### **MEMORANDUM**

Florida Department of Transportation District 2 Environmental Management Office

**Date:** September 1, 2020

**To:** Michael Brock, PD&E Project Manager

From: Jared Sweat, Environmental Specialist III

**Copies to:** File, Aja Stoppe, Will Mahler, Maryann Hooper

Subject: Interstate 95 from Interstate 295 to J. Turner Butler Boulevard/State Road 202

**Preferred Pond Locations Contamination Screening Evaluation Tech Memo** 

Jacksonville, Duval County, Florida

FM No. 435577-1-21-01

NOTE: The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

A desktop contamination screening and site reconnaissance of the nine preferred pond locations within the Interstate 95 (I-95) corridor from Interstate 295 (I-295) to J. Turner Butler Boulevard (JTB)/State Road (SR) 202 was conducted to identify and evaluate the potential for contamination to adversely impact right-of-way acquisition and/or construction.

This technical memorandum utilized the research and sites of concern identified in the *Level 1 Contamination Screening Evaluation Report: I-95 from I-295 to SR 202* dated December 17, 2019 as a basis for evaluation of the preferred pond locations.

The screening was conducted using the Department's GIS databases of known hazardous material storage and/or contamination sites, a review of aerial photography, and a site reconnaissance visit. Identified sites were investigated using the Florida Department of Environmental Protection (FDEP)'s database management system (OCULUS), the Department's project files, and followed up with a physical reconnaissance of the proposed locations. All activities were performed in accordance with Part 2, Chapter 20 of the Florida Department of Transportation (FDOT)'s Project Development & Environment (PD&E) Manual dated July 1, 2020. As a result of this review the following information and recommendations are provided:

#### **Preferred Pond Locations**

The nine preferred pond locations have been selected among four drainage basins along the corridor. Two alternatives are being considered for Basin 'D' in this evaluation. The locations of all evaluated pond locations are shown on **Figure 1** and listed in the table below.

Basin	Pond Site ID
В	B-1
С	C-1
	C-2
	C-3
	C-4
	C-5
D	D-3
	D-4
Е	E-1

### **Department Documents Reviewed**

A contamination screening evaluation of the preferred pond locations was not covered in the *Level 1 Contamination Screening Evaluation Report: I-95 from I-295 to SR 202* produced by APTIM, dated December 17, 2019 nor the updated overview technical memorandum *Contamination Screening Evaluation Technical Memorandum and Level 1 CSER Overview/Recommendations FM: 446153-1 & 435577-1* dated April 30, 2020 produced by FDOT.

Portions of this corridor have been previously documented in the following documents: *Level 1 Contamination Screening Evaluation Report of I-95/SR 202/US-1 Corridor: FM 416501-4* produced by Aerostar Environmental Services, dated December 8, 2008 (EDMS Document No. 6366577), *Level 2 Assessment I-95/JTB (SR 202)/Philips Highway (US 1) Study FM: 416501-4* produced by Aerostar Environmental Services, dated September 10, 2012 (EDMS Document No. 6366637), and *Level 1 Contamination Screening Evaluation Report I-95 from SR 202 to Atlantic Blvd: FM 432259-2* produced by Aerostar SES LLC, dated June 12, 2018 (EDMS Document No. 7983211). These documents were reviewed in support of this evaluation.

#### Site Reconnaissance and Database Review

A physical reconnaissance of the pond locations was conducted for this review on May 22, 2019, June 5, 2019, and February 2, 2020. Property conditions and operations were evaluated at the proposed pond locations and adjacent properties for indications of activities that may contribute for the potential to soil and/or groundwater contamination. Historical aerial photographs provided by the University of Florida Map and Imagery Library (1943 and 1960) and the FDOT Survey and Mapping Office APLUS database (1959, 1969, 1972, 1975, 1982, 1988, 1993, 1997, 2000, 2008, and 2017) were also reviewed.

