

STATE ENVIRONMENTAL IMPACT REPORT

Florida Department of Transportation

Florida's Turnpike Enterprise

Florida's Turnpike (SR 91)

Project Development and Environment (PD&E) Study

From North of Jupiter (Indiantown Road / SR 706) (MP 117.0)

To North of Fort Pierce (Okeechobee Road / SR 70) (MP 153.7)

Palm Beach, Martin, and St. Lucie Counties, Florida

ETDM Project No.: 14295

FDOT Financial ID No.:423374-1-22-01

Federal Aid Project No.: N/A

Date: June, 2021

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1. PROJECT DESCRIPTION AND PURPOSE AND NEED:

a. Project Information:

Project Name: Florida's Turnpike (SR 91)

Project Limits: From North of Jupiter (Indiantown Road / SR 706) (MP 117.0) to North of Fort Pierce (Okeechobee Road / SR 70) (MP 153.7)

County: Palm Beach, Martin, and St. Lucie

ETDM Number (If applicable): 14295

Financial Management Number: 423374-1-22-01

Federal-Aid Project Number: N/A

Project Manager: Brian P. Ribaric, PE

b. Proposed Improvements:

A description of the proposed improvements is provided in Section 1.5, Description of Preferred Alternative, in **Appendix A**

c. Purpose and Need:

The Purpose and Need is provided in Section 1.2, Purpose and Need, in **Appendix A**.

d. Project Planning Consistency:

Disregard providing historical details, instead focus on future phases of segments being advanced. If more than one segment is being advanced additional tables should be added.

Currently Adopted CFP-LRTP	COMMENTS
N	No project segments or phases are presently included in the Palm Beach TPA, Martin MPO, or St. Lucie TPO Cost Feasible Plan – Long Range Transportation Plans.

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PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP \$	TIP/STIP FY	COMMENTS
PE (Final Design)	N	N	\$		<p>The Tentative 2022-2026 5-year Work Program has the following projects:</p> <ul style="list-style-type: none"> • 446165-1 SR91 INTERCHANGE IMPROVEMENTS AT SR714 (MP 134.5) Phase 32 in FY 23 for \$6.4 million. • 446333-1 WIDEN TPK(SR91), SW MARTIN HWY TO ST. LUCIE C/L (MP 134.5- 138.08) (4 to 8 Lanes) Phase 32 in FY 25 for \$5.6 million • 446334-1 WIDEN TPK(SR91) FROM MARTIN C/L TO BECKER RD (MP 138.08- 138.5) (4 to 8 Lanes) Phase 32 in FY 25 for \$4.2 million <p>No other design phases are in the 5-year Work Program for the remainder of the corridor.</p> <p>These projects have been presented to the Martin MPO and St. Lucie TPO in inclusion in their Transportation Improvement Plans.</p>
R/W	N	N	\$		No right-of-way phases are in the 5-year Work Program for the entire corridor.
Construction	N	N	\$		No construction phases are in the 5-year Work Program for the entire corridor.

*Include pages from current TIP/STIP/LRTP

2. ENVIRONMENTAL ANALYSIS

Issues/Resources

*Substantial Impacts?

**Supporting Information

Yes No Enhance No Inv.

A. SOCIAL & ECONOMIC

1. Social	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Appendix A, Section 2.1.1</u>
2. Economic	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Appendix A, Section 2.1.2</u>
3. Land Use Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Appendix A, Section 2.1.3</u>
4. Mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Appendix A, Section 2.1.4</u>
5. Aesthetic Effects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Appendix A, Section 2.1.5</u>
6. Relocation Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Appendix A, Section 2.1.6</u>

B. CULTURAL

1. Historic Sites/Districts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Appendix A, Section 2.2.1</u>
2. Archaeological Sites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Appendix A, Section 2.2.2</u>
3. Recreational Areas and Protected lands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Appendix A, Section 2.2.3</u>

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C. NATURAL

1. Wetlands and Other

Surface Waters ☐ ☒ ☐ ☐ Appendix A, Section 2.3.1

2. Aquatic Preserves and

Outstanding FL Waters ☐ ☒ ☐ ☐ Appendix A, Section 2.3.2

3. Water Resources ☐ ☒ ☐ ☐ Appendix A, Section 2.3.3

4. Wild and Scenic Rivers ☐ ☒ ☐ ☐ Appendix A, Section 2.3.4

5. Floodplains ☐ ☒ ☐ ☐ Appendix A, Section 2.3.5.

6. Coastal Barrier Resources ☐ ☐ ☐ ☒ Appendix A, Section 2.3.6

7. Protected Species and

Habitat ☐ ☒ ☐ ☐ Appendix A, Section 2.3.7

8. Essential Fish Habitat ☐ ☒ ☐ ☐ Appendix A, Section 2.3.8

D. PHYSICAL

1. Highway Traffic Noise ☐ ☒ ☐ ☐ Appendix A, Section 2.4.1

2. Air Quality ☐ ☒ ☐ ☐ Appendix A, Section 2.4.2

3. Contamination ☐ ☒ ☐ ☐ Appendix A, Section 2.4.3

4. Utilities and Railroads ☐ ☒ ☐ ☐ Appendix A, Section 2.4.4

5. Construction ☐ ☒ ☐ ☐ Appendix A, Section 2.4.5

6. Bicycles and Pedestrians ☐ ☒ ☐ ☐ Appendix A, Section 2.4.6

7. Navigation ☐ ☒ ☐ ☐ Appendix A, Section 2.4.7

* Substantial Impacts?: Yes = Substantial Impact; No = No Substantial Impact; Enhance = Enhancement; NoInv = Issue absent, no involvement.

**Supporting information is documented in the referenced attachment(s).

3. ANTICIPATED PERMITS

[X] Section 404 Dredge and Fill Permit (State 404 Permit) – USACE/FDEP

[X] Section 10 Permit – USACE

[X] Section 408 Alteration of a USACE Civil Works Project – USACE/SFWMD

[X] U.S. Coast Guard Bridge Permit - USCG

[X] Section 7 (a) Wild and Scenic Rivers Act Determination – NPS

[X] Environmental Resource Permit - SFWMD

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[X] Right-of-Way Occupancy Permit – SFWMD

[X] Sovereign Submerged Lands Easements – FDEP

[X] National Pollutant Discharge Elimination System – FDEP

[X] Gopher Tortoise Relocation Permit – FWC

[X] Incidental Take Permit (as necessary) – USFWS/FWC

4. ENGINEERING ANALYSIS

The engineering analysis is contained in the *Preliminary Engineering Report (PER)*. Engineering analysis was prepared in accordance with Part 1 Chapter 4, Project Development Process and Part 2, Chapter 3, Engineering Analysis of the FDOT Project Development and Environment (PD&E) Manual.

5. COMMITMENTS

Florida's Turnpike Enterprise (FTE) is committed to the following measures to minimize impacts to the social, natural and/or physical environment:

- If protected plants are observed during future surveys conducted prior to construction, the FTE will coordinate with FDACS and public parks (e.g., Jonathan Dickinson State Park) prior to construction for possible relocation of protected plants.
- If Florida Sandhill crane nests are observed during future surveys conducted prior to construction, then a 400-foot buffer will be implemented if construction occurs during the nesting season (January through July). The FTE will coordinate with the FWC during the project construction phase, if necessary.
- During the design phase of the Florida's Turnpike interchange at Crosstown Parkway, the FTE will coordinate with the City of Port St. Lucie (City) to ensure access is provided to the City's proposed adventure park, located north of Crosstown Parkway and west of the Turnpike. FTE will also coordinate with St. Lucie County to ensure access is provided to the St. Lucie West Middle School and St. Lucie West Centennial High School, located north of Crosstown Parkway and west of SW Cameo Boulevard.
- During the design phase, a Level II Impact to Construction Assessment will be conducted for sites with a potential contamination risk rating of medium or high, based on proposed right-of-way acquisition and design construction plans.
- Asbestos testing results will be obtained for building structures to be demolished or renovated in conjunction with the project.
- The FTE is committed to the construction of feasible and reasonable noise abatement measures at locations identified in Noise Study Report, dated June, 2021, contingent upon the following conditions during future Design phases:
 - Final recommendations on the construction of abatement measures is

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determined during the project's final design and through the public involvement process;

- Detailed noise analyses during the final design process support the need, feasibility, and reasonableness of providing abatement;
- Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost reasonable criterion;
- Community input supporting types, heights, and locations of the noise barrier(s) is provided to the FTE; and
- Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved.

6. FDOT SELECTED ALTERNATIVE

The Preferred Alternative includes widening Florida's Turnpike (SR 91) mainline from four 12-foot lanes to eight 12-foot lanes by adding two general toll lanes in each direction and widening both the inside and outside shoulders from 10 feet to 12 feet and providing a median barrier. The proposed typical section holds the outside edge of shoulder of the existing northbound lanes and reconstructs to the west to avoid impacting the specified width for Florida Gas Transmission (FGT).

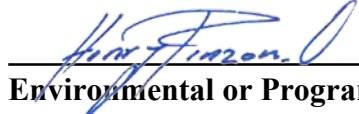
Operational improvement alternatives were developed for the four existing interchanges located at SW Martin Highway, SE Becker Road, SW Port St. Lucie Boulevard, and Okeechobee Road (SR 70). Two new interchange locations were developed as well and include Crosstown Parkway and W Midway Road. The following list presents the Preferred Alternative selected for each respective interchange location.

- SW Martin Highway – Alternative 7B
- SE Becker Road – Alternative 1
- SW Port St. Lucie Boulevard – Alternative 2
- Crosstown Parkway – Alternative 3
- W Midway Road – Alternative 1
- Okeechobee Road (SR 70) – Alternative 4

For a detailed description of the Preferred Alternative, refer to the *Recommendation of Preferred Alternative Memorandum*, February 2021, prepared under separate cover.

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7. [X] APPROVED FOR PUBLIC AVAILABILITY (Before public hearing when a public hearing is required)



**Environmental or Program Development
Manager or Administrator**

6/29/2021

Date

8. PUBLIC INVOLVEMENT

1. ☐ A public hearing is not required.
2. ☒ A public hearing will be held on July 22, 2021. This draft document is publicly available, and comments can be submitted to FDOT until August 11, 2021.
District Contact Information: Brian P. Ribaric, P.E., Project Manager for
Florida's Turnpike Enterprise (Atkins)
P.O. Box 613069
Ocoee, Florida 34761
(407) 264-3095
Brian.Ribaric@dot.state.fl.us
3. ☐ A public hearing was held on (insert date) and the transcript is available.
4. ☐ An opportunity for a public hearing was afforded and was documented (insert date).

9. APPROVAL OF FINAL DOCUMENT

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status.

The final SEIR reflects consideration of the PD&E Study and the public hearing.

District Secretary or Designee

 / /

Date

10. SUPPORTING INFORMATION

SEE ATTACHMENTS

APPENDIX A

Supporting Information

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1.0 PROJECT SUMMARY

1.1 Project Description

Florida's Turnpike Enterprise (FTE) is conducting a Project Development and Environment (PD&E) study to evaluate capacity improvements to the existing Florida's Turnpike (SR 91) corridor in Palm Beach, Martin and St. Lucie Counties, Florida. The project limits extend from north of Jupiter/Indiantown Road at Mile Post (MP) 117 to north of Okeechobee Road (SR 70) at MP 153.7, a distance of approximately 36.7 miles. Refer to **Figure 1-1** for the Project Location Map. The project consists of the widening of Florida's Turnpike (SR 91) from four to eight lanes by adding two general toll lanes in each direction.

Currently, Florida's Turnpike (SR 91) is a four lane limited access toll facility. The interchange at Jupiter/Indiantown Road at MP 116 is not included in this study. The interchange of Turnpike and SR 714/SW Martin Highway (MP 134.6) is the only exit to Martin County. The Turnpike has two interchanges in Port St. Lucie in St. Lucie County, one at SE Becker Road (MP 138.5) and the other at SR 716/SW Port St. Lucie Boulevard (MP 143.1). Port St. Lucie - Fort Pierce Service Plaza is at MP 145. The northernmost interchange is at SR 70/Okeechobee Road (MP 153.2) near Fort Pierce in St. Lucie County.

Numerous bridge structures will be widened or reconstructed along with the roadway. The project corridor includes crossings of the Loxahatchee River and St. Lucie Canal. Potential reconfiguration of existing interchanges and potential new interchange access locations were also evaluated as part of this PD&E study. The proposed new interchange access locations selected were Crosstown Parkway (MP 144.7) and W Midway Road (MP 150.4). The evaluation of a new I-95 direct connection interchange with the Turnpike near SE Bridge Road (MP 125.5) in Martin County is not part of this PD&E Study but will be part of a separate PD&E Study (FPID No. 446975-1-22-01).

