

CONTAMINATION TECHNICAL MEMORANDUM

Okeechobee Utility Authority Wellfield Avoidance Realignment PD&E Re-evaluation

Limits of Project: SR 710 from US 441 to L-63N Canal

Okeechobee County, Florida

Financial Management Number: 419344-3

December 1, 2023

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 the Federal Highway Administration and FDOT.

Memo

To: Michael Sherron
District Contamination Impact Coordinator
Florida Department of Transportation, District One

December 1, 2023

From: Maliah Moreno
Environmental Department

Michael Bair, ASP, LEP
Chief Scientist
Tierra

Re: Contamination Technical Memorandum
Okeechobee Utility Authority Wellfield Avoidance Realignment Design Change PD&E Re-evaluation

For: SR 710 from US 441 to L-63N Canal
Okeechobee County, Florida
FPID: 419344-3
Tierra Project No.: 6511-12-054E

Project Description

On March 16, 2017, the Florida Department of Transportation (FDOT) Office of Environmental Management (OEM) granted Location and Design Concept Acceptance (LDCA) for the State Road (SR) 710 Project Development and Environment (PD&E) Study. The project limits are approximately 13 miles from United States Highway (US) 441 in Okeechobee County to County Road (CR) 714 (Southwest Martin Highway) in Martin County. The proposed improvements include widening the existing SR 710 roadway to four-lane and a new four-lane extension of SR 710 from US 441 to SR 70.

On Thursday, August 30, 2018, the FDOT District One held a public hearing for Segment 1 of the original PD&E Study, extending from SR 710 at the L-63N Canal north to the proposed intersection at US 441, a distance of approximately 3.8 miles. This hearing was held to present changes in project design, right-of-way needs, and access management changes made since the FDOT OEM's original LDCA. The public was provided an opportunity to review and provide comments on the project's potential impacts to the social, cultural, natural, and physical environment. The FDOT OEM approved a Design Change and Right of Way Authorization re-evaluation documenting these changes on February 7, 2019.

The proposed roadway improvements being advanced within this re-evaluation generally remain unchanged since the prior February 2019 re-evaluation. The improvements consist of a new four-lane suburban typical section. The roadway includes two 12-foot-wide travel lanes in each direction, separated by a raised grassed median varying from 30 feet to 39 feet wide. The posted speed will be 45 miles per hour (mph). The posted speed will reduce to 40 mph near the new intersection at US 441. The SR 710 extension will include 7 feet bicycle lanes, 6 feet sidewalk along the south side of the roadway, and a 10 feet shared use path along the north side of the roadway. Type E curb and gutter will be provided along the median and outside edges of the roadway with a closed stormwater conveyance system. The SR 710 extension will have new signals at the intersections with US 441, SR 70, and SE 40th Avenue. The project also includes widening the existing SR 710 bridge over the L-63N Canal and a new bridge culvert over Taylor Creek. Acquisition of right-of-way will be required for the new roadway alignment and stormwater ponds.

The current concept proposed for advancement differs from the prior 2019 concept in that approximately one mile of the new SR 710 is being realigned to avoid impacts to the Okeechobee Utility Authority (OUA) wellfield. Starting approximately 150 feet east of Taylor Creek, the centerline of the road shifts north of the prior alignment, before converging with the original alignment east of the proposed Pond 2 site. There is no change in the proposed roadway typical section. The maximum difference between the two alignments is 275 feet, occurring near Station 536+00. Refer to the attached figures for a comparison of the original and realigned roadway design. The changes in acreage for the current design is approximately one acre more than the 2018 public hearing concept.

Contamination History

During the PD&E phase, a Contamination Screening Evaluation report (CSER) was completed in December 2010 and included the evaluation of four segments – Segment 1, Segment 2, Segment 3, and Segment 4 – from US 441 in Okeechobee County to CR 714 in Martin County. Segments 1 and 2, as identified in the PD&E report, generally correspond to the design phase from US 441 to the L-63N Canal. This Contamination Technical Memorandum (Tech Memo) provides an update to the original PD&E CSER and a previous PD&E re-evaluation dated August 2018. This update is necessary due to the age of the original PD&E study, in addition to the proposed design change due to the OUA wellhead off-set requirement.