Each pond location and previously unidentified potential sites of concern have been classified with a rating of "No," "Low," "Medium," or "High" for potential contamination impacts to the project. The rating system is described in the FDOT Project Development and Environmental (PD&E) Manual, Part 2, Chapter 20. Contamination, dated July 1, 2020. These ratings are described as follows:

- No: A review of available information on the property and a review of the conceptual or design plans indicate there is no potential contamination impact to the project. It is possible that contaminants had been handled on the property. However, findings from the Level I evaluation indicate that contamination impacts are not expected.
- Low: A review of available information indicates that former or current activities on the property have an ongoing contamination issue, has a hazardous waste generator identification (ID) number, or the site store, handles, or manufacturers hazardous materials. However, based on the review of conceptual or design plans and/or findings from the Level I evaluation, it is not likely that there would be any contamination impacts to the project.
- **Medium:** After a review of conceptual or design plans and findings from a Level I evaluation, a potential contamination impact to the project has been identified. If there is insufficient information (such as regulatory records or site historical documents) to make a determination as to the potential for contamination impact, and there is reasonable suspicion that contamination may exist, the property should be rated at least as a "Medium". Properties used historically as gasoline stations and which have not been evaluated or assessed by regulatory agencies, sites with abandoned in place underground petroleum storage tanks or currently operating gasoline stations should receive this rating.
- **High:** After a review of all available information and conceptual or design plans, there is appropriate analytical data that shows contamination will substantially impact construction activities, have implications to ROW acquisition or have other potential transfer of contamination related liability to the FDOT.

#### **Results of Evaluation**

Nine pond locations were identified and evaluated for the presence of known or potential contamination concerns which may have a negative impact on the construction and future maintenance of the potential pond locations. Six pond locations (<u>Pond B-1</u>, <u>Pond C-1</u>, <u>Pond C-2</u>, <u>Pond C-3</u>, <u>Pond C-4</u>, and <u>Pond C-5</u>) were ranked as having a NO risk for potential to impact the project, one location (<u>Pond D-3</u>) was ranked LOW, two locations (<u>Pond D-4</u> and <u>Pond E-1</u>) were ranked MEDIUM, and none were ranked a HIGH risk. Summaries of each pond location investigated is attached in **Appendix A**.

Groundwater flow in the proposed ponds locations are unknown and the depth to the surficial aquifer ranges between 5.6 feet to 6.6 feet below land surface based on FDEP data from adjacent properties reviewed during the FM 435577-1 Level 1 CSER dated December 2019. The contaminants of concern for the identified MEDIUM risk pond locations are the elevated potentials for the presence of petroleum hydrocarbons, chlorinated solvents, solid waste, and/or leaded gasoline impacted soils and/or groundwater

within or adjacent to the locations.

A new site of concern was identified in proximity to proposed <u>Pond D-3</u> and identified as **Site 4K: JEA Lake Lugano Lift Station**. This site currently has an emergency generator with a 1,148-gallon diesel above-ground storage tank (AST) that was installed in March 2014 with no assessment data available. This site of concern was rated with a 'LOW' risk for <u>Pond D-3</u> as the AST was located approximately 620 feet from the closest edge of the pond location. A brief site summary for **Site 4K** is described in summary for Pond D-3.

Previously identified sites of concern include former/active petroleum storage site, former automotive repair, former/current equipment repair, and solid waste (household trash and tires) debris. Due to the unknown presence of these impacts with no/little documentation or analytical data available, additional testing of the soil and/or groundwater will be conducted prior to Right-of-Way acquisition phase of this project.

#### Recommendations

Soil and/or groundwater assessment may be recommended within the proposed stormwater ponds once design details are available based on the evaluation of risk associated with **Site 4G** and **Site 4H** for Pond D-4; and observations during the field review for Pond E-1. The elevated potential for impacts from **Site 4G** is based on the distance of the oil/part washer and any potential dewatering activities. The elevated potential for impacts from **Site 4H** is based on the conflicting assessment information for soil contamination with no recent assessments conducted on the property. Pond E-1 has an elevated potential for impacts based on the observance of numerous solid waste piles during multiple field visits. Of the preferred pond locations, Pond D-4 and Pond E-1 are rated with a 'MEDIUM' risk. Further assessment of these locations will be scheduled by the District 2 Environmental Management Office prior to acquisition by Right-of-Way.

Once drainage, utility, or other subsurface work are added to the design, site rankings should be reevaluated. Subsurface work adjacent to MEDIUM or HIGH risk sites may require further assessment of soil and/or groundwater prior to construction to determine the presence of impacts to construction.

If you have any questions please send me an e-mail (<u>jared.sweat@dot.state.fl.us</u>) or contact me directly at 386-961-7462.