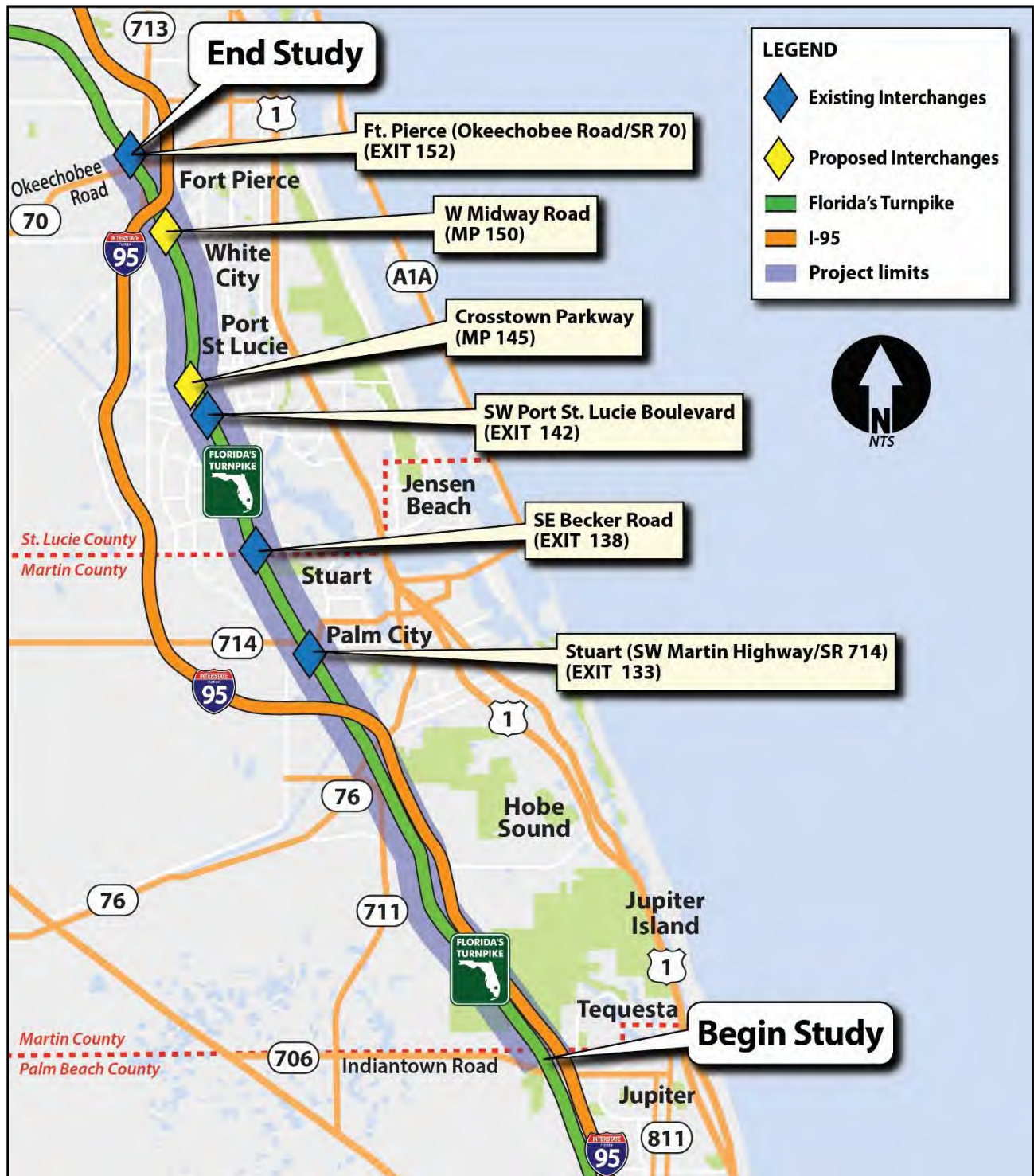


Figure 1-1: Project Location Map

1.2 Purpose & Need

The purpose of the project is to enhance the integrity of the highway while accommodating future traffic demands, improving overall safety, and meeting current design standards. New interchange access locations were evaluated as part of this study, as well as operational improvements to the existing interchanges.

The need for the project is based on the following criteria:

The primary purpose of the widening of Florida's Turnpike (SR 91) from north of Indiantown Road to north of Okeechobee Road is to add capacity that will accommodate future traffic volumes of freight and passenger vehicles linked to the projected growth in population and employment. The SR 91 corridor is located within Palm Beach, Martin, and St. Lucie Counties. Based on a start date of April 1, 2018, the population in Palm Beach County is estimated to reach over 1.8 million by 2045, which represents a 26.3% increase; the population in St. Lucie County is expected to increase by 35.6% by 2045 to nearly 410,000; and the population in Martin County is expected to increase by 22.7% by 2045 to nearly 190,000. As the city and county populations increase, traffic will increase on area roadways as well. Based on data compiled for the Treasure Coast Regional Planning Model, by 2040, the Treasure Coast (including Martin, St. Lucie, and Indian River Counties) is expected to add an additional 104,000 workers, for an increase of 42%. St. Lucie County is projected to experience the largest gross gains in the workforce from 2010 to 2040. Key industries in the region set to experience the most growth include professional, health, retail, and construction.

Although freeway segments are all currently operating at an acceptable Level of Service (LOS) D or better and ramp roadways are currently operating under capacity with Volume-to-Capacity ratios less than 1.0, the Turnpike mainline will require three lanes of travel in each direction by year 2035 north of Port St. Lucie Boulevard, by year 2042 between SW Port St. Lucie Boulevard and SE Becker Road, and by year 2025 south of SE Becker Road. Four lanes will be required between SE Becker Road and SW Martin Highway by year 2033.

Establishment of two Freight Logistics Zones in St. Lucie County and around the Treasure Coast International Airport (TCI) and the Port of Ft. Pierce and a 1,200-acre Intermodal Logistics Center located just north of TCI have the potential to significantly increase freight traffic to and from these areas in northern St. Lucie County.

A total of 516 crashes occurred along the Turnpike within the project area during the 2012-2016 study period. Among the total 516 crashes, 325 were property damage only crashes, 182 were injury related crashes, and 16 crashes involved at least one fatality. Of the total crashes, 103 (20.0%) were due to front to rear, 79 (15.3%) involved hitting a concrete traffic barrier, 58 (11.2%) involved hitting a guardrail face, and 56 (10.9%) were due to sideswipe in the same direction, all of which are heavily influenced by congestion. Adding lanes to increase capacity and other operational enhancements at interchanges are anticipated to greatly improve the safety of the corridor. However, all portions of the Turnpike within the project limits contain crash rates lower than the statewide average for similar facility types.

During the 2012-2016 study period, one intersection in the project area that will be enhanced by proposed improvements at the SW Martin Highway interchange is the SW Martin Highway and SW High Meadow Avenue intersection. From 2012 to 2016, this intersection had 46 crashes, resulting in a crash rate higher than the statewide average for similar facilities (1.572 crashes per million vehicle travel miles). Of the 46 total crashes, the most common crash type was front to rear with 24 crashes (52.2%), followed by six angle crashes (13.0%), and six unknown crashes (13.0%) during those years. While there were no fatalities or severe injuries, there were 27 crashes which resulted in property damage only (58.7%), 15 crashes which resulted in minor injuries (32.6%), and four crashes which resulted in moderate injuries (8.7%).

Additionally, the Turnpike is identified as a “critical transportation facility” in the Treasure Coast Regional Planning Council’s (TCRPC) Evacuation Transportation Analysis as part of the Statewide Regional Evacuation Study Program. Critical transportation facilities play an important role for all evacuation scenarios. For the Evacuation Level A Operational Scenario, the most minor storm event evaluated, portions of this study corridor are identified as “critical segments with highest vehicles queues.” For Evacuation Levels B through E Operational Scenarios, with E being the highest level of evacuation, the entirety of the project area segments is identified as “critical segments with highest vehicle queues.”

1.3 Alternatives Analysis Summary

1.3.1 Preferred Mainline Alternative

This PD&E study involves the widening of Florida’s Turnpike (SR 91) mainline from four 12-foot-wide travel lanes to eight 12-foot-wide travel lanes by adding two general toll lanes in each direction and widening both the inside and outside shoulders from 10 feet to 12 feet. Due to the presence of Florida Gas Transmission (FGT) buried utilities on the east side of the roadway, all proposed widening will occur to the west. The proposed eight lane typical section is consistent throughout the entirety of the project limits. The proposed typical section includes four 12-foot-wide travel lanes in each direction, 12-foot-wide paved outside shoulders, 12-foot-wide paved inside shoulders, and a two-foot-wide concrete median barrier. The required typical section width for Florida’s Turnpike (SR 91) is 146 feet. The proposed mainline improvements fall within the available right-of-way and do not require right-of-way acquisition. A detailed graphic of Florida’s Turnpike (SR 91) mainline preferred typical section is provided below in **Figure 1-2**.

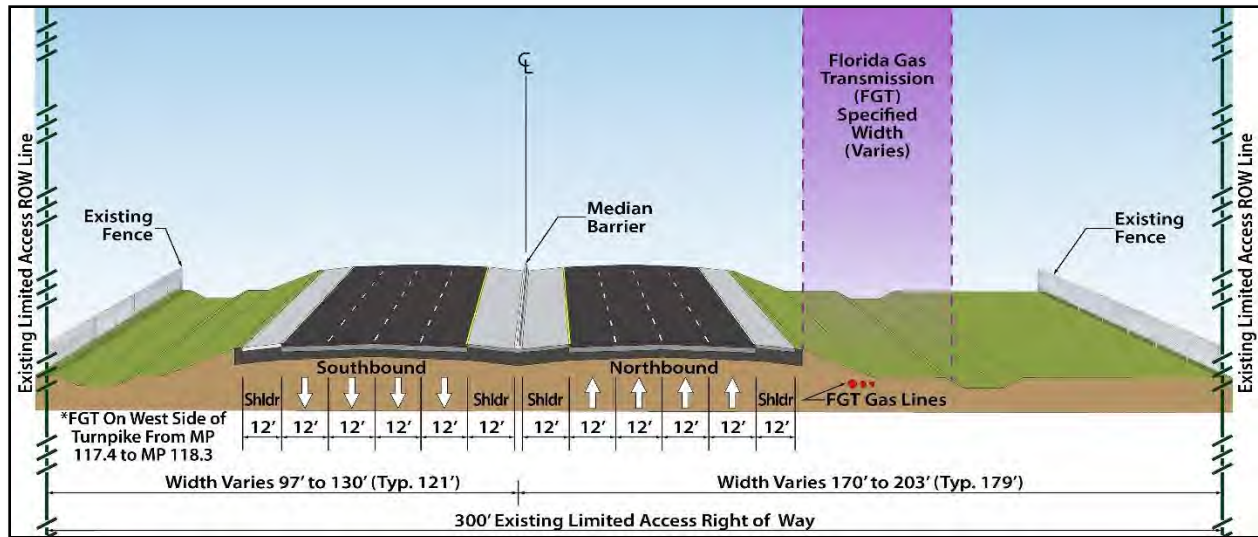


Figure 1-2: Mainline – Preferred Typical Section

1.3.2 Preferred Interchange Alternatives

In addition to proposed operational improvement alternatives at the four existing interchange locations; SW Martin Highway, SE Becker Road, SW Port St. Lucie Boulevard, and Okeechobee Road (SR 70), two proposed new interchange locations were also developed. The two new interchange locations were Crosstown Parkway (MP 145) and W Midway Road (MP 150). An *Interchange Feasibility Technical Memorandum – March 2020* was prepared for this project and provides more detail as to the development of alternatives for these two new interchange locations.

Two interchange alternatives were evaluated for each of the six interchange locations. **Table 1-1** provides a summary of the preferred interchange alternatives for the four existing interchanges and the two proposed interchanges. For a detailed description of each preferred interchange alternative, refer to *Section 6.1.9* of the *Preliminary Engineering Report*.

Table 1-1: Preferred Interchange Alternatives

Interchange	Mile Post (MP)	Type	Preferred Alternative
SW Martin Highway (SR 714)	MP 135	Full Interchange	Alternative 7B
SE Becker Road	MP 138	Full Interchange	Alternative 1
SW Port St. Lucie Boulevard	MP 142	Full Interchange	Alternative 2
Crosstown Parkway	MP 145	Partial Interchange (to/from south)	Alternative 3
W Midway Road	MP 150	Full Interchange	Alternative 1
Okeechobee Road (SR 70)	MP 152	Full Interchange	Alternative 4

1.3.3 No-build Alternative

The No-build Alternative is also being considered for this corridor. As part of this alternative, it is assumed that no capacity or safety improvements will be made to the mainline roadway or any existing interchanges. It is also assumed that no new interchanges will be constructed. This alternative will remain a viable alternative throughout the PD&E study.

1.3.4 Summary of Preferred Alternative

The Preferred Alternative was analyzed to determine the potential impacts to the social, cultural, natural, and physical environment compared to the No-build Alternative. **Table 1-2** summarizes the impacts associated with the Preferred Alternative. The project specific alternative evaluation between the Preferred Alternative and the No-build Alternative is shown in **Table 1-3**.

Table 1-2: Environmental Impact Summary of Preferred and No-build Alternatives

Item		Preferred Alternative	No-build Alternative
Social	Right of Way Impacts (acres)	64.0	0
	Number of Parcels Impacted	73	0
	Number of Business or Resident Relocations	4	0
	Number of Community Facilities Impacted	0	0
	Park and Recreational Facilities Impacted	1	0
Cultural	Native American Lands Impacted (acres)	0	0
	NRHP-Eligible Historical and Archaeological Sites Impacted (number)	0	0
Natural	Wetland Impacts (acres)	62.7	0
	Other Surface Water Impacts (acres)	367.1	0
	Essential Fish Habitat Impacts (acres)	6.1	0
	Floodplain Impacts (acres)	78.4	0
	Protected Species (potential)	Low	None
	Critical Habitat (acres)	0	0
Physical	Number of Contamination/Hazardous Waste Sites Impacted**	27	0
	Number of Noise Receptors Impacted	1,626	0
	Number of Potential Utilities Relocated	65	0

* NRHP = National Register of Historic Places

** total medium or high ranked sites within 500 feet of project area

Table 1-3: Alternative Evaluation Matrix

Comparison Metric	Preferred Alternative	No-build Alternative
Conforms with Transportation Plan	No	No
Maintains Florida's Turnpike LOS	Yes	No
Accommodates Future Travel Demands	Yes	No
Improves Evacuation Time	Yes	No
Improves Emergency Response Time	Yes	No
Additional Right of Way Required (acres)	64.0	0.00
Project Cost (in 2020 dollars)	\$1.6 billion	\$0.00

2.0 ENVIRONMENTAL IMPACT ANALYSIS

2.1 Social and Economic Impacts

The documentation of the existing and proposed conditions and the evaluation of the potential social impacts is provided in the following support document completed as part of this study.