The PD&E CSER (2010) identified seven potential contamination sites (Sites 1-7) within Segments 1 and 2. The previous PD&E re-evaluation (2018) identified another potential contamination site (Site 13 - Medium) within Segments 1 and 2. The risk ratings for the original seven potential contamination sites remained the same in the PD&E re-evaluation (2018) except for Site 1 (Low to Medium) and Site 6 (High to Medium). Site 1 received an elevated risk rating due to potential requirements for National Pollutant Discharge Elimination System (NPDES) permitting in the future. Site 6 received a reduced risk rating based on FDEP's issuance of a Site Rehabilitation Completion Order (SRCO) in 2013. Two additional sites were identified during this PD&E re-evaluation for the OUA wellfield avoidance realignment design change. The risk ratings for all ten sites are provided below. Each potential contamination site is illustrated on the attached graphics.

Current Methodology

The methodology employed for this contamination re-evaluation included the following tasks:

- Determine contamination sites located within Segments 1 and 2 of the original PD&E CSER,
- Conduct desktop research using Florida Department of Environmental Protection's (FDEP's) MapDirect database for each identified contamination site for updated information since publication of the original PD&E CSER and the PD&E re-evaluation,
- Adjust risk ratings, as necessary, based on updated contamination information and proposed changes to roadway alignment and preferred ponds, and
- Conduct desktop search for any new contamination sites using FDEP's MapDirect database and provide appropriate risk ratings.

PD&E Site No.	Site Name	PD&E Risk Rating (2010)	PD&E Re-evaluation Risk Rating (2018)	OUA Re-evaluation Risk Rating (2023)	Comments
1	Raulerson Hospital 1796 US Hwy 441 North, Okeechobee FAC 47/9200739 FAC 47/9811744	Low	Medium	Medium	The July 2009 petroleum discharge noted in the PD&E CSER received a SRCO in 2011. Although no new discharges have been reported since 2018, this site remains listed as a contamination site in the FDEP's MapDirect database. Depending on the location of the contamination at this site and the final roadway alignment, this site could trigger the testing requirement necessary for National Pollutant Discharge Elimination System (NPDES) permitting. Therefore, this site remains assigned a risk rating of Medium so that it can be reviewed again once final construction plans are available. The OUA realignment shifts toward this site.
2	Okeechobee Health Care 1646 US Hwy 441 North, Okeechobee FAC 47/9401228	Low	Low	Low	The PD&E CSER notes that no releases have been reported at this site. No new discharges have been reported since 2018. The August 2022 tank inspection report notes that the facility is "In Compliance." Although the OUA realignment shifts toward this site, none of the more recent documentation warrants a change to the risk rating and therefore it remains Low.
3	Okeechobee Utility Authority (OUA) 1200 NE 12 th Street, Okeechobee FAC 47/9401463	Low	Low	Low	The PD&E CSER notes that no releases have been reported at this site. No new discharges have been reported since 2018. The August 2021 tank inspection report notes that the facility is "In Compliance." The OUA realignment shifts farther from this site and none of the more recent documentation warrants a change to the risk rating. Therefore, the risk rating remains Low.
4	Bill's Mini Mart 3007 Hwy 70 East, Okeechobee FAC 47/9100166	Low	Low	Low	The PD&E CSER notes that no releases have been reported at this site. No new discharges have been reported since 2018. The April 2023 tank inspection report notes that the facility is "Minor Out of Compliance" due to administrative errors. The OUA realignment is not near this site and none of the more recent documentation warrants a change to the risk rating. Therefore, the risk rating remains Low.
5	Dee's Garden Shop 2768 SR 710, Okeechobee FAC 47/8512544	Low	Low	Low	The PD&E CSER notes that this site received a No Further Action (NFA) status in 2002. Limited field testing was performed during the PD&E CSER, and no contamination was detected. No new discharges have been reported since 2018. The OUA realignment is not near this site and none of the more recent documentation warrants a change to the risk rating and therefore it remains Low.