**Attachments (6):** Appendix A: Risk Evaluation Summary; Figure 1: Preferred Ponds and Associated Sites of Concern; Figure 2: Pond B-1 and Associated Sites of Concern; Figure 3: Ponds C-1, C-2, C-3, C-4, C-5 and Associated Sites of Concern; Figure 4: Ponds D-3, D-4 and Associated Sites of Concern; and Figure 5: Pond E-1 and Associated Sites of Concern

# APPENDIX A: RISK EVALUATION SUMMARY I-95 from I-295 to JTB Preferred Ponds Technical Memorandum Jacksonville, Duval County, Florida

Specific Pond Location/ Site Information	Site Description/History	Documented Contamination/ File Review Results	Potential Contaminant of Concern/ Groundwater Depth-Flow	FDOT Ranking System Results
Pond B-1  Portions of Duval county parcel IDs #156448-0100 and #156449-0100  EPA ID: FLR000152587 (Site 2A: Walmart Supercenter #4444)	These parcels are currently vacant land in-between I-95 and Avenues Walk Boulevard adjacent to the I-295 eastbound to I-95 northbound ramp. Prior use of the area is indicative of forested wetlands and timber production per aerial imagery going back to 1943.  During the site visit, it was noted there are large deposits of solid waste debris (e.g. automotive tires, household waste) along the fence line adjacent to the Avenues Walk Boulevard side of the parcel. Also, green utility cabinets for the plaza are directly adjacent to the fence line bordering the eastern side of the parcels.  Aerial photographs:  1943 – 1960: vacant land with little development surrounding the area 1969: I-95 constructed in current configuration 1972 – 2005: vacant land with minor development in proximity 2007: - development directly adjacent to the north of area has commenced 2008 – present: appears as it does today (vacant land)	No documentation or analytical data was found for this site.	None noted  Groundwater depth and flow unknown for this location.	NO: This proposed pond location is adjacent to the project corridor and approximately 2,500 feet southwest of Site 2A: Walmart Supercenter #4444.  There are no contamination impacts anticipated for this proposed pond location.
Pond C-1 Interior portion of existing I-95 and US-1/Philips Highway interchange (FDOT ROW)  FAC ID: 9700589 (Site 2C: Little Harbour Plaza), 9816536 (Site 3A: Avenues Mall)	Four existing ponds currently serve the interior of the I-95 and US-1/Philips Highway interchange. These ponds will be modified during the reconstruction of the interchange and become expanded to five separate ponds (C-1 through C—5). Prior use of the area before the I-95 interchange was built was vacant land with forested wetlands/timber production.  Aerial photographs:  1943 – 1960: vacant land with little development surrounding the area 1969: I-95 constructed in current configuration 1972 – present: appears as it does today	The adjacent FAC ID site (9700589 – <b>Site 2C: Little Harbour Plaza</b> ) filed a Discharge Report Form (DRF) in April 1997. The DRF indicated that the contamination was related to site use as a former petroleum gas station where the system and its components were removed prior to 1989. The most recent assessment (August 2018) indicates petroleum impacted soil and groundwater are present. Exceedances of SCTLs ranged for Benzene (0.29 mg/kg – 2.0 mg/kg), Toluene (1.4 mg/kg – 34 mg/kg), Ethylbenzene (1.3 mg/kg – 59 mg/kg), total Xylenes (3.6 mg/kg – 190 mg/kg), Naphthalene (20 mg/kg – 22 mg/kg), 1-Methylnaphthalene (8.2 mg/kg – 9.4 mg/kg), 2-methylnaphthalene (17 mg/kg – 21 mg/kg), and TRPH (860 mg/kg – 1,000 mg/kg). GCTLs exceedances ranged from Benzene (190 ug/L – 3,900 ug/L), Toluene (200 ug/L – 9,400 ug/L), Ethylbenzene (1,200 ug/L), total Xylenes (2,800 ug/L – 3,400 ug/L), Naphthalene (65 ug/L – 90 ug/L), and TRPH (11,000 ug/L – 14,000 ug/L). The groundwater plume is approximately 275 feet southeast of this proposed pond location.  The other adjacent FAC ID site (9816536 – <b>Site 3A: Avenues Mall</b> ) has a registered 1,000-gallon diesel emergency generator AST present approximately 600 feet east of this proposed pond location. No contamination is known for this tank that was installed on September 1, 2018.	Petroleum hydrocarbons, lead  Groundwater depth is approximately 4 – 6 feet and flows south for this location.	MEDIUM: This pond location is within the project corridor is approximately 620 feet west of the above storage tank at Site 3A: Avenue Malls and 275 feet north of Site 2C: Little Harbour Plaza. Based on the former use of Site 2C, soil and groundwater testing may be recommended. Potential contamination impacts may impact construction for this proposed pond location if dewatering is required adjacent to this site.  Dewatering adjacent to Site 2C may require a NPDES Generic Permit for Discharges from Petroleum Contaminated Sites, 62-621.300(1).