- Sociocultural Effects Evaluation (SCE) Memorandum (February 2021)
- Conceptual Stage Relocation Plan (CSRP) (December 2020)
- Aesthetic Plan Report (November 2020)

2.1.1 Social

As part of the ETDM screening process, the United States Environmental Protection Agency (USEPA) commented that there are significant low-income, minority, linguistically isolated, and other special populations in the project corridor. To ensure compliance with Executive Order (EO) 12898, *Environmental Justice*, accommodations for limited English proficiency were provided during public involvement outreach and engagement efforts. The Preferred Alternative for the mainline envisions constructing the improvements in such a way as to “hold” the east side of the current typical section in order to accommodate the existing Florida Gas Transmission (FGT) pipeline. All lane additions are expected to be constructed within the existing right-of-way for the mainline. Therefore, no physical impacts or relocations are expected to residents or businesses adjacent to the existing mainline. Additionally, there are four existing interchanges within the project limits that are recommended to be improved, and two new interchanges proposed within the project area. A total of 64 acres of right-of-way acquisition is required for the six interchange locations. A total of three business relocations and one residential relocation will occur as a result of the proposed interchange improvements. Moreover, the improved access to the existing four interchanges, and the additional access at the two new proposed interchanges is expected to provide residents with better access to the Turnpike, which may improve economic choices for residents and businesses within the corridor. The project is not expected to create new barriers to social interaction for the communities surrounding the project, nor detract from community goals or special designations. The addition of the new interchanges and the improvement of the existing interchanges along the corridor should provide equal or better economic opportunities for residents and businesses in the community, as enhanced access to such a significant transportation resource is provided. The improvements will also assist in evacuation of residents and visitors during a hurricane emergency.

Additionally, a noise study report and air quality screening report have been developed as part of the PD&E Study, which complies with Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*. These reports are discussed in detail in sections 2.4.1 Highway Traffic Noise, and 2.4.2 Air Quality. The proposed project is located in the counties of Palm Beach, Martin, and St. Lucie, an area currently designated as being in attainment for particulate matter (2.5 and 10 microns in size) and carbon monoxide (CO). The project is not forecasted to change the volume of motor vehicles or the vehicle-miles-traveled (VMT) within any of the evaluated segments by more than 11 percent and, when considering the total VMT, would result in an approximate two percent reduction in the VMT within the project corridor which would correspondingly decrease Mobile Source Air Toxics (MSATs). Moreover, U.S. EPA regulations for vehicle engines and fuels will result in a decline in MSAT emissions over the next several decades. The reduction in MSATs with

the project, along with the reduction in emissions due to the regulations, will result in lower future background levels of the pollutants.

For the year 2045 Build condition, noise levels were modelled using the Federal Highway Administration's (FHWA) Traffic Noise Model (TNM) at 3,134 noise sensitive sites. Noise levels at 1,518 residences and 108 non-residential "special land use" sites, are predicted to approach or exceed the Noise Abatement Criteria (NAC) for the year 2045 Build Alternative and therefore considered "impacted". No noise sensitive sites are expected to experience a substantial increase (15 decibels, using an "A" scale weighting) in traffic noise compared to existing conditions.

Analyses were performed of the impacted locations to determine if noise abatement was potentially feasible and reasonable under FDOT policy. The noise barrier analysis performed to date indicates that noise barriers could potentially provide reasonable and feasible noise abatement for 1,207 of the 1,518 impacted residences, as well as provide a 5 dB(A) noise reduction benefit to 1,236 non-impacted residences. Noise abatement was not determined feasible and reasonable for any of the 108 impacted special use sites; however, some of the special use locations will receive incidental benefits from noise barriers for the residential areas. Noise barriers at 14 locations were determined to be potentially feasible and reasonable and will be given further consideration during the Design phase of this project. Noise abatement will be further considered during the design phase of the project.

2.1.2 Economic

The proposed improvements would support economic vitality through freight and goods movement by reducing congestion and improving access at the existing interchanges, and enhancing access through the implementation of the two new interchanges. By improving the connectivity between major trucking and freight routes, rail, ports, and distribution centers, the project will increase the ability to provide goods and products inside and outside the region. The improved connectivity is expected to translate into job opportunities within the region to support freight and logistics centers.

The proposed improvements also create a better overall transportation system linkage, as well relieving congestion on the local system thus improving access to these areas for residents living in the surrounding neighborhoods. The project is not anticipated to impact any of the transit services that cross over the Turnpike mainline and will not negatively affect current transportation modes that serve special needs population, nor create any disproportionate effects on these populations.

2.1.3 Land Use Changes

The project has minimal potential for negative effects on the land use along of the corridor. Improvements to the mainline can be built within the existing right-of-way. It is expected that right-of-way will need to be acquired for future stormwater management pond sites and proposed interchanges; however, relative to the overall project size, additional right-of-way needs will be minimal and will have little effect on the overall land use along the project corridor.

Because of the limited access nature of the mainline, the project should have minimal effects on adjacent future land use. At the existing interchanges, the improved access should help existing and future commercial and residential land use elements. The proposed new interchanges will provide opportunity for land use changes in the interchange area. FTE is coordinating these new interchange access points with the appropriate local governments so that local comprehensive plans and Capital Improvement Plan can be modified, as necessary. For a detailed

discussion of the existing and proposed land uses along the project corridor see the Sociocultural Effects Evaluation Memorandum (February 2021) completed for this project.

2.1.4 Mobility

Mobility is the ability of residents to move freely about their community through a variety of transportation modes. Extra emphasis is on providing improved transportation for non-driving and transit dependent populations (i.e. low-income, elderly, disabled, and children) so that normal daily activities can be carried out in their neighborhoods more easily.

The project will improve mobility in the project and adjoining area by reducing congestion and improving access. The project provides an opportunity to enhance mobility for all modes, including pedestrians, bicyclist, and transit users, for the businesses and residents in the area. Local transportation providers have an opportunity to revise and enhance their services in concert with the proposed improvements.

2.1.5 Aesthetic Effects

Proposed construction of improvements to Florida's Turnpike (SR 91) mainline, including modifications to four existing interchanges and addition of two new interchanges, will not involve changes to the aesthetic character compatibility, community values, sensitive areas, or visual features within the project area. In general, the project will retain the current aesthetic aspects of the corridor.

As part of this PD&E Study, an *Aesthetic Plan Report* has been developed that will provide guidance for aesthetics through the design, construction, and maintenance stages of the project. FTE has invested heavily in creating a unique aesthetic brand that greatly enhances the traveler's experience using the Mainline Toll System (SR 91). The importance of aesthetics was emphasized when the FTE created the "*Landscape Program Master Plan*" for all Turnpike facilities in Florida. Much of this philosophy to achieve a successful, predictable and efficient Landscape Program developed in this *Landscape Program Master Plan* is being incorporated into this study.

2.1.6 Relocation Potential

A *Conceptual Stage Relocation Plan* (December 2020) has been developed, which identifies the impacts to businesses and resident that may require relocation due to the proposed project. The purpose of the *Conceptual Stage Relocation Plan* is to identify community characteristics, analyze the impact of the project on the community, and identify residences and businesses that would be affected by the project and any special relocation needs.

Based on interchange designs and stormwater pond requirements for the proposed widening, the corridor may require business and residential relocations.

Three residential relocations are anticipated to accommodate the Preferred Alternative. Two of the residential relocations are located at the Florida's Turnpike (SR 91)/SW Port St. Lucie Boulevard interchange. The third residential relocation is located at the Florida's Turnpike (SR 91)/Okeechobee Road (SR 70) interchange.

There is one potential business relocation anticipated to accommodate the Preferred Alternative. The business relocation is located at the Florida's Turnpike (SR 91)/SW Martin Highway interchange. Information about the anticipated residential and business relocations can be found in the project's *Conceptual Stage Relocation Plan*.

2.2 Cultural Resources

The documentation of the existing and proposed conditions and the evaluation of the potential effects of the project on Cultural Resources are provided in the following support document completed as part of this study.

- Cultural Resources Assessment Survey (CRAS) (September 2020)

A *Cultural Resource Assessment Survey* (CRAS) was prepared to identify cultural resources within the project area of potential effect (APE) and assess the resources in terms of their eligibility for listing in the National Register of Historic Places (National Register) according to the criteria set forth in 36 Code of Federal Regulations (CFR) Section 60.4. The State Historic Preservation Office (SHPO) concurred with the CRAS on October 26, 2020. The archaeological APE for this project is defined as the geographic limits of the proposed project improvements, while the historic APE is defined as 150 feet outward from the proposed project improvements.

The CRAS was forwarded to the SHPO for consultation and review. Copies of the SHPO concurrence with the findings and recommendations of the CRAS (letter dated September 16, 2020, concurrence dated October 26, 2020) is included as **Appendix D**.

2.2.1 Historic Sites/Districts

The historic resources survey resulted in the identification of 31 previously recorded historic resources; consisting of 15 canal segments, eight road segments, one railroad segment, six buildings, and one bridge, within the project limits. The survey also resulted in the identification of 38 unrecorded historic resources, including nine newly identified buildings, 28 newly identified bridges, and a newly identified segment of Florida's Turnpike (SR 91) mainline within the project area.

All but two of the historic linear resources have either been previously determined ineligible for National Register or are considered ineligible for the National Register based on the results of this survey.

Portions of the St. Lucie Canal and FEC Railway – Lake Harbor Branch have been determined eligible in other segments of the current APE. Field survey reveals that these two resources maintain their historic associations and integrity within the current project APE, and are therefore considered eligible for the National Register within the project APE.

All six of the previously recorded historic buildings have been previously determined by the SHPO to be National Register-ineligible. Field survey and historical research did not reveal any additional information to re-evaluate these resources, and therefore, they remain ineligible for the National Register.

Field survey resulted in the identification of nine newly identified historic buildings within the current project APE. All of the nine buildings are of a common style and type in South Florida and lack historical significance. Therefore, they are ineligible for individual listing in the National Register under Criteria A, B, C, or D.

The 29 bridges associated with Florida's Turnpike (SR 91) that are located within the current project APE are common types that were popular in the mid-twentieth century and were built throughout the US. Therefore, they are considered ineligible for the National Register under Criteria A, B, C, or D, individually and as a resource group.

During the review of the project APE, the surrounding area was also reviewed to identify any potential National Register-eligible historic districts. The buildings surrounding the APE exhibit common construction techniques and

designs from their respective area of construction. Further, most buildings exhibit some form of exterior alteration that comprises historic integrity. Historic research also did not reveal any significant historic associations. Therefore, there are no potential historic districts within, or partially within, the current project APE.

2.2.2 Archaeological Sites

No archaeological sites were identified within the archaeological APE. Background research, a pedestrian survey, and extensive subsurface testing conducted during the current survey determined that large portions of the archaeological APE have been subjected to land modification associated with the construction of Florida's Turnpike (SR 91) mainline and its numerous interchanges, the surrounding development, and the installation of underground utilities. While subsurface testing was not feasible within areas of existing hardscape or underground utility corridors, 156 shovel tests were excavated throughout the archaeological APE, and no cultural material was identified within any of the tests. The results of the current survey confirmed a low potential for encountering intact archaeological resources within the archaeological APE.

2.2.3 Recreational Areas

Between Indiantown Road (SR 706) and north of Okeechobee Road (SR 70), there are thirteen (13) parks, preserves, and natural areas within the area surrounding the project (see **Appendix F**). The project is adjacent to substantial public lands that serve as important habitat and are also used for recreation. Below is a brief description of the recreational areas that are adjacent to and/or cross Florida's Turnpike (SR 91) mainline, as well as their potential to be impacted by the proposed improvements.

The southern end of the project is surrounded by Loxahatchee River Natural Area, Cypress Creek Natural Area, and Riverbend Park to the west and Jonathan Dickinson State Park to the east. This area includes various recreational trails and navigable waterways. A paddling trail, along the Loxahatchee River, crosses underneath Florida's Turnpike (SR 91) mainline, just north of MP 117.5. The Loxahatchee River Management Area Multi-Use Trail runs adjacent to the mainline for approximately 0.25 miles, south of the Loxahatchee River. The Cypress Creek Management Area "Ocean to Lake Trail," crosses underneath Florida's Turnpike (SR 91) mainline, just north of MP 119.5.

Halpatiokee Regional Park and Atlantic Ridge Preserve State Park are located in the southeast quadrant of the interchange between I-95 and SW Kanner Highway. They include biking, hiking, and paddling trails, with one paddling trail crossing underneath the Thomas B. Manuel Bridge, along the St. Lucie River. Phipps Park and St. Lucie North Campgrounds are located on either side of the St. Lucie River, on the west side of Florida's Turnpike (SR 91) mainline. There is an existing boat ramp, underneath the southern end of the Thomas B. Manuel Bridge, which can be accessed from Phipps Park.

The City of Port St. Lucie is planning to construct an adventure park in the northeast quadrant of the intersection of SW Cameo Boulevard and Crosstown Parkway (see **Appendix C** – Preferred Alternative Concept Plans, sheet 55). The Preferred Alternative interchange for Crosstown Parkway includes a fishhook ramp, which ties into the northern terminus of SW Cameo Boulevard. The adventure park is planned to be constructed on the land adjacent to SW Cameo Boulevard to the west, the proposed fishhook ramp to the north, Florida's Turnpike (SR 91) mainline to the east, and Crosstown Parkway to the south. Florida's Turnpike Enterprise has coordinated with the City of Port St.

Lucie, throughout the duration of the PD&E study, to develop a Preferred Alternative that works in conjunction with the proposed adventure park.