PD&E Site No.	Site Name	PD&E Risk Rating (2010)	PD&E Re-evaluation Risk Rating (2018)	OUA Re-evaluation Risk Rating (2023)	Comments
6	Townstar #40 3993 SR 710, Okeechobee FAC 47/8630309	High	Medium	Medium	Limited field testing was performed during the PD&E CSER, and no contamination was detected. Since publication of the PD&E CSER, an SRCO was issued for the petroleum discharge (2013). No new discharges have been reported since 2018. The April 2023 tank inspection report notes that the facility is "In Compliance." No shifts to the OUA realignment are noted near this site. Although an SRCO has been issued, the facility continues to operate as a gas station. Therefore, per Chapter 20 of the PD&E Manual (July 2023), the risk rating remains Medium.
7	SFWMD Equipment Yard ~ 4200 SR 710, Okeechobee	Low	Low	Low	This site was identified during the site reconnaissance as part of the PD&E CSER, which notes that this site has been used in its current configuration since at least 1994 for equipment storage. This site is not listed in the FDEP's MapDirect database and therefore updated information is not available. The site appears to continue to be used in a similar manner according to Google Earth imagery reviewed from 2010 through 2023. No shifts to the OUA realignment are noted near this site. The risk rating remains Low.
8 - 12	<i>These sites are documented in the PD&E CSER but are located outside of the limits of this design project and therefore are not a contamination concern</i>				
13	Florida Power and Light – Okeechobee Service Center 825 NE 34 th Avenue, Okeechobee FAC 47/8519987	not rated	Medium	Medium	Although this site was mentioned in the PD&E CSER, it was not considered a contamination concern and a detailed evaluation was not provided. This facility is located adjacent to the west of the OUA realignment where a discharge of gasoline was reported in June 1992. Tank removal, site assessment, and remedial tasks were completed during various periods between 1993 and 2017 that resulted in an SRCO on October 16, 2017. One 3,000-gallon Ethanol E10 AST remains in service at the site. The January 2023 tank inspection report notes that the facility is "In Compliance." Although an SRCO was issued for the 1992 discharge, the site's proximity to the OUA realignment and the active nature of the fueling operations warrant a risk rating of Medium.
14*	Boral Roofing 1289 NE 9 th Avenue, Okeechobee FAC 9816203	not rated	not rated	Low	Although this site was not identified in the PD&E CSER or PD&E re-evaluation (2018), this site was assigned a number (Site 14) as part of this OUA realignment re-evaluation (2023). This facility is located to the south of the OUA realignment adjoining east of the OUA facility (Site 3). One 579-gallon Vehicular Diesel AST remains in service at the site. No discharges have been reported at this site. No tank inspection reports were available for review. The OUA realignment shifts farther from this site. Since there are no reported discharges, Site 14 is assigned a risk rating of Low.

PD&E Site No.	Site Name	PD&E Risk Rating (2010)	PD&E Re-evaluation Risk Rating (2018)	OUA Re-evaluation Risk Rating (2023)	Comments
15*	Bridge No. 910065 SR 710 over Interceptor Canal L-63N, Okeechobee	not rated	not rated	Low	Although this site was not identified in the PD&E CSER or PD&E re-evaluation (2018), this site was assigned a number (Site 15) as part of this OUA realignment re-evaluation (2023). The project alignment was noted to include an existing bridge structure at SR 710 over Interceptor Canal L-63N (Bridge No. 910065). A NESHAP Asbestos Survey Report and Screening for Metals-Based Coatings (MBCs) was issued in May 2018 due to the planned modifications of the existing bridge structure. Polarized Light Microscopy (PLM) testing results indicated no Asbestos Containing Materials (ACMs) were identified from the samples collected. No MBCs were observed on the bridge structure. No bridge plans were available at the time of this survey. Therefore, a review of bridge plans was not conducted. Based on the results of this survey, no further testing was recommended. Therefore, Site 15 is assigned a risk rating of Low.