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Specific Pond Location/ Site Information	Site Description/History	Documented Contamination/ File Review Results	Potential Contaminant of Concern/ Groundwater Depth-Flow	FDOT Ranking System Results
Pond C-2; Pond C-3; Pond C-4; and Pond-C-5  Interior portion of existing I-95 and US-1/Philips Highway interchange (FDOT ROW)	Four existing ponds currently serve the interior of the I-95 and US-1/Philips Highway interchange. These ponds will be modified during the reconstruction of the interchange and become expanded to five separate ponds (C-1 through C-5). Prior use of the area before the I-95 interchange was built was vacant land with forested wetlands/timber production.  Aerial photographs:  1943 – 1960: vacant land with little development surrounding the area 1969: I-95 constructed in current configuration 1972 – present: appears as it does today	No documentation or analytical data was found for this site.	None noted  Groundwater depth and flow unknown for this location.	NO: These proposed pond locations are within the project corridor and over 650 feet west of Site 3A: Avenues Mall.  There are no contamination impacts anticipated for these proposed pond locations.
Pond D-3  Portion of Duval county parcel #148635-1010  FAC ID: 9814083 (Site 4K: JEA Lake Lugano Lift Station); 8943679 (Site 4H: JEA Royal Lakes WWTF)	This parcel is currently vacant land directly behind 8691 Western Way and an existing FDOT pond behind 8743 Western Way. This parcel is being utilized as a conservation easement with the St. Johns River Water Management District per City of Jacksonville's Property Appraiser. This parcel is directly east/southeast of the existing JEA Royal Lakes Wastewater Facility (WWTF), which has been present in aerial photographs since 1972. This area was utilized as a staging area for the construction of multiple subdivisions in the immediate area with visible soil disturbance in aerial photographs.  During the site visit, it was noted that the drainage conveyance system that currently exist on the property is significantly lower than the surrounding landscape elevation. This is possibly due to the dugout material from the ditch system was placed on the surrounding area. Minor solid waste was noted within the ditch conveyance system.  Aerial photographs: 1943 – 1960: vacant land with little development surrounding the area 1969: vacant land; I-95 constructed in current configuration 1972 – 1975: Area partially cleared for staging area for neighboring subdivisions; WWTF present 1980 – 1982: Drainage conveyance system dugout to current configuration; proposed pond area mostly cleared of vegetation 1988 – present: appears as it does today (vacant land)	The adjacent petroleum storage FAC ID site (8943679 – Site 4H: JEA Royal Lakes WWTF) completed a tank closure on June 2, 1995 for a removed 1,066-gallon diesel UST. Minor soil contamination may still be present as there is conflicting information in the closure assessment. There is no documented contamination for the two diesel ASTs (one 5,000-gallon and one 2,000-gallon) for this site.  The other adjacent petroleum storage FAC ID site (9814083 – Site 4K: JEA Lake Lugano Lift Station) has a registered 1,148-gallon diesel emergency generator AST present approximately 620 feet east/northeast of this proposed pond location. No contamination is known for this tank that was installed on March 28, 2014.	petroleum hydrocarbons or solid waste  Groundwater depth is approximately 5.6 – 6.6 feet and groundwater flow is unknown for this location.	LOW: This proposed pond location is approximately 575 feet east/southeast of the soil contamination existing on the adjacent Site 4H: JEA Royal Lakes WWTF and 620 feet southwest from the AST on the adjacent Site 4K: JEA Lake Lugano Lift Station.  Contamination impacts are not anticipated based on the reviewed information and distance (>500 feet) of the sites of concern from the proposed pond location.