The City of Port St. Lucie's Winterlakes Neighborhood Park is located within the southwest quadrant of the Florida's Turnpike (SR 91) mainline and Midway Road crossing (see **Appendix C** – Preferred Alternative Concept Plans, sheet 65). This park abuts the existing mainline right-of-way and construction of a new interchange with Midway Road will result in impacts to this park. Construction of a new southbound on-ramp to Florida's Turnpike (SR 91) from Midway Road will require approximately 0.60 acres of additional right-of-way from this park; however, these impacts are within a drainage buffer zone located between Florida's Turnpike (SR 91) and proposed park facilities and will not result in impacts to proposed park facilities. Florida's Turnpike Enterprise will continue to coordinate with the City of Port St. Lucie to minimize these impacts to the greatest extent possible.

The northern end of the project is surrounded by the Gordy Road Recreation Area and Ten Mile Creek Preserve to the west and George LeStrange Preserve to the east. There are walking trails within all three areas, although none of these recreational facilities cross Florida's Turnpike (SR 91) mainline. Paddling along Ten Mile Creek is allowed, west of Florida's Turnpike (SR 91) mainline.

With the exception of the Winterlakes Neighborhood Park, the proposed improvements are not anticipated to impact the recreational areas mentioned above. Temporary impacts may occur during construction, at the locations where facilities cross underneath Florida's Turnpike (SR 91) mainline. Refer to *Section 2.4.5* of this document, for information on the procedures to be followed during construction to minimize impacts to the recreational areas.

There are five schools with sports complexes and dedicated sports parks adjacent to Florida's Turnpike (SR 91) mainline. The majority of the sports facilities are located adjacent to the existing limited access right-of-way; however, no right-of-way will be needed from these facilities, therefore they are not expected to be directly impacted by the proposed improvements. The facilities include Jupiter Community Park, Southfork High School, Citrus Grove Park, Jessica Clinton Park, and Turtle Run Park. St. Lucie West Centennial High School is located in the northwest quadrant of the proposed Crosstown Parkway partial interchange concept. There are no proposed impacts to the existing facilities; however, two new ramps (the southbound on ramp and northbound off ramp) are proposed to tie into SW Cameo Boulevard, along the east side of the high school.

2.3 Natural Environment

The documentation of the existing and proposed conditions and the evaluation of the project's potential effects on the natural environment are provided in the following support documents completed as part of this study.

- Natural Resources Evaluation (NRE) Report (May 2021)
- Pond Siting Report (PSR) (June 2020)
- Location Hydraulics Report (LHR) (June 2020)
- Water Quality Impact Evaluation (WQIE) (December 2020)

2.3.1 Wetlands and Other Surface Waters

Potential direct impacts to wetlands and surface waters were assessed for the Preferred Alternative. Wetland and surface water habitat types to be impacted by the proposed improvements include natural and manmade streams

and waterways, reservoirs, mixed wetland hardwoods, exotic wetland hardwoods, cypress, hydric pine, wetland forested mixed, wetland scrub, and freshwater marshes. Impacts associated with the Preferred Alternative total 429.81 acres and include, 14.11 acres of forested wetlands, 48.44 acres of scrub shrub wetlands, and 0.12 acres of herbaceous wetlands (total 62.67 acres of wetlands), and 9.30 acres of natural streams and waterways (natural surface waters) and 357.84 acres of man-made surface waters (total 367.14 acres of surface waters). Functional loss was calculated by wetland and natural surface water habitat types for the Preferred Alternative using the Uniform Mitigation Assessment Method (UMAM). Construction of the Preferred Alternative results in a loss of 39.25 functional units. These scores are subject to agency review and may change during the permitting process.

Indirect impacts resulting from construction of the Preferred Alternative include secondary wetland and surface water impacts in the proposed project area. These impacts are anticipated to be minor since the wetlands and surface waters are already associated with the existing roadway and interchanges. Habitats along the edge of the existing roadway and interchanges were disturbed when these areas were constructed and have since experienced constant disturbance from right-of-way maintenance and exposure to nuisance/exotic species. This “edge effect” will remain with the construction of the proposed improvements. Therefore, these disturbed edges are not expected to increase in areas where the roadway and interchanges already exist.

The ETAT evaluated the project’s effects on various natural resources, including wetlands. ETAT comments are summarized in ETDM Summary Report in **Appendix B**. A pre-application meeting was conducted with the SFWMD, USACE, NMFS, and FDOT on November 16, 2017, providing an overview of the project, discussing existing permits, and necessary permit requirements and approvals. Follow-up correspondence with the SFWMD took place in July 2017 and July 2020 to clarify permit requirements and approvals at specific waterway crossing locations. Coordination with the FDEP took place on January 21, 2020 for a sovereign submerged lands determination for potential state-owned lands within the project area.

Wetland impacts, which will result from the construction of this project, will be mitigated pursuant to Section 373.4137, F.S. to satisfy all mitigation requirements of Part IV Chapter 373, F.S. and 33 U.S.C. 1344. Compensatory mitigation for this project will be completed through the use of mitigation banks and any other mitigation options that satisfy state and federal requirements.

While the project will result in wetland impacts, the implementation of a mitigation plan that satisfies all requirements of Part IV Chapter 373, F.S. and 33 U.S.C. 1344 will offset these impacts and construction of the project should not result in substantial impacts to wetlands.

2.3.2 Aquatic Preserves and Outstanding Florida Waters

The Loxahatchee River-Lake Worth Creek Aquatic Preserve is located downstream (eastward) of the project area. The Loxahatchee River and Cypress Creek are both a part of this preserve; however, both cross the project area upstream of, and outside of, the preserve boundary. The proposed project has potential to affect the preserve, as it is located downstream of the Turnpike.

The waters of the Loxahatchee River at the crossing of Florida’s Turnpike (SR 91) mainline are listed as an Outstanding Florida Water (OFW) pursuant to Rule 62-302.700(2)(d), F.A.C., through its designation as a National

Wild and Scenic River. The Loxahatchee River is specifically identified as an OFW in Rule 62-302.700(9)(j), F.A.C.

The project must meet the more stringent water quality criteria implemented to protect OFWs. These criteria are identified in the Environmental Resource Permit Applicant's Handbook Vol. I, Section 10, and will be addressed during project design and permitting. The proposed project will include a stormwater management system, which will be designed in compliance with applicable water quality criteria to prevent degradation of water resources and habitat quality in and around the Loxahatchee River crossing.

2.3.3 Water Resources

Water Quality

This project will require water quality treatment in accordance with the following SFWMD regulations:

Per SFWMD ERP Applicant's Handbook, Volume II, Section 4.2.1: Retention, detention, or both shall be provided for one of the three following criteria or equivalent combination thereof:

- 1) Wet detention volume shall be provided for the first inch of runoff from the developed project or the total runoff of 2.5 inches times the percentage of imperviousness, whichever is greater.*
- 2) Dry detention volume shall be provided equal to 75 percent of the above amounts computed for wet detention.
- 3) Retention volume shall be provided equal to 50 percent of the above amounts computed for wet detention.

*In addition to the criteria provided above, SFWMD confirmed that the required water quality volume is 2.5 inches over the new impervious area in areas of reconstruction and widening, but clarified that full treatment of new and existing impervious should be provided, if feasible.

Per SFWMD ERP Applicant's Handbook, Volume II, Section 4.1.3: Systems that have direct discharge to an OFW must provide an additional fifty percent of the required treatment.

Per SFWMD ERP Applicant's Handbook, Volume II, Section 4.1.4: Systems discharging to a waterbody that has been identified as impaired by the Department of Environmental Protection (DEP) shall be designated to provide a net improvement. With the implementation of a stormwater management plan that meets the SFWMD requirements, the construction of the project should not have a substantial impact on water quality.

There are no existing permitted stormwater management facilities along the mainline; however, the interchanges have permitted stormwater ponds within the infield areas. Proposed stormwater management facilities are recommended to accommodate the proposed widening and interchange improvements. The *Pond Siting Report* (May 2020) estimates the volume required to mitigate FDOT and SFWMD stormwater requirements and identifies right-of-way for any necessary off-site stormwater management facilities. Three pond site alternatives were identified for each basin between milepost (MP) 133 and MP 142. Pond sizing calculations were provided for the remainder of the basins within the project limits. Given the seasonal high groundwater table (SHGWT) throughout the project corridor, wet detention ponds are recommended. The Loxahatchee River is classified as an OFW, and any direct discharge to the river requires additional treatment.

Thirty pond sites were evaluated for the project limits between MP 133 and MP 142. The pond sites were evaluated on the basis of several factors including, total cost of each alternative, FEMA flood zone, wetland impacts, habitat and environmental impacts, as well as ease of hydraulic connectivity to the pond site. The preferred pond alternatives were selected based on the sites that could best be described based on these parameters.

From SE Becker Road to the C-24 Canal, Florida's Turnpike (SR 91) mainline is bordered by FGT on the east and a drainage canal on the west. This condition also exists from MP 121.9 to MP 125.4 and from MP 146.4 to MP 147.7, which are outside the limits of the pond siting but within the limits of the PD&E study. Given the design constraints, it is recommended to convert the existing ditch over the FGT line to a treatment swale. It is recommended that this approach be coordinated with FGT early in the design phase to ensure it is a feasible option.

Water Quantity

The proposed widening of the existing Turnpike mainline and associated interchange improvements will result in impacts to the adjacent FEMA floodplains. The anticipated impacts to the 100-year floodplain due to the proposed roadway widening were estimated to be 78.3 acres; however, the impact volume from the proposed widening and necessary compensation will need to be assessed during the design phase, when survey of the existing ground, geotechnical data for the seasonal high water table (SHWT), and proposed cross sections are available. Off-site floodplain compensation sites, on-site swales, and infield storage areas should be evaluated to provide compensation for floodplain impacts.

The necessary culvert and bridge culvert extensions will have transverse impacts on the existing floodplains that will need to be further analyzed during the design phase. The proposed bridge widenings over the regulatory floodways at Loxahatchee River, Roebuck Creek, and Ten Mile Creek will require a No-Rise Certification from FEMA. The proposed improvements will have both transverse and longitudinal encroachments on the Loxahatchee River and Roebuck Creek, but only transverse encroachments area anticipated at Ten Mile Creek.

Replacement drainage structures for this project are limited to hydraulically equivalent structures which are not expected to increase the backwater surface elevations. Since flooding conditions in the project area are inherent in the topography or are a result of other outside contributing sources, and there is no practical alternative to eradicate flooding problems in any significant amount, existing flooding will continue, but will not increase as the result of the construction of this project.

The project will not affect existing flood heights or floodplain limits. There will be no significant change in the potential for interruption or termination of emergency service or emergency evacuation routes as the result of construction of this project. Therefore, it has been determined that this encroachment is not substantial.

2.3.4 Wild and Scenic Rivers

Projects involving Wild and Scenic Rivers require consultation with the National Park Service (NPS) in accordance with Section 7 of the Wild and Scenic Rivers Act (WSRA). The NPS is the administrating agency responsible for making a Section 7(a) determination for the Loxahatchee River crossing. The NPS must conclude, based on information provided by the project proponent that the project will not have a "direct and adverse" effect on the free-flowing condition, water quality, or the outstandingly remarkable values for which the Loxahatchee River was designated.

Florida's Turnpike (SR 91) mainline crosses the Loxahatchee River within a Wild and Scenic River segment categorized as "Scenic." This segment extends from north of Indiantown Road (SR 706) to north of the Florida Turnpike/I-95 alignment. This segment is described in the National Park Service (NPS), Final Wild and Scenic River Study/Final Environmental Impact Statement (July 1984), for the Loxahatchee River, as largely undeveloped with many values that support its inclusion in the National Wild and Scenic River System. The Loxahatchee River has special designations affording it extra protections to maintain water quality and habitat viability. These designations include its status as an Outstanding Florida Water, including in the Loxahatchee River Lake-Worth Aquatic Preserve, and Florida's first component of the National Wild and Scenic River System.

Initial coordination meetings with the NPS occurred on February 15, 2018 and September 25, 2020, at which the proposed project was presented and discussed. As the project moves forward, further evaluation in accordance with Section 7(a) of the WSRA and additional coordination with the NPS will be required.

2.3.5 Floodplains

Federal Emergency Management Agency (FEMA) floodplains are prevalent throughout the project corridor. There are three regulatory floodways within this study limits: Loxahatchee River, Roebuck Creek, and Tenmile Creek. The proposed widening of the Florida's Turnpike (SR 91) mainline, from four to eight lanes and associated interchange improvements, will result in impacts to the adjacent FEMA floodplains. The approximate location of floodplains along the project corridor are provided in the Location Hydraulics Report (April 2021) developed for this project. The anticipated area of floodplain impact due to the proposed roadway widening was estimated to be approximately 78.4 acres; however, the impact volume from the proposed widening and necessary compensation will need to be assessed during the design phase, when survey of the existing ground, geotechnical data for the seasonal high water table (SHWT), and proposed cross sections are available. Off-site floodplain compensation sites, on site swales, and infield storage areas should be evaluated to provide compensation for the floodplain impacts.

2.3.6 Coastal Barrier Resources

No Coastal Barrier Resources are present within the project area. The proposed project will have no effect on these resources.

2.3.7 Protected Species and Habitat

Based on the evaluation of collected data, field reviews, Florida Natural Areas Inventory (FNAI) data, and database searches, multiple federal and state protected species were considered as having the potential to occur within or adjacent to the project area. Protected species documented occurrence locations were obtained from project specific requests and publicly available data sources from the United States Fish and Wildlife Service (USFWS), FNAI and Florida Fish and Wildlife Conservation Commission (FWC). For a species to be considered to have a potential to occur, the project area must be within the species' distribution range and potentially suitable habitat must occur. An effect determination was made for each federal and state protected species based on an analysis of the potential impacts of the Preferred Alternative on each species and technical assistance meetings held with the USFWS, National Marine Fisheries Service (NMFS) and the FWC.