*Site was not identified in PD&E CSER (2010) or PD&E re-evaluation (2018); Site assigned a number as part of this OUA realignment re-evaluation (2023)

This Tech Memo provides updated risk ratings for the five preferred pond sites identified in the Final Level I Pond Siting Report (PSR) CSER for Proposed Ponds (2014) and the Final Level II Field Screening Report (FSR) for Preferred Ponds (2018): Pond 1, Pond 2, Pond 3, Pond 4, and Pond 5. A Final Level I PSR CSER for Proposed Ponds was issued in August 2014 and included the evaluation of twenty-three proposed pond alternatives located along or near the realignment of SR 710. A Final Level II FSR for Preferred Ponds was issued in July 2018 and provided Level II soil screening results for five preferred pond sites identified in the Final Level I PSR CSER for Proposed Ponds (2014). The risk ratings for the five preferred pond sites remained the same in the Final Level II FSR for Preferred Ponds (2018) except for Pond 1 (Low to No) based on Level II soil screening results. The risk ratings for the five preferred pond sites remained the same in this PD&E OUA re-evaluation (2023) except for Pond 4 (No to Medium) due to observations noted in the Final Level II FSR for Preferred Ponds report. The risk ratings for these five preferred pond sites are provided below. Each preferred pond site is illustrated on the attached graphics.

Pond Site No.	Final Level I PSR CSER – Proposed Ponds (2014)	Final Level II FSR – Preferred Ponds (2018)	OUA Re-evaluation Risk Rating (2023)	Comments
1	Low	No	No	Slight adjustments to the OUA realignment are noted approximately 400 feet northeast of this pond. However, the OUA realignment shifts farther from this pond. No arsenic exceedances or buried debris were encountered in the borings completed for Pond 1 during Level II field activities. In addition, no recent documentation warrants a change to the risk rating. Therefore, the risk rating remains No.
2	No	No	Low	Slight adjustments to Pond 2 and the OUA realignment have been proposed near the Hamrick Property located north of SR 710. The OUA realignment shifts toward this pond. No arsenic exceedances or buried debris were encountered in the borings completed for Pond 2 during Level II field activities. Given the proposed design change to Pond 2 and the OUA realignment, this pond is assigned a risk rating of Low.

Pond Site No.	Final Level I PSR CSER – Proposed Ponds (2014)	Final Level II FSR – Preferred Ponds (2018)	OUA Re-evaluation Risk Rating (2023)	Comments
3	No	No	No	No shifts to the OUA realignment are noted near this pond. No arsenic exceedances or buried debris were encountered in the borings completed for Pond 3 during Level II field activities. In addition, no recent documentation warrants a change to the risk rating. Therefore, the risk rating remains No.
4	No	No	Medium	No shifts to the OUA realignment are noted near this pond. No arsenic exceedances were encountered in the borings completed for Pond 4 during Level II field activities. However, discarded material (fragments of glass, pieces of metal rods) were observed from an estimated depth of 0 to 2 feet in select borings in the central area of the southern portion of Pond 4. Based on this observation, Pond 4 is assigned a risk rating of Medium.
5	No	No	No	No shifts to the OUA realignment are noted near this pond. No arsenic exceedances or buried debris were encountered in the borings completed for Pond 5 during Level II field activities. In addition, no recent documentation warrants a change to the risk rating. Therefore, the risk rating remains No.

The ten sites considered as part of this PD&E re-evaluation have resulted in the assignment of seven Low and three Medium risk ratings. No additional action is recommended for the sites that are assigned a risk rating of Low. The three sites that received a Medium risk rating (Site 1, Site 6, and Site 13) should be reviewed once final construction plans are available to determine if additional action is necessary.

The five preferred pond sites considered as part of this Tech Memo have resulted in the assignment of three No, one Low and one Medium risk ratings. No additional action is recommended for the pond sites that are assigned a risk rating of No or Low. The one pond site that received a Medium risk rating (Pond 4) should be reviewed once final construction plans are available to determine if additional action is necessary.