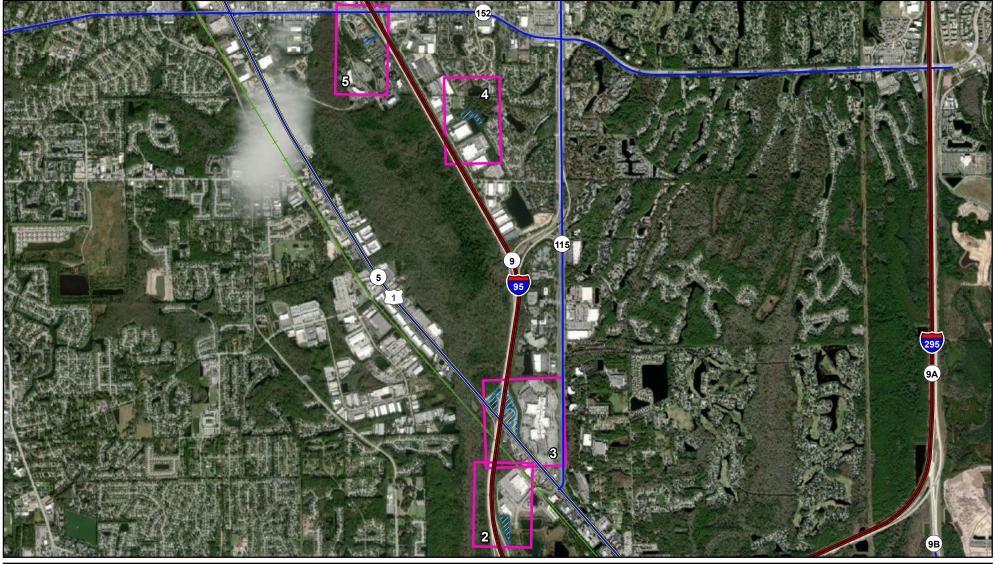
### **APPENDIX A: RISK EVALUATION SUMMARY**

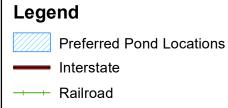
I-95 from I-295 to JTB Preferred Ponds Technical Memorandum Jacksonville, Duval County, Florida

Specific Pond Location/ Site Information	Site Description/History	Documented Contamination/ File Review Results	Potential Contaminant of Concern/ Groundwater Depth-Flow	FDOT Ranking System Results
Pond D-4  Portion of Duval county parcel #148634-0400/8691 Western Way (Site 4F: Carrier Sales)  FAC ID: 8521652 (Site 4G: Republic Services); 8943679 (Site 4H: JEA Royal Lakes WWTF)  EPA ID: FLD982076184 (Site 4F: Carrier Sales); FLD043868728 (Clarke American – Harrington Industrial Plastics); FLD982156747 (Southland Waste Systems – Site 4G: Republic Services)	This pond location is currently vacant land directly behind the facility, Site 4F: Carrier Sales, located at 8691 Western Way and is part of their parcel. This area is directly south of Site 4H: JEA Royal Lakes Wastewater Treatment Facility (WWTF) and southeast of 4G: Republic Services, which has been present in aerial photographs since 1972.  During the site visit, it was noted that the drainage conveyance system that currently exist on the property is significantly lower than the surrounding landscape elevation. This is possibly due to the dugout material from the ditch system was placed on the surrounding area. Minor solid (household) waste was noted within the ditch conveyance system.  Aerial photographs:  1943 – 1960: vacant land with little development surrounding the area 1969: vacant land; I-95 constructed in current configuration 1972 – 1975: Area partially cleared for staging area for neighboring subdivisions; WWTF present 1980 – 1982: Drainage conveyance system dugout to current configuration; proposed pond area mostly cleared of vegetation 1988 – present: appears as it does today (vacant land)	Adjacent sites <b>4F</b> and <b>4G</b> include three very small and one small quantity generators registered with EPA. Two of these sites (FLD982076184; FLD043868728 – <b>Site 4F: Carrier Sales</b> ) do not have any indication of contamination associated with their sites. The other site (FLD982156747 – <b>Site 4G: Republic Services</b> ) has a used oil/part washer present with no inspection data since 2010.  The adjacent petroleum storage FAC ID site (8521652 – <b>Site 4G: Republic Services</b> ) recently documented a discharge (4/25/2019) of petroleum to groundwater. Upon further evaluation, the petroleum impacted groundwater was determined to be attributed to an improperly installed temporary monitoring well. Per the December 11, 2019 Integral Piping and Sump Closure Assessment Report, no contaminants exceeded their respective GCTL or SCTL. FDEP accepted the closure report on January 10, 2020 with no additional assessment requested. Three tanks have been removed from <b>Site 4G</b> since the early 1990s, with various contamination assessments completed. A Site Rehabilitation Completion Order (SRCO) was issued on March 13, 2017 for contamination associated with the removal of Tank 1. Assessments for Tanks 2 and 3 were conducted from 1993 to 1995 under a Contamination Assessment Report, an addendum, and Natural Attenuation Monitoring. A No Further Action for the contamination associated with removal from Tanks 2 and 3 was issued on June 28, 1995.  Tank 1: 400-gallon waste oil UST (installed March 1974; removed August 1995)  Tank 2: 2,000-gallon diesel UST (installed March 1974; removed December 1992/January 1993)  Tank 3: 10,000-gallon diesel UST (installed July 1993; in-service)  The other adjacent petroleum storage FAC ID site (8943679 – <b>Site 4H: JEA Royal Lakes WWTF)</b> completed a tank closure on June 2, 1995 for a removed 1,000-gallon diesel UST. Minor soil contamination may still be present as there is conflicting information in the closure assessment. There is no documented contamination for the two diesel ASTs (one 5,000-gallon and one	Petroleum hydrocarbons, chlorinated solvents, leaded gasoline  Groundwater depth is approximately 5.6 – 6.6 feet and groundwater flow is unknown for this location.	MEDIUM: This proposed pond site is approximately 270 feet south from soil contamination located on the adjacent Site 4H: JEA Royal Lakes WWTF and 350 feet south from the oil/part washer located on the adjacent Site 4G: Republic Services. Based on the former and current use of the Site 4G, soil and groundwater testing may be recommended. Potential contamination impacts may impact construction if dewatering is required adjacent to this site.