The project corridor and adjacent areas were evaluated for the presence of federal and/or state protected species and their suitable habitat in accordance with Part 2, Chapter 16 of the PD&E Manual. **Tables 2-1** and **2-2** summarize

the effect determinations that have been made for each federal and state protected species based upon their probability ranking and the implementation measures and/or commitments (see Section 2.3.7.1) to offset any potential impacts to each species.

Table 2-1: Federal Protected Species Effect Determination

Project Effect Determination	Federal Listed Species
"No Effect"	American Alligator (<i>Alligator mississippiensis</i>)
	Okeechobee Gourd (<i>Cucurbita okeechobeensis</i>)
"May affect, but is not likely to adversely affect"	Florida Grasshopper Sparrow (<i>Ammodramus savannarum floridanus</i>)
	Eastern Indigo Snake (<i>Drymarchon couperi</i>)
	Wood Stork (<i>Mycteria americana</i>)
	Smalltooth sawfish (<i>Pristis pectinata</i>)
	West Indian Manatee (<i>Trichechus manatus</i>)
"May affect"	Florida Scrub-jay (<i>Aphelocoma coerulescens</i>)
	Crested Caracara (<i>Caracara cheriway</i>)
	Florida Bonneted Bat (<i>Eumops floridanus</i>)
	Red-cockaded Woodpecker (<i>Leuconotopicus borealis</i>)
	Everglade Snail Kite (<i>Rostrhamus sociabilis plumbeus</i>)

Table 2-2: State Protected Species Effect Determination

Project Effect Determination	State Listed Species
"No effect anticipated"	Golden Leather Fern (<i>Acrostichum aureum</i>)
	Meadow Jointvetch (<i>Aeschynomene pratensis</i> var. <i>pratensis</i>)
	Many-flowered Grass-Pink (<i>Calopogon multiflorus</i>)
	Piedmont Joint Grass (<i>Coelorachis tuberculosa</i>)
	Cutthroat Grass (<i>Coleataenia abscissa</i>)
	Florida Tree Fern (<i>Ctenitis abscissa</i>)
	Cublet Fern (<i>Dennstaedtia bipinnata</i>)
	Night-scented Orchid (<i>Epidendrum nocturnum</i>)
	Redberry Eugenia (<i>Eugenia confusa</i>)
	Coastal Vervain (<i>Glandularia maritima</i>)
	Spreading Pinweed (<i>Lechea divaricata</i>)
	Celestial Lily (<i>Nemastylis floridana</i>)
	Giant Sword Fern (<i>Nephrolepis biserrata</i>)
	Scrub Bluestem (<i>Schizachyrium niveum</i>)
	Ray Fern (<i>Schizaea pennula</i>)
	Southern Ladies'-tresses (<i>Spiranthes torta</i>)
	Banded Wild-pine (<i>Tillandsia flexuosa</i>)
	Scentless Vanilla (<i>Vanilla mexicana</i>)
"No adverse effect anticipated"	Redmargin Zephyrlily (<i>Zephyranthes simpsonii</i>)
	Hand Fern (<i>Ophioglossum palmatum</i>)

	Toothed Maiden Fern (<i>Thelypteris serrata</i>)
	Gopher Tortoise (<i>Gopherus polyphemus</i>)
	Florida Pine Snake (<i>Pituophis melanoleucus mugitus</i>)
	Florida Sandhill Crane (<i>Antigone canadensis pratensis</i>)
	Florida Burrowing Owl (<i>Athene cunicularia floridana</i>)
	Little Blue Heron (<i>Egretta caerulea</i>)
	Tricolored Heron (<i>Egretta tricolor</i>)
	Southeastern American Kestrel (<i>Falco sparverius paulus</i>)
	Roseate Spoonbill (<i>Platalea ajaja</i>)
	Least Tern (<i>Sternula antillarum</i>)

2.3.7.1 Implementation Measures and Commitments

Based on the field and literature reviews outlined in this report, federal- and state-protected species have the potential to occur within and adjacent to the project area. In order to assure that the proposed project will not adversely impact these species, the FTE will adhere to the following:

Implementation Measures

- As determined necessary through agency technical assistance, the FTE will perform surveys for the species discussed in this report and other wildlife species during the project design phase to ascertain the involvement, if any, of protected species. Species specific survey requirements will be considered for, but not limited to, the Florida scrub jay, crested caracara, red-cockaded woodpecker, Everglade snail kite, and southeastern American kestrel.
- During the design and permitting phases of this project, a Wood Stork Foraging Analysis per USFWS methodology will be conducted to determine the amount of biomass lost from wetland and surface water impacts. Impacts to suitable foraging habitat for the federally protected wood stork will be mitigated through the purchase of credits from a U.S. Fish and Wildlife Service-approved mitigation bank pursuant to Section 373.4137, F.S. or as otherwise agreed to by the FTE and the appropriate regulatory agencies.
- A full acoustic and roost survey for bats in accordance with current federal regulatory guidance, will be completed prior to permitting to verify activity and occupancy status of the Florida bonneted bat. Currently, the USFWS consultation area for the Florida bonneted bat is located south of the St. Lucie Canal (C-44 Canal).
- As needed, during the design and permitting phases of this project, a general plant survey will be conducted and if any federally or state protected plant species are found within 25 feet of construction limits, coordination will occur with the USFWS/FDACS to secure any necessary permits.
- During the design and permitting phase of this project, gopher tortoise surveys will be conducted and if any burrows are found within 25 feet of construction limits, coordination will occur with FWC to secure any necessary permits for gopher tortoises and associated commensal species before construction.
- If a bald eagle nest is identified within 660 feet of the proposed project area, the FTE will reinstate technical assistance with the USFWS to secure all necessary approvals prior to the start of construction.

- During the design and permitting phases of this project, the FTE will conduct surveys to identify any osprey nests within the project area. If nest removal is deemed necessary, the FTE will remove nest(s) when they are inactive (i.e., without eggs or flightless young).
- The USFWS Standard Protection Measures for the Eastern Indigo Snake will be implemented to assure that the Eastern indigo snake will not be adversely impacted by the project.
- The Standard Manatee Construction Conditions for In-water Work (2011) will be implemented during construction at waterway crossings to prevent adverse impacts to the West Indian manatee

Commitments

- If protected plants are observed during future surveys conducted prior to construction, the FTE will coordinate with FDACS and public parks (e.g., Jonathan Dickinson State Park) prior to construction for possible relocation of protected plants.
- If Florida sandhill crane nests are observed during future surveys conducted prior to construction, then a 400-foot buffer will be implemented if construction occurs during the nesting season (January through July). The FTE will coordinate with the FWC during the project construction phase, if necessary.

2.3.8 Critical Habitat

The project area was evaluated for the occurrence of Critical Habitat as defined by the Endangered Species Act of 1973, as amended, and 50 CFR Part 424. The USFWS is the authority, as a federal agency, to protect critical habitat from destruction or adverse modification of the biological or physical constituent elements essential to the conservation of listed species. Critical Habitat is defined as the specific areas within the geographical area occupied by a species on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protections.

Based on a review of the project area, there is no Critical Habitat for any listed species within the project area. As a result, the project will not result in the destruction or adverse modification of Critical Habitat.

2.3.9 Essential Fish Habitat

Construction of the proposed improvements has the potential to impact a total of 6.10 acres of designated Essential Fish Habitat (EFH), including 3.49 acres of forested wetlands and 2.61 acres of surface waters. Potential impacts include direct impacts such as fill placement for roadway widening and bridge approaches, pile placement, bridge pier construction and indirect impacts such as shading of vegetated habitats, principally forested wetlands. For a detailed discussion of potential project effects on Essential Fish Habitat, please see the Natural Resources Evaluation (NRE) (May 2021) developed for this project. Potential impacts to EFH, as well as differentiation between direct and indirect impacts, can be further assessed at each waterway crossing as bridge concepts are advanced, and the project proceeds through the design process.

The potential impacts to EFH in the project area have been avoided and minimized to all extent practicable. This has been accomplished by locating the widening and/or replacement of bridge structures as close as possible to existing structures and utilizing existing filled causeways for bridge approaches and roadway to the extent feasible. Stormwater treatment is an essential feature of the proposed project. Surface water runoff from additional impervious areas will be treated to prevent increased water quality degradation as a result of the proposed improvements. Due to the incorporation of stormwater treatment facilities, the proposed project will not result in the degradation of water quality in the identified EFH. Additionally, sedimentation and erosion control measures

(i.e., silt fences, turbidity barriers) will be utilized during construction to minimize soil exposure and siltation into the water column, further reducing adverse impacts to EFH.

The proposed impacts to areas of EFH within the Preferred Alternative do not contain any submerged aquatic vegetation and will occur in areas that have been previously disturbed by construction of the existing roadway, culverts, and bridge crossings. Additionally, the EFH within the project area is comprised of the furthest landward extent of the designated EFH and the salinity regimes do not meet the requirements for the majority of the South Atlantic Fish Management Council (SAFMC) managed species. Further, due to the topography of the forested wetland systems, portions of these habitats exist at an elevation that may preclude or substantially limit access and recruitment of life history stages of managed species. As a result, it is anticipated that the proposed project will not have significant direct or indirect adverse impacts on EFH. Based on this information, no populations of SAFMC or Atlantic States Marine Fisheries Commission (ASMFC) managed species with potential to occur within the project area are expected to be adversely affected by the proposed project. The project is anticipated to have a **“more than minimal but less than substantial”** potential for adverse effects on EFH.

2.4 Physical Environment

The documentation of the existing and proposed conditions and the evaluation of the potential effects to the physical environment are provided in the following support documents completed as part of this study.

- Air Quality Technical Memorandum (October 2020)
- Contamination Screening Evaluation Report (CSER) (February 2021)
- Utilities Assessment Package (UAP) (February 2021)
- Noise Study Report (NSR) (June 2021)

2.4.1 Highway Traffic Noise

A traffic noise analysis documented in a Draft PD&E Noise Study Report (NSR) dated June 2021 was performed in accordance with Title 23, Code of Federal Regulations, Part 772 (23 CFR 772), *Procedures for Abatement of Highway Traffic Noise and Construction Noise* following methodology and procedures established by FDOT in the PD&E Manual, Part 2, Chapter 18. The purpose of the NSR is to identify noise sensitive sites that would be impacted by the Preferred Alternative, evaluate potential abatement measures at impacted noise sensitive sites, and determine where potential noise abatement (i.e., noise barriers) is recommended for further evaluation during the design phase. Predicted noise levels were produced using the Federal Highway Administration’s (FHWA) Traffic Noise Model (TNM), version 2.5.

Noise levels developed for this analysis are expressed in decibels (dB) using an “A”-scale [dB(A)] weighting. This scale most closely approximates the response characteristics of the human ear. All noise levels are reported as hourly equivalent noise levels (L_{Aeq1h}). The L_{Aeq1h} is defined as the equivalent steady-state sound level that, in a given hourly period, contains the same acoustic energy as the time-varying sound level for the same hourly period. Use of the dB(A) and L_{Aeq1h} metrics to evaluate traffic noise is consistent with 23 CFR 772. Noise abatement measures are considered when in conjunction with “impacts”, meaning predicted future year traffic noise levels approach, meet, or exceed the FHWA’s Noise Abatement Criteria (NAC) or when there is a substantial increase (15 dB(A)) in traffic noise levels.

For the year 2045 Build condition, noise levels were modelled in TNM at 3,134 noise sensitive sites. Noise levels at 1,518 residences and 108 non-residential “special land use” sites, are predicted to approach or exceed the NAC for the year 2045 Build Alternative and therefore considered “impacted”. No noise sensitive sites are expected to experience a substantial increase (15 dB(A)) in traffic noise compared to existing conditions.

Analyses were performed of the impacted locations to determine if noise abatement was potentially feasible and reasonable under FDOT policy. The noise barrier analysis performed to date and summarized in **Table 2-3** indicates that noise barriers could potentially provide reasonable and feasible noise abatement for 1,207 of the 1,518 impacted residences, as well as provide a 5 dB(A) noise reduction benefit to 1,236 non-impacted residences. Noise abatement was not determined feasible and reasonable for any of the 108 impacted special use sites; however, some of the special use locations will receive incidental benefits from noise barriers for the residential areas. The results of the noise barrier evaluations where noise abatement was determined to be potentially feasible and reasonable are summarized by noise sensitive area in **Table 2-3**.

The PD&E study phase analysis indicates that noise barriers are potentially feasible and reasonable at 14 noise sensitive areas. These noise barriers may benefit 2,443 residences with predicted noise levels that approach or exceed the NAC. **Table 2-3** shows the 14 noise sensitive areas where preliminary noise barriers were determined to be potentially feasible and reasonable. The potentially feasible and reasonable noise barriers meet the FDOT’s cost per benefit criteria with a preliminary cost of under the \$42,000 per benefited receptor criterion. Noise barriers at these 14 locations will be given further consideration during the Design phase of this project. The dimensions of noise walls are subject to change during the design phase of the project. Furthermore, it should be noted that as part of the conceptual PD&E assessment process, several noise wall locations appear to have engineering constraints that may render them non-constructible or which could result in them not being cost-reasonable. While these constraints will be assessed with greater scrutiny in future design projects, an effort was made to identify those walls that may have such potential constraints in the NSR.

Statement of Likelihood

FTE is committed to the construction of feasible and reasonable noise abatement measures. 14 potentially feasible and reasonable noise barrier systems have been identified for this project (see **Table 2-3** for more detail on the noise barriers) contingent upon the following conditions:

- Final recommendations on the construction of abatement measures are determined during the project’s final design and through the public involvement process;
- Detailed noise analyses during the final design process support the need, feasibility and reasonableness of providing abatement;
- Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost reasonable criterion;
- Community input supporting types, heights, and locations of the noise barrier(s) is provided to FTE; and
- Safety and engineering aspects have been reviewed and any conflicts or issues resolved.