Respectfully Submitted,



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Figure 1

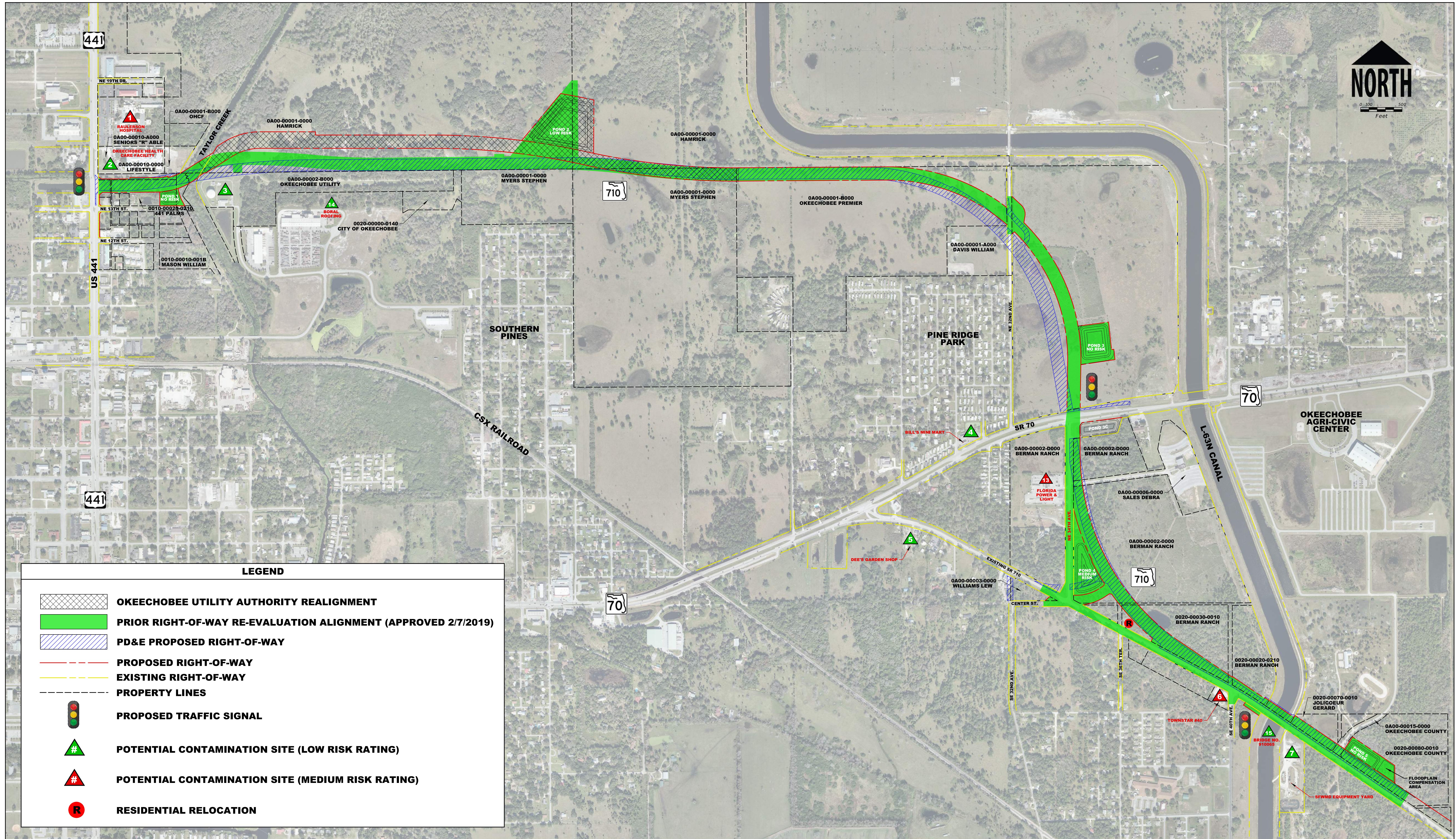


Figure 2

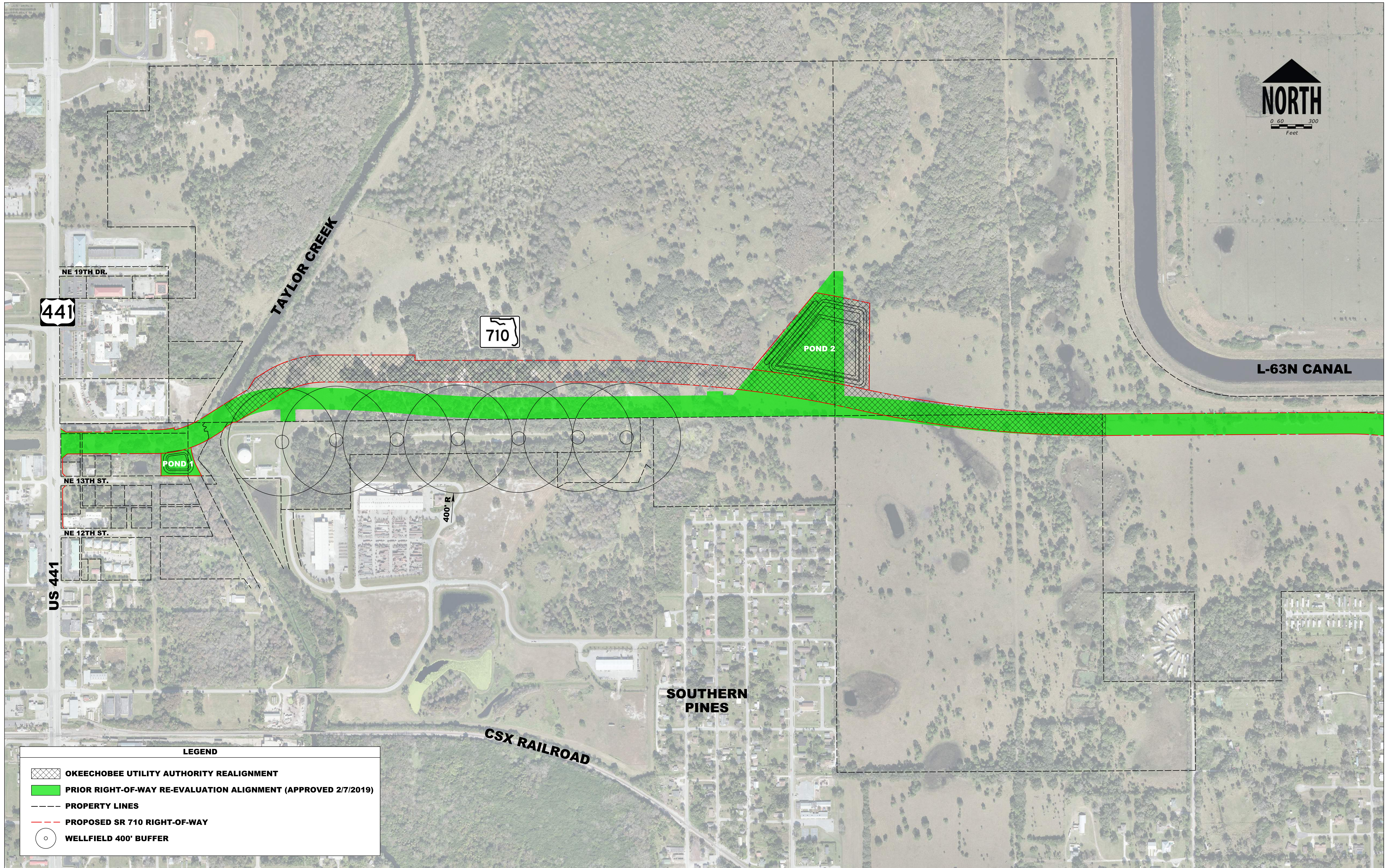


Figure 3