# APPENDIX A: RISK EVALUATION SUMMARY I-95 from I-295 to JTB Preferred Ponds Technical Memorandum Jacksonville, Duval County, Florida

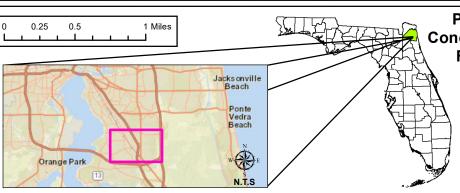
Specific Pond Location/ Site Information	Site Description/History	Documented Contamination/ File Review Results	Potential Contaminant of Concern/ Groundwater Depth-Flow	FDOT Ranking System Results
Pond E-1	This parcel is currently vacant land located between two hotels (Knights Inn Jacksonville @ Dix Ellis Trail and Quality	No documentation or analytical data was found for this site.	Solid waste debris	<b>MEDIUM</b> : This proposed pond site has no assessment data available. Due to different
Parcel #152683-0160	Inn & Suites Jacksonville).  During the site visits, multiple solid waste piles were observed on the proposed pond site. A large storage container/staging area for the Quality Inn & Suites Hotel exists on the southeastern corner of the parcel that small trailers and various equipment present.		Groundwater depth and flow unknown for this location.	solid waste piles being observed on multiple field visits to this location, this site has the potential for contamination impacts to occur. The closest site of concern identified from the Level 1 was Site 5A: Incomm, which is approximately 700 feet south of this parcel.
	Aerial photographs:  1943 – 1960: vacant land with little development surrounding the area 1969: vacant land; I-95 constructed in current configuration 1972 - 1982: vacant land; with minor development near interchange of I-95 and Baymeadows 1988: Commercial development underway for area; vacant land for proposed pond site 1993 - present: appears as it does today			Based on the current use of the site, soil and groundwater testing may be recommended.





State Road

Figure Boundary

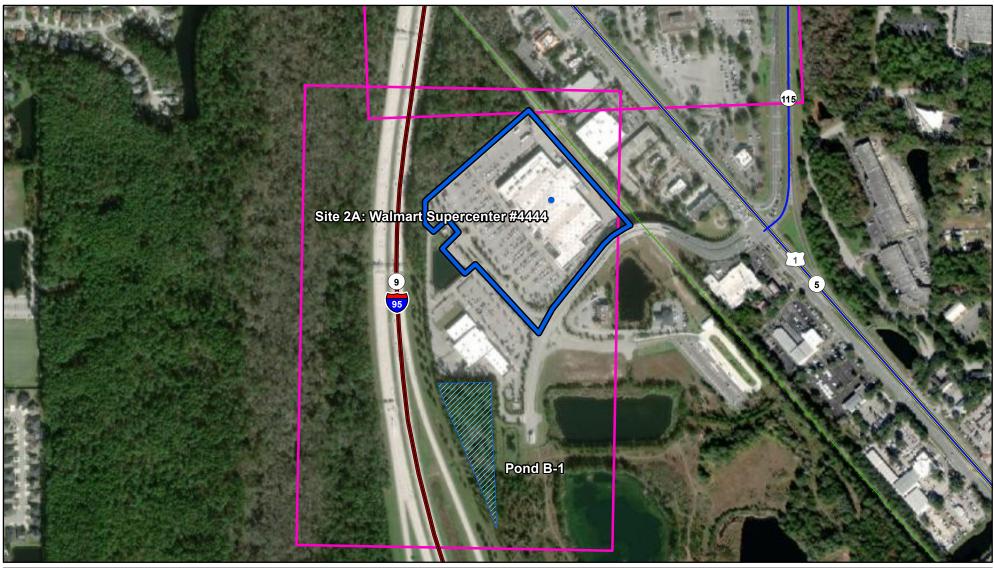


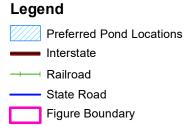
Preferred Ponds & Associated Sites of Concern Contamination Screening Figure FM: 435577-1 I-95 from I-295 from JTB