A land use review will be performed during the design phase to identify all noise sensitive sites that may have received a building permit subsequent to the noise study but prior to the project’s Date of Public Knowledge. The

Table 2-3: Potentially Feasible and Reasonable Noise Barrier Evaluation Summary

Noise Sensitive Area	Number of Impacted Residences	Noise Barrier Approx. Begin Station	Noise Barrier Approx. End Station	Preliminary Noise Barrier Height (ft.)	Preliminary Noise Barrier Length (ft.) ¹	Preliminary Noise Barrier Location	Preliminary Noise Barrier Cost ²	Number of Residences Potentially Benefited by a Noise Barrier ³		Cost Per Benefited Residence
								Impacted	Total	
NOISE BARRIERS NORTHBOUND SIDE OF TURNPIKE										
Hammock Creek & Highlands Reserve (CNE NB05)	73	841+80	931+80	14	9,000	SH	\$3,780,000	57	144	\$26,250
Coquina Cove Apartments and Martin Downs Country Club Residences (CNE NB06)	67	994+20	1025+20	22	3,100	ROW	\$2,550,000	67	187	\$13,636
		1023+00	1035+00	14	1,200	SH				
Copperleaf (CNE NB07)	25	1109+80	1038+80	14	2,900	SH	\$1,218,000	25	50	\$24,360
Jessica Clinton Park-Port St. Lucie Section 39 (CNE NB08)	77	1285+00	1335+00	14	5,000	SH	\$2,100,000	77	133	\$15,789
Osprey Ridge & Port St Lucie Section 18 (CNE NB09)	71	1412+40	1419+80	22	900	ROW	\$2,362,800	71	97	\$24,359
		1385+20	1413+40	14	2,840	SH				
		1370+00	1382+20	14	1,200	SH				
		1382+20	1385+20	8	300	SH				
River Park and Cove at St Lucie (CNE NB12)	280	1603+70	1713+50	14	10,980	SH	\$4,611,600	280	509	\$9,060
St James Golf Club and Monoco Court residences (CNE NB13, NB14, and NB15)	101	1719+20	1796+00	14	7,700	SH	\$3,234,000	101	331	\$9,770

Table 2-3: Potentially Feasible and Reasonable Noise Barrier Evaluation Summary

Noise Sensitive Area	Number of Impacted Residences	Noise Barrier Approx. Begin Station	Noise Barrier Approx. End Station	Preliminary Noise Barrier Height (ft.)	Preliminary Noise Barrier Length (ft.) ¹	Preliminary Noise Barrier Location	Preliminary Noise Barrier Cost ²	Number of Residences Potentially Benefited by a Noise Barrier ³		Cost Per Benefited Residence
								Impacted	Total	
NOISE BARRIERS SOUTHBOUND SIDE OF TURNPIKE										
Wildwood Estates & Sunshine Parkway Manor (SB05)	48	742+00	774+40	22	3,350	ROW	\$2,211,000	47	64	\$34,547
Port St Lucie Section 34, Port St Lucie Section 36, Port St Lucie Section 37, Port St Lucie Section 41 and Windmill Point (CNE SB10)	154	1290+60	1382+20	22	9,140	ROW	\$10,180,800	100	277	\$36,754
		1221+00	1249+40	22	2,860	ROW				
		1251+60	1275+60	22	2,400	ROW				
		1217+80	1223+80	8	600	SH				
		1274+40	1291+80	8	1,740	SH				
		1248+20	1253+00	8	480	SH				
Port St Lucie – Section 5 (CNE SB 11)	48	1386+30	1422+30	22	3,600	ROW	\$2,592,000	45	66	\$39,273
		1378+70	1387+70	8	900	SH				
Port St Lucie – Section 9 (CNE SB12 & CNE SB13)	97	1447+00	1489+00	22	4,480	ROW	\$3,268,800	58	88	\$37,145
		1488+00	1501+00	8	1,300	SH				
Lake Forest (CNE SB14)	93	1542+00	1595+20	22	5,390	ROW	\$3,557,400	93	207	\$17,186
Magnolia Lakes, Palms of St Lucie West and Paradise Villas (CNE SB15)	104	1617+70	1704+90	22	8,720	ROW	\$5,755,200	88	178	\$32,333
Vizacaya Falls & Winterlakes (CNE SB16 & CNE SB17)	183	1726+60	1770+20	22	4,300	ROW	\$3,030,000	94	104	\$29,135
		1769+20	1777+20	8	800	SH				

¹ Full height is for length indicated. The length for any required taper in height at a shoulder noise barrier termination would be in addition to the length indicated.

² Unit cost of \$30/ft² for all non-shoulder noise barriers.

³ Total includes impacted/benefited residences and residences with a predicted noise level that does not approach or exceed 67 dBA, but are incidentally benefited.

date that the State Environmental Impact Report is approved by FTE will be the Date of Public Knowledge. If the review identifies noise sensitive sites that have been permitted prior to the Date of Public Knowledge, then those sensitive sites will be evaluated for traffic noise impacts and abatement considerations.

2.4.2 Air Quality

The proposed project is located in the counties of Palm Beach, Martin, and St. Lucie, an area currently designated as being in attainment for particulate matter (2.5 and 10 microns in size) and carbon monoxide (CO). As such, the State Implementation Plan conformity requirements of the Clean Air Act are not applicable to these two pollutants.

The project alternatives (No-build and Build) were subjected to the CO screening model entitled CO Florida 2012 that makes various worst-case assumptions related to site conditions, Meteorology, and traffic. The Florida Department of Transportation's (FDOT's) CO Florida 2012 model uses United States Environmental Protection Agency (U.S. EPA) software to produce estimates of one-hour and eight-hour CO at default air quality receptor locations. The one- and eight-hour estimates can be directly compared to the National Ambient Air Quality Standards (NAAQS) for CO.

In the project's design year (2045) with the No-build Alternative, the intersection with a combination of the highest intersection leg approach volume and delay is the Okeechobee Road (SR 70) and S Kings Highway intersection (i.e., turnpike ramps). In the design year with the Build Alternative, the intersection with a combination of the highest intersection leg approach volume and delay is the SW Martin Highway and SW High Meadow Avenue intersection (an intersection east of the turnpike ramps). Both the No-build and Build Alternatives were evaluated for both intersections.

Estimates of CO were predicted for the default receptors which are located at distances from 10 to 150 feet from the edge of the roadway. Based on the results from CO Florida 2012, the highest project-related CO levels are not predicted to meet or exceed the NAAQS. As such, the project "passes" the screening model. Additionally, the project is expected to generally improve the level of service which would reduce overall delay and congestion within the project area.

This project has not been linked with any special mobile source air toxic (MSAT) concerns but would add substantial new capacity (from the existing four lane facility to an improved eight lane facility). However, the design year average daily traffic (AADT) is projected to be less than 140,000 on all roadway segments. Therefore, following the MSAT evaluation procedures described in Part 2, Chapter 19 of the FDOT PD&E Manual, the project has a low potential for MSAT effects and only a qualitative evaluation of MSATs is required.

The project is not forecasted to change the volume of motor vehicles or the vehicle-miles-traveled (VMT) within any of the evaluated segments by more than 11 percent and, when considering the total VMT, would result in an approximate two percent reduction in the VMT within the project corridor which would correspondingly decrease MSATs.

Moreover, U.S. EPA regulations for vehicle engines and fuels will result in a decline in MSAT emissions over the next several decades. Based on regulations now in effect, an analysis of national trends with U.S. EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSATs from 2010 to 2050, in which vehicle-miles of travel are projected to increase by over 45 percent (Updated Interim Guidance on Mobile Source Air Toxics Analysis in NEPA [National Environmental Policy Act] Documents, FHWA, October 2016). The reduction in MSATs with the project, along with the reduction in emissions due to the regulations, will result in lower future background levels of the pollutants.

2.4.3 Contamination

A Level I contamination evaluation was conducted for areas within 500 feet of the project corridor and a *Contamination Screening Evaluation Report* (CSER) (February 2021) was prepared. Based on the Level I screening evaluation, a total of 105 mainline and 36 pond site potential contamination sites were identified within the project limits. **Tables 2-4** and **2-5** present a summary of the risk ratings assigned for each potential contamination site/facility. **Table 2-6** provides details of the medium and high potential contamination sites for the mainline roadway. Please see **Appendix C** – Preferred Alternative Conceptual Plans for the locations of Medium and High ranked contamination sites for the mainline roadway.

Table 2-4: Summary of Risk Ratings - Mainline

Number of Mainline Sites per Risk Rating			
High	Medium	Low	No
5	19	65	19

Table 2-5: Summary of Risk Ratings – Ponds

Number of Pond Sites per Risk Rating			
High	Medium	Low	No
0	3	9	25

Table 2-6: High and Medium Rated Contamination Sites – Mainline

Appendix C Sheet Number	Site Name & Address	Databases/Facility ID	Approximate Distance from Turnpike ROW (unless otherwise noted)	Contaminants of Concern	Risk Rating
C-81 through C-84	Groves/Crops (including former) No address	N/A	Within ROW, East and West of ROW	Pesticides, Herbicides, Arsenic	Medium
C-24	Worldwide Dedicated Services Florida Turnpike MM 128.2 Stuart, FL	VOLCLNUP 180179	Within ROW (east side of NB lane)	Petroleum	High
C-28	Former Marathon Plaza 95/ 7 Eleven #41164 8100 Jack James Dr. Stuart, FL	TANKS 9800857 TANKS 9800990 (use 9800857)	440 feet east; (tank farm 15 feet south of Kanner Highway)	Petroleum	Medium
C-28	Mobil/Sunshine #821 8062 Jack James Dr. Stuart, FL	TANKS 9812553	550 feet east (tank farm 30 feet north of Kanner Highway)	Petroleum	Medium
C-39	FDOT Turnpike MM 133 Martin County Yard/ Stuart Maintenance Yard Turnpike Interchange Stuart, FL	LUST/TANKS 8626159	Within ROW	Petroleum	Medium
C-37	Mobil Martin Downs 3551 SW Martin Highway Palm City, FL	LUST/TANKS 9201330	Adjoining north	Petroleum	Medium
C-37	Palm City Auto Lube/ Highway Enterprise Inc. 3584 Armellini Ave. Palm City, FL	LUST/TANKS/STCERC 8945557NONTSD FLR000078402	Adjoining north	Petroleum	Medium

C-37	Como Oil Co. of FL/ Martin County Petroleum 3586 SW Martin Hwy Stuart, FL	LUST/TANKS/STCER 8511487 NONTSD FLT010069151	Adjoining north of SW Martin Hwy/Adjoining east of Florida's Turnpike ROW MW-7 is 70 feet east of Turnpike ROW, MW-7 is 130 feet north of SW Martin Hwy ROW	Petroleum	Medium
C-38	Exxon/Midnight Farms 3590 SW Deggeller Ct. Palm City, FL	LUST/TANKS 8511426 NONTSD FLR000061002	Adjoining north of SW Martin Hwy 700 feet west of Florida's Turnpike	Petroleum	Medium
C-41	Martin Downs Country Club Inc. 4300 SW Mallard Creek Trail Palm City, FL	WASTE CLEANUP 157657 TANKS 8630063 NONTSD FLD981920986	Golf course and maintenance facility are 50 east; Tank farm 220 feet east of ROW	Petroleum, Herbicides, pesticides, arsenic	Medium
C-52	SPILL Florida's Turnpike South of MM 140.5 STA 1285 East side of NB lane Port St. Lucie, FL	NA	Within ROW	Petroleum	Medium
C-58	BP/Coco Vista Macmillan 468 Port St. Lucie Blvd Port St. Lucie, FL	TANKS 9808703	Adjoining south	Petroleum	Medium
C-58	Sunoco (Former Mobil) Expert Auto (Former Kwons Service Center) 461/471 Port St. Lucie Blvd Port St. Lucie, FL	LUST/STCERC/TANKS 8516222 ERNS 173593	Adjoining north of Port St. Lucie Blvd. 900 feet west of Florida's Turnpike	Petroleum	Medium
C-57	Turnpike Substation 2300 Bayshore Blvd Port St. Lucie, FL	ERNS 933786	Within ROW	Petroleum, PCBs	Medium
C-59	Port St. Lucie Shell/ Former Chevron 299 St. Lucie Blvd Port St. Lucie, FL	LUST/TANKS 9063940 NONTSD FLD984210195	Adjoining north of St. Lucie Blvd 100 feet east of Florida's Turnpike	Petroleum	Medium
C-63	Fort Pierce Service Plaza MM 145 Port St. Lucie, FL	ERNS 1218682	Within ROW	Petroleum	Medium

C-77	St. Lucie Recycling 5950 Glades Cutoff Rd. Ft. Pierce, FL	SLDWST_LF 101649	Adjoining east	Solid waste	Medium
C-78 & C-79	St. Lucie County Glades Rd Landfill/St. Lucy Co Bailing and Recycling Facility 6120 Glades Cutoff Rd. Ft. Pierce, FL	SLDWST 70652	Adjoining west	Ammonia, chloride, sodium, iron, TDS, benzene	High
C-81	Toll Plaza at Ft. Pierce/ FDOT Turnpike MM 152 Ft. Pierce, FL	TANKS 9400360 TANKS 9602391	Within ROW	Petroleum	Medium
C-84	Love's Travel Stop/ Pilot Travel Center 7150 Okeechobee Road Ft. Pierce, FL	LUST/STCERC/TANKS 9701235 9701238 (use 9701235) VOLCLNUP 272775	Adjoining east of the Okeechobee Rd project limit, Tank farm 120 feet east 1,100 feet east of Florida's Turnpike	Petroleum	Medium
C-84	Boudrias Groves 2898 Kings Hwy Ft. Pierce, FL	LUST/STCERC/TANKS 8516061	Adjoining Okeechobee Rd ROW 800 feet east of Florida's Turnpike	Petroleum	High
C-84	Florida Department of Transportation Highway 70 & Kings Hwy (NW corner) Ft. Pierce, FL	LUST/STCERC/TANKS 9102669	Within Kings Hwy ROW, adjoining Okeechobee Road ROW, and 600 feet east of Florida's Turnpike ROW	Petroleum	High
C-82	Pilot Travel Center #090 7300 Okeechobee Road Ft. Pierce, FL	LUST/STCERC/TANKS 9802058	Adjoining north of the Okeechobee Rd ROW 270 feet east of Florida's Turnpike	Petroleum	High
C-75	Townstar #481 6600 W Midway Road Port St. Lucie, FL	LUST/STCERC/TANKS 8942900	adjoining west of the Midway Rd project limit, Tank farm 120 feet west 0.45 miles west of Florida's Turnpike	Petroleum	Medium

Based on the conclusions of this study and risk ratings noted above, the following recommendations are made.

