	0	0.0000	0.00
									0.0000	
									0.0000	
									0.0000	

Total Impact Acres **0.25**

Each line is rounded up to the next hundreth.

Total Functional Loss **0.192**

Total Rounded Functional Loss **0.20**

Total Functional Gain Units **0.000**

Mitigation / Preservation	Habitat Type	Location and Landscape Support before	Location and Landscape Support after	Water Environment before	Water Environment after	Community Structure before	Community Structure after	Time Lag	Risk Factor	Preservation Adjustment Factor	Relative Functional Gain	Acres Provided	Functional Gain Units
1								1	1.00		0.0000		0.0000
2								1	1.00		0.0000		0.0000
3								1	1.00		0.0000		0.0000
4								1	1.00		0.0000		0.0000
5								1	1.00		0.0000		0.0000
6								1	1.00		0.0000		0.0000
7								1	1.00		0.0000		0.0000
creation													
1								1	1.00		0.0000		0.0000
2								1	1.00		0.0000		0.0000
uplands													
11				x	x x			1	1.00		0.0000		0.0000
12				x	x x			1	1.00		0.0000		0.0000
13				x	x x			1	1.00		0.0000		0.0000
14				x	x x			1	1.00		0.0000		0.0000
15				x	x x			1	1.00		0.0000		0.0000