Jacksonville, Duval County

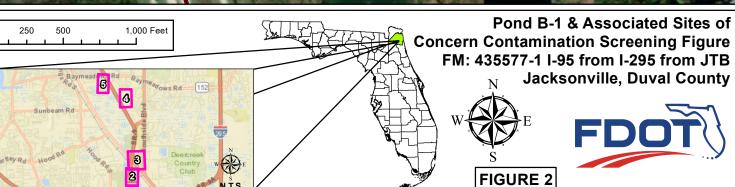


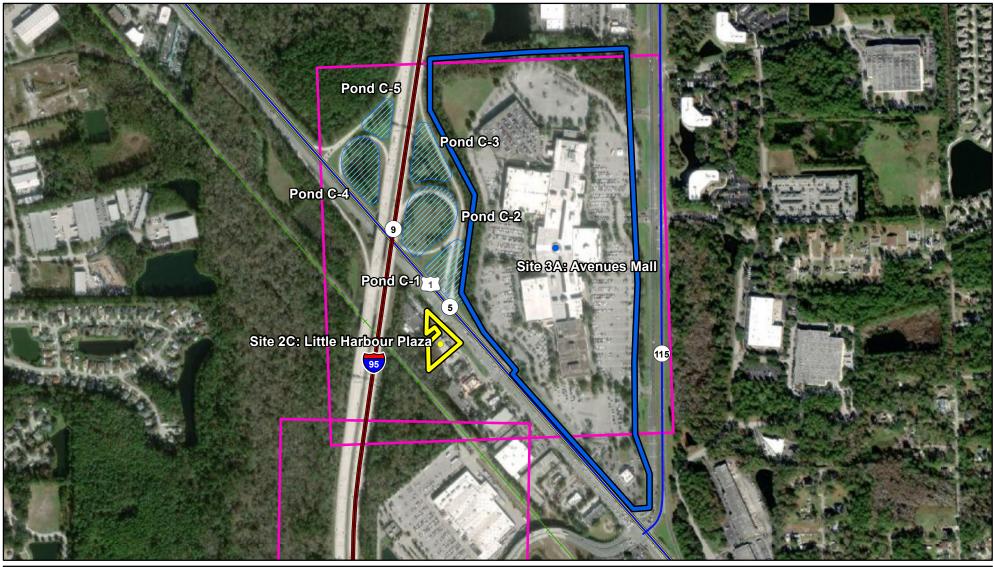
FDOT





- No Risk
- Low Risk
- Medium Risk
- High Risk







Preferred Pond Locations

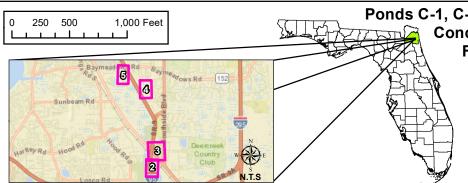
Interstate

→ Railroad

State Road

Figure Boundary

- No Risk
- Low Risk
- Medium Risk
- High Risk



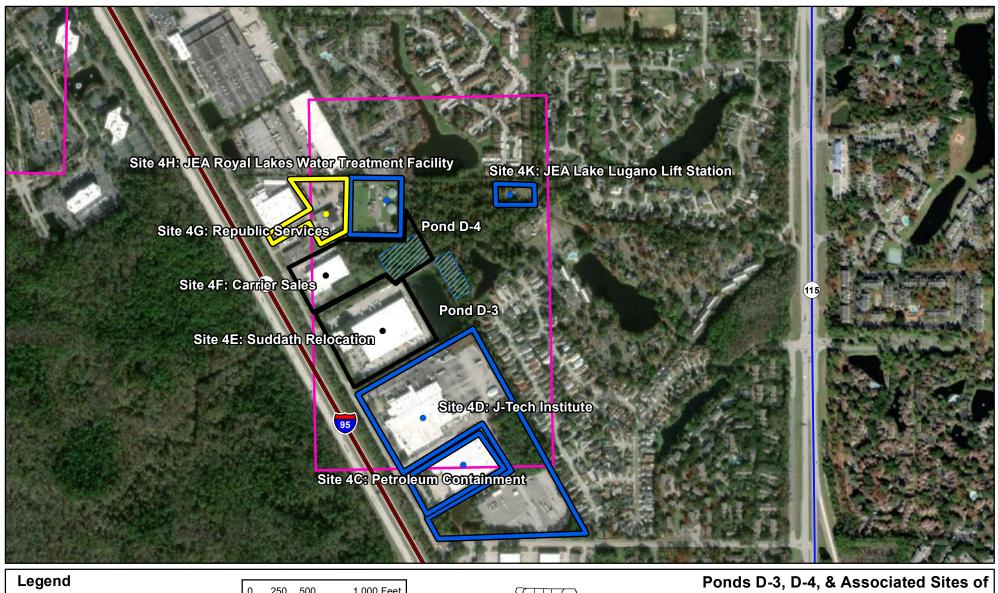
Ponds C-1, C-2, C-3, C-4, C-5 & Associated Sites of Concern Contamination Screening Figure FM: 435577-1 I-95 from I-295 from JTB

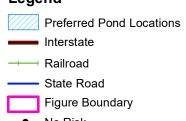
Jacksonville, Duval County



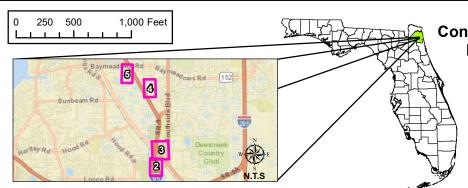