- During the design phase, a Level II Impact to Construction Assessment will be conducted for sites with a potential contamination risk rating of medium or high, based on proposed right-of-way acquisition and design construction plans.
- Asbestos testing results will be obtained for building structures to be demolished or renovated in conjunction with the project.

2.4.4 Utilities and Railroads

Utilities

Existing utility facilities along the project area include power, gas, electric, fiber optics, water, sewer, and communications. A preliminary plan set with aerial background was sent to all Utility Agency Owners (UAOs), identified by Sunshine 811 as having utility facilities in the project area, for their use in identifying their facilities. Refer to the *Utilities Assessment Package*, February 2021, for a description of the existing utilities within and adjacent to the project area. **Table 2-7** provides a summary of the existing utility agency owners and their respective utility types.

Table 2-7: Utility Agency Owners

Utility Agency Owner	Contact	Utility Type
AT&T Corp. 6000 Metro West Blvd, Suite 201 Orlando, FL 32835	c/o PEA, Inc. Stefan Eriksson 407-578-8000 seriksson@pea-inc.net	Communications
AT&T Florida 7747 Ellis Road West Melbourne, FL 32904 120 North K Street Lake Worth, FL 33460	Luke Folkerts 407-496-6041 LF2490@att.com Garth Bedward 561-504-9263 GB7410@att.com	Communications
City of Port St. Lucie 900 SE Ogden Lane Port St. Lucie, FL 34983	Laney Southerly 772-873-6400 lsoutherly@cityofpsl.com	Water, Sewer and Fiber
Comcast 3960 RCA Blvd, Suite 6002 Palm Beach Gardens, FL 33410 1495 NW Britt Road Stuart, FL 34994	Miya Fisher 561-818-6633 miya_fisher@comcast.com Rick Johnson 772-692-9010 rick_johnson@comcast.com	Communications
Crown Castle 1601 NW 136 Ave, Suite A-200 Sunrise, FL 33323	Danny Haskett 786-610-7073 danny.hasket@crowncastle.com	Communications
Deltacom 1530 Delta Com Drive Anniston, AL 36207	John McGuffey 256-241-6438 John.mcguffey@elink.com	Communications
Florida City Gas 4045 NW 97 Ave Doral, FL 33178	Maria Paula Lopez 786-332-8913 maria.lopez@nexteraenergy.com	Gas
Florida Gas Transmission 2405 Lucien Way, Suite 200 Maitland, FL. 32751	Joseph E. Sanchez 407-838-7171 Joseph.E.Sanchez@energytransfer.com	Gas Pipeline
Ft. Pierce Utility Authority (FPUA) Water & Sewer 1701 South 37 Street Fort Pierce, FL 34947	James Carnes 772-466-1600 jcarnes@fpua.com	Water & Sewer
Ft. Pierce Utility Authority Electric 1701 South 37 Street Fort Pierce, FL 34947	Jason Mittler 772-466-1600 jmittler@fpua.com	Electric
Ft. Pierce Utility Authority Fiber 1701 South 37 Street Fort Pierce, FL 34947	Jason Mittler 772-466-1600 jmittler@fpua.com	Communications
Ft. Pierce Utility Authority Gas 1701 South 37 Street Fort Pierce, FL 34947	Jason Mittler 772-466-1600 jmittler@fpua.com	Gas
FPL Distribution 4406 SW Cargo Way Palm City, FL 34990 15430 Endeavor Drive Jupiter, FL 33478	Rob Morris 772-223-4215 rob.morris@fpl.com Reynoldo Calzadilla 321-214-3848 reynoldo.calzadilla@fpl.com	Electric
FPL Transmission 15430 Endeavor Drive Jupiter, FL 33478	Tricia D'Annunzio 561-904-3560 tricia.dannunzio@fpl.com	Electric

Utility Agency Owner	Contact	Utility Type
Hometown Communications (Blue Stream Fiber) 1982 SW Hayworth Ave Port St. Lucie, FL 34987	Steve Lencse 954-752-7244 slencse@mybluestream.com	Communications
Hotwire Communications 10360 USA Today Way Miramar, FL 33025	Walter Sancho-Davila 954-699-0900 walter.sancho-davila@hotmail.com	Communications
ITS Fiber (Indiantown Telephone) 15925 SW Warfield Blvd Indiantown, FL 34956	Eddie Richeson 229-507-1308 eddier@itsfiber.net	Communications
Martin County Utilities 2378 SE Ocean Blvd Stuart, FL 34995	Steve Vandersluis 772-221-1437 svaners@martin.fl.us	Water & Sewer
St. Lucie County Utilities 2300 Virginia Ave Ft Pierce, FL 34982	Raymond Murankus 772-462-5221 murankusr@stlucieco.org	Water & Sewer
St. Lucie West Services District 450 SW Utility Drive Port St. Lucie, FL 34986	Joshua Miller 772-340-0220 jmillier@slwsd.org	Water
TECO Peoples Gas 5101 NW 21 Ave, Suite 460 Ft Lauderdale, FL 33309	Max Chamorro 954-453-0812 mjchamorro@tecoenergy.com	Gas
Town of Jupiter 17403 Central Blvd. Jupiter, FL 33458	Amanda Barnes 561-741-2537 amandab@jupiter.fl.us	Water
Tropicana Products Douglas Pipeline Pittsburgh, PA 15234	c/o Douglas Pipeline, Andi Shacklett 412-531-2440 ashacklett@douglaspipeline.com	Pipeline

Conservative utility facility relocation estimates were requested as part of the utility coordination process for each UAO. The total combined estimated cost for relocations is \$46,300,000. **Table 2-8** provides a summary of the anticipated utility impacts and their associated costs. Only impacted facilities are listed in the table below.

It is anticipated the municipal water and sewer providers (City of Port St. Lucie, Martin County, and Ft. Pierce Utility Authority) may request a Utility Work by Highway Contractor Agreement (UWHCA), as demonstrated on past projects of similar scope.

Table 2-8: Build Impacts and Cost Estimates

Utility Agency Owner	Utility Type	Station	General Location	Size	Impact	Estimated Cost
Turnpike Mainline						
AT&T Corp.	BT	3625+00 to 3696+50	Center of TPK	2-2"	Horizontal alignment shift	Reimbursement not anticipated
AT&T Corp.	BT	100+00 to 2014+00	Center of TPK	2-2"	Horizontal alignment shift	Reimbursement not anticipated
AT&T Florida	BFO	1945+50 to 1958+00	East R/W	50 PR Copper	Ramp widening	\$100,000
City of Port St. Lucie	FM	1673+40	Crossing TPK	30"	Widening	\$100,000

City of Port St. Lucie	Fiber	1673+35	Crossing TPK	1-2"	Widening	\$100,000
City of Port St. Lucie	WM	1698+00	Crossing TPK	12"	Widening	\$100,000
City of Port St. Lucie	Concentrate Main	1698+10	Crossing TPK	16"	Widening	\$100,000
City of Port St. Lucie	FM	1698+20	Crossing TPK	12"	Widening	\$100,000
City of Port St. Lucie	WM	1753+00	Crossing TPK	12"	Widening	\$100,000
Florida Gas Transmission	GM	3625+00 to 3696+50	East R/W	18", 24" & 30"	Widening	\$18,000,000
Florida Gas Transmission	GM	96+50 to 1980+00	East R/W	18", 24" & 30"	Widening	\$18,000,000
FPUA Fiber	Fiber	1810+45 L to 1960+23 L	West R/W	1-4"	Widening	Reimbursement not anticipated
FPL Distribution	UE	1811+00	Crossing TPK	3-1000A XPE	Bridge construction	\$200,000
FPL Distribution	OE	1814+00 L to 1825+70 L	West R/W	1-1/OT 7.6kv	Ramp construction	\$200,000
FPL Distribution	OE	1833+75	Crossing TPK	3-568T 23kv	Bridge construction	\$200,000
FPL Distribution	OE	1889+50 L to 1996L	West R/W	3-568T 23kv	Ramp construction	\$100,000
FPL Transmission	OE	963+00 L to 998+20 L	West R/W	230kv	Widening and ramp improvements	\$3,000,000
FPL Transmission	OE	997+30 R to 1423+00 R	East R/W	230kv	Bridge and interchange improvements	\$1,800,000
FPL Transmission	OE	1452+00 R to 1715+00 R	East R/W	230kv	Bridge construction	\$500,000
FPL Transmission	OE	1833+90	Crossing TPK	230kv	Bridge construction	\$500,000
Martin County	WM	721+50	Crossing TPK	12" in 24" casing	Widening	Reimbursement not anticipated
Martin County	RWM	721+50	Crossing TPK	12" in 24" casing	Widening	Reimbursement not anticipated
Martin County	RWM (IQ)	721+50	Crossing TPK	8" in 18" casing	Widening	Reimbursement not anticipated
Martin County	FM	788+50	Crossing TPK	6" PVC	Widening	Reimbursement not anticipated
Martin County	WM	788+50	Crossing TPK	8"PVC	Widening	Reimbursement not anticipated
Martin County	FM	1036+00	Crossing TPK	6" PVC	Widening	Reimbursement not anticipated
Martin County	WM	1036+00	Crossing TPK	12" in 24" casing	Widening	Reimbursement not anticipated
Martin County	WM	1052+50	Crossing TPK	12" in 20" casing	Widening	Reimbursement not anticipated
SW Kanner Highway (SR 76)						
FPL Distribution	OE	739+25	South side crossing TPK	13kv	Bridge Construction	\$100,000
SW Martin Highway (SR 714)						
ITS Fiber (Indiantown)	BT	981+20	South side crossing TPK	N/A	Widening	Reimbursement not anticipated
FPL Distribution	OE	981+20	South side crossing TPK	3-568T	Widening	Reimbursement not anticipated

TECO	GM	981+00	South side crossing TPK	6"	Widening	Reimbursement not anticipated
Comcast	Aerial	981+40	South side crossing TPK	N/A	Widening	Reimbursement not anticipated
SE Becker Road						
AT&T Florida	BFO	1182+10	North side crossing TPK	(2) # 216, (1) # 48 & 100 PR Copper	Widening	\$200,000
City of Port St. Lucie	Fiber	1180+20	North side crossing TPK	1-2"	Widening	Reimbursement not anticipated
City of Port St. Lucie	WM	1180+20	North side crossing TPK	20"	Widening	Reimbursement not anticipated
SW Port St Lucie Boulevard						
FPL Distribution	OE	1422+00	South side crossing TPK	3-568T 23kv	Widening	\$200,000
FPL Transmission	OE	1426+00 (Bayshore Blvd)	East R/W	230kv	Widening	\$600,000
FPL Transmission	UE	1426+00 to 1480+00 (Bayshore Blvd)	East R/W	230kv	Widening	\$600,000
Florida City Gas	GM	1427+75	North side crossing TPK (attached to bridge)	6" Steel	Widening	\$100,000
City of Port St. Lucie	FM	1426+20	South side crossing TPK east to SE Bayshore Blvd	8"	Widening	\$100,000
City of Port St. Lucie	WM	1426+70	South side crossing TPK east to SE Bayshore Blvd	16" Abandoned	Widening	Reimbursement not anticipated
City of Port St. Lucie	WM	1427+70	North side crossing TPK east to SE Bayshore Blvd	16"	Widening	Reimbursement not anticipated
City of Port St. Lucie	FM	1418+00 to 1427+50 (Bayshore Blvd)	West R/W	12"	Widening and new Interchange	\$100,000
City of Port St. Lucie	WM	1425+20	Crossing Bayshore Blvd	6"	Widening	Reimbursement not anticipated
City of Port St. Lucie	FM	1418+00 to 1433+00 (Bayshore Blvd)	East R/W	12"	Widening and new Interchange	\$100,000
City of Port St. Lucie	WM	1431+00 (Bayshore Blvd)	Crossing Bayshore Blvd	6"	Widening	Reimbursement not anticipated

City of Port St. Lucie	FM	1426+00 to 1433+00 (Bayshore Blvd)	East R/W	4"	Widening	Reimbursement not anticipated
City of Port St. Lucie	Fiber	1426+00 to 1433+00 (Bayshore Blvd)	East R/W	1-2"	Widening	Reimbursement not anticipated
City of Port St. Lucie	Fiber	1427+90	North side crossing TPK east to Bayshore Blvd	1-2"	Widening	Reimbursement not anticipated
St Lucie West Boulevard						
FPL Distribution	UE	1601+60	Crossing TPK	(2) 1000A XPE 23kv	Bridge construction	\$100,000
City of Port St. Lucie	FM	1600+00	Median crossing TPK	16"	Bridge construction	Reimbursement not anticipated
City of Port St. Lucie	WM	1599+50	South side crossing TPK	16"	Bridge construction	Reimbursement not anticipated
City of Port St. Lucie	Fiber	1599+45	South side crossing TPK	1-2"	Bridge construction	Reimbursement not anticipated
W Midway Road						
FPUA Fiber	Fiber	1810+40	South side crossing TPK	1-4"	Widening	Reimbursement not anticipated
FPL Distribution	UE	1811+00	South side crossing TPK	3-1000A XPE 23kv	Widening and new interchange	\$200,000
AT&T Florida	BFO	1811+20	South side crossing TPK	#144 & #72	New Interchange	\$200,000
City of Port St. Lucie	WM	1811+60	South side crossing TPK	16"	Widening and new interchange	\$200,000
Glades Cut-Off Road						
Tropicana	GM	1834+00	North side crossing TPK	Douglas Pipeline	Bridge construction	Reimbursement not anticipated
AT&T Florida	BFO	1833+50	North side crossing TPK	#48	Bridge construction	Reimbursement not anticipated
FPUA Gas	GM	1832+80	North side crossing TPK	8"	Bridge construction	Reimbursement not anticipated
FPUA Water & Sewer	FM	1832+80	North side crossing TPK	6" PVC	Bridge construction	Reimbursement not anticipated
Okeechobee Road (SR 70)						
FPUA Fiber	Fiber	1960+20	South side crossing TPK	1-4"	Widening	\$100,000
AT&T Florida	BT	1961+00	South side crossing TPK	12-4"	Widening and new interchange	\$100,000
FPUA Water & Sewer	WM	1962+20	North side crossing TPK	12"	Widening and new interchange	\$100,000

**Information in the table above was extracted from the Utility Assessment Package, February 2021.*

Railroads

Although there are no at-grade railroad crossings within the project limits, there is one location where the railroad passes underneath Florida's Turnpike (SR 91) mainline. The railroad has two tracks that run parallel to the south side of Glades Cut-Off Road and cross underneath Bridge Nos. 940076 and 940951. The Primary Operating Railroad is the Florida East Coast Railroad Company (FEC) with an FDOT Crossing

Inventory Number of 272254P. Based on information received from the U.S. Department of Transportation Federal Railroad Administration, there are a total of four trains during the day (6AM-6PM) and four trains during the night (6PM-6AM). The trains travel at speeds between 30 and 40 miles per hour (mph).