FIGURE 3





- No Risk
- Low Risk
- Medium Risk
- High Risk

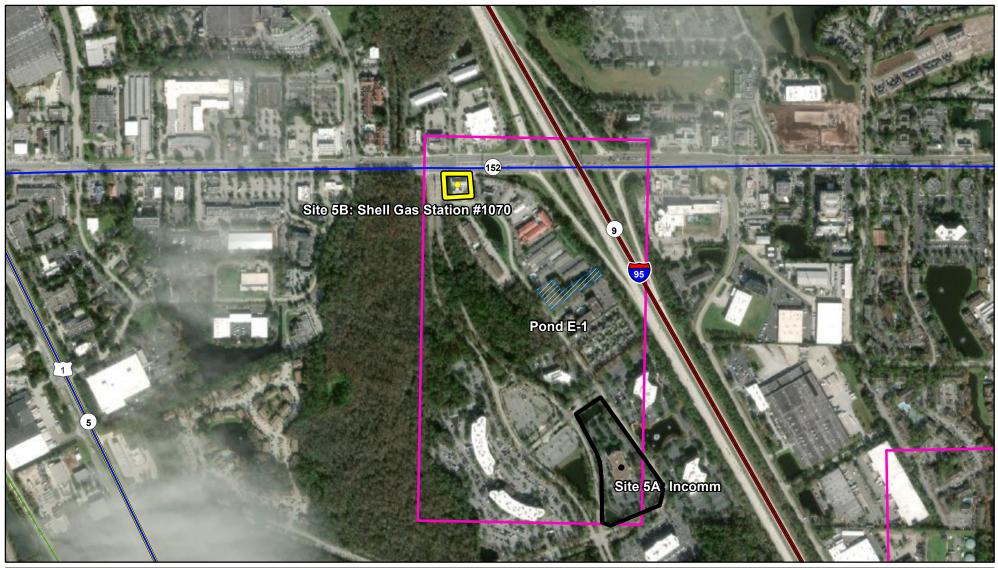


Ponds D-3, D-4, & Associated Sites of Concern Contamination Screening Figure FM: 435577-1 I-95 from I-295 from JTB

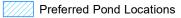
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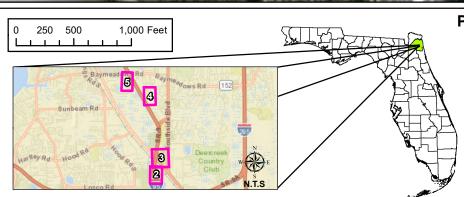
Interstate

→ Railroad

State Road

Figure Boundary

- No Risk
- Low Risk
- Medium Risk
- High Risk



Pond E-1 & Associated Sites of Concern Contamination Screening Figure FM: 435577-1 I-95 from I-295 from JTB  $_{\rm N}$  Jacksonville, Duval County