The existing bridge provides a substandard vertical clearance over the railroad. Due to the skewed orientation of the bridge, widening is not recommended. It is recommended that the existing bridge be replaced with a new structure to meet the minimum vertical clearance of 23.5 feet. Refer to the *Bridge Analysis Technical Memorandum*, January 2021, for more detail on the proposed bridge.

2.4.5 Construction

The construction activities associated with Florida's Turnpike (SR 91) corridor proposed improvements will result in temporary air, noise, vibration, water quality, traffic flow, and visual impacts for those residents and travelers within the immediate vicinity of the project. Air quality impacts will be temporary and primarily be in the form of exhaust emissions from trucks and construction equipment as well as fugitive dust from construction sites. Air pollution associated with the creation of airborne particles will be effectively controlled using watering or the application of other control materials in accordance with FDOT's *Standard Specifications for Road and Bridge Construction*.

Noise and vibration impacts may be generated by heavy equipment and construction activities such as pile driving and vibratory compaction of embankments. Noise control measures will be implemented as set forth in the FDOT's *Standard Specifications for Road and Bridge Construction*. Adherence to local construction noise and/or construction vibration ordinances by the construction contractor will also be required where applicable.

Water quality impacts resulting from erosion and sedimentation will be controlled in accordance with FDOT's *Standard Specifications for Road and Bridge Construction* and using Best Management Practices (BMPs).

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays during project construction. Signs will be used as appropriate to provide notice of road closures and other pertinent information to the travelling public. The local news media will be notified in advance of road closings and other construction-related activities which could inconvenience the community so that motorists, residents, and business persons can plan travel routes in advance.

Access to all businesses and residences will be maintained to the extent practical through controlled construction scheduling. Within the project study limits, the present traffic congestion may become worse during stages of construction where narrow lanes may be necessary. Traffic delays will be controlled to the extent possible where many construction operations are in progress at the same time.

Visual impacts associated with the storage of construction materials and establishment of temporary construction facilities will occur but are temporary and short term.

Construction of the roadway and bridges requires excavation of unsuitable material, placement of embankments, and the use of materials, such as lime rock, asphaltic concrete, and Portland cement concrete. The removal of structure and debris will be in accordance with local and state regulation agencies permitting

this operation. The construction contractor will be responsible for controlling pollution on haul roads, in borrow areas, and areas used for disposal of waste materials from the project. Temporary erosion control features as specified in the FDOT's *Standard Specifications for Road and Bridge Construction*, Section 104, will consist of temporary grassing, sodding, mulching, sandbagging, slope drains, sediment basins, sediment checks, artificial coverings, and berms.

2.4.6 Bicycles and Pedestrians

Florida's Turnpike (SR 91) mainline is a limited access facility and does not accommodate bicycle facilities. Bicycle lanes are not proposed as part of the Preferred Alternative for Florida's Turnpike (SR 91) mainline.

Bicycle and pedestrian accommodations are proposed at five of the six project interchange locations. The only interchange location that does not include bicycle and pedestrian accommodations for the Preferred Alternative is Crosstown Parkway. The existing Crosstown Parkway overpass (Bridge No. 944018) does not require replacement or modification due to the mainline widening. The SW Martin Highway preferred interchange alternative proposes six foot wide sidewalks and seven foot wide buffered bicycle lanes, along the north and south sides of SW Martin Highway, from SW Martin Downs Boulevard to SW Leighton Farms Avenue/SW Deggeller Court. The SE Becker Road preferred interchange alternative proposes six foot wide sidewalks and seven foot wide buffered bicycle lanes, along the north and south sides of SE Becker Road, from the existing traffic signal at the northbound on ramp to just west of SW Bradshaw Circle. The SW Port St. Lucie Boulevard preferred interchange alternative proposes six foot wide sidewalks and seven foot wide buffered bicycle lanes, along the north and south sides of SW Port St. Lucie Boulevard, from the intersection at SW Bayshore Boulevard to SW Cameo Boulevard. The W Midway Road preferred interchange alternative proposes six foot wide sidewalks and seven foot wide buffered bicycle lanes, along the north and south sides of W Midway Road, from the proposed intersection at S Jenkins Road/NW Milner Drive to Glades Cut-Off Road. The Okeechobee Road (SR 70) preferred interchange alternative proposes six foot wide sidewalks and seven foot wide buffered bicycle lanes, along the north and south sides of Okeechobee Road (SR 70), from the intersection at S Kings Highway to Gordy Road. West of Gordy Road, a six foot wide sidewalk is proposed on the south side of Okeechobee Road (SR 70). The preferred interchange alternatives at SW Martin Highway, SE Becker Road, SW Port St. Lucie Boulevard, and W Midway Road provide two foot wide barrier wall, along the north and south sides of the overpass, in order to separate the pedestrians from the travel lanes.

2.4.7 Navigation

There are multiple navigable waterways, which cross Florida's Turnpike (SR 91) mainline within the project area. These waterways include St. Lucie Canal (C-44), Rim Ditch (C-24), Tenmile Creek, Loxahatchee River, and County Line Canal (C-23). The following determinations were made, regarding the respective waterways, through coordination with the United States Coast Guard (USCG).

St. Lucie Canal (C-44)

A permit amendment to the existing USCG Bridge Permit (No. 9-01-7) would be required for the St. Lucie Canal (C-44) crossing. The project design will maintain existing horizontal and vertical navigational clearances at this crossing. Refer to **Appendix E** for information regarding coordination with the USCG.

Rim Ditch (C-24)

A Bridge Permit would be required for the C-24 canal crossing and this waterway would not qualify for Advance Approval.

Tenmile Creek

No Bridge Permit is required for the Tenmile Creek crossing.

Loxahatchee River

No Bridge Permit is required for the Loxahatchee River crossing. The segment of the Loxahatchee River containing Florida's Turnpike (SR 91) bridge structure is not tidal and is presently not used for interstate commerce. In addition, because of the Wild & Scenic River designation on that segment of the river, improvements to the channel, making it useable to interstate commerce, is unlikely. Refer to **Appendix E** for information regarding coordination with the USCG.

County Line Canal (C-23)

A vertical weir in the County Line Canal (C-23) prevents navigation at the Florida's Turnpike (SR 91) crossing. No Bridge Permit is required for the C-23 canal.

A brief review of the smaller waterway crossings resulted in the USCG acknowledging that no further USCG coordination for these smaller waterway crossings would be required.

APPENDIX B
*ETDM Programming Summary Report
and Agency Comments*



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

MIKE DEW
SECRETARY

ETDM Summary Report

Project #14295 - Turnpike Mainline Widening from Jupiter to Fort Pierce

Programming Screen - Published on 05/19/2017

Printed on: 1/22/2018

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Introduction to Programming Screen Summary Report

The Programming Screen Summary Report shown below is a read-only version of information contained in the Programming Screen Summary Report generated by the ETDM Coordinator for the selected project after completion of the ETAT Programming Screen review. The purpose of the Programming Screen Summary Report is to summarize the results of the ETAT Programming Screen review of the project; provide details concerning agency comments about potential effects to natural, cultural, and community resources; and provide additional documentation of activities related to the Programming Phase for the project. Available information for a Programming Screen Summary Report includes:

- Screening Summary Report chart
- Project Description information (including a summary description of the project, a summary of public comments on the project, and community-desired features identified during public involvement activities)
- Purpose and Need information (including the Purpose and Need Statement and the results of agency reviews of the project Purpose and Need)
- Alternative-specific information, consisting of descriptions of each alternative and associated road segments; an overview of ETAT Programming Screen reviews for each alternative; and agency comments concerning potential effects and degree of effect, by issue, to natural, cultural, and community resources.
- Project Scope information, consisting of general project commitments resulting from the ETAT Programming Screen review, permits, and technical studies required (if any)
- Class of Action determined for the project
- Dispute Resolution Activity Log (if any)

The legend for the Degree of Effect chart is provided in an appendix to the report.

For complete documentation of the project record, also see the GIS Analysis Results Report published on the same date as the Programming Screen Summary Report.



#14295 Turnpike Mainline Widening from Jupiter to Fort Pierce

District: District 4

County: Martin , Palm Beach , St. Lucie

Planning Organization: Florida's Turnpike Enterprise

Plan ID: Not Available

Federal Involvement: Other Federal Permit USCG Bridge Permit

Phase: Programming Screen

From: Indiantown Road (MP 116)

To: SR 70 (MP 152)

Financial Management No.: 423374-1-22-01

Contact Information: Brian Ribaric (407) 264-3095 brian.ribaric@dot.state.fl.us

Snapshot Data From: Project Published 5/19/2017

Issues and Categories are reflective of what was in place at the time of the screening event.

	Social and Economic							Cultural			Natural					Physical					Emergency Response
	Land Use Changes	Social	Relocation Potential	Farmlands	Aesthetic Effects	Economic	Mobility	Section 4(f) Potential	Historic and Archaeological Sites	Recreation Areas	Wetlands and Surface Waters	Water Quality and Quantity	Floodplains	Wildlife and Habitat	Coastal and Marine	Noise	Air Quality	Contamination	Infrastructure	Navigation	
Alternative #1 From: Indiantown Road (MP 116) To: SR 70 (MP 152) Published: 05/19/2017 Reviewed from 01/18/2017 to 03/04/2017)	2	3	2	3	2	1	1	N/A	3	3	3	3	3	3	3	3	2	3	2	3	4

Purpose and Need

Purpose and Need

The purpose of the widening of Florida's Turnpike Mainline (SR 91) from Jupiter to Ft. Pierce is to add capacity that will accommodate future traffic volumes of freight and passenger vehicles linked to the projected growth in population and industry. Based on county-wide growth totals developed by the Bureau of Economic and Business Research at the University of Florida the population of St. Lucie County is anticipated to grow by almost 65% and employment is expected to increase by approximately 58% between 2010 and 2040, with the fastest job growth occurring in the industrial sector.

Establishment of two Freight Logistics Zones in St. Lucie County around the Treasure Coast International Airport and the Port of Ft. Pierce, and a 1,200-acre Intermodal Logistics Center located just north of the airport have the potential to significantly increase freight traffic to and from these areas in northern St. Lucie County. An increase in freight traffic throughout the project corridor will place strains on the capacity of the existing roadway and further reduce the safety of a stretch of roadway that has averaged 3.5 fatalities per year and over 145 injuries each year since 2011. The Florida's Turnpike Enterprise document entitled *Florida Traffic Trends Report, July 2015*, identifies the need to widen the mainline from four to six lanes by 2040 from Jupiter (MP 116) to Stuart (MP 133), by 2030 from Stuart (MP 133) to Port St. Lucie (MP 142) and by 2035 from Port St. Lucie (MP 142) to Ft. Pierce (MP 152). In addition, improvements at the Port St. Lucie Boulevard (MP 142) interchange are needed by 2020 and this improvement is identified as the number seven ranked unfunded interchange need improvement.

Planning Consistency

The Martin MPO LRTP references a portion of the project from West Indiantown Road (MP 116) to St. Lucie County in the SIS 2040 Multi-Modal Unfunded Needs Plan. The project is consistent with the goals and objectives of the Martin MPO, the St. Lucie County TPO, and the Palm Beach MPO.

Purpose and Need Reviews

FL Department of Agriculture and Consumer Services

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	03/03/2017	Steve Bohl (Steve.Bohl@freshfromflorida.com)	No Purpose and Need comments found.

FL Department of Economic Opportunity

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	03/03/2017	Matt Preston (matt.preston@deo.myflorida.com)	No Purpose and Need comments found.

FL Department of Environmental Protection

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/10/2017	Suzanne Ray (plan.review@dep.state.fl.us)	No Purpose and Need comments found.

FL Department of State

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/22/2017	Daniel McClarnon (daniel.mcclarnon@dos.myflorida.com)	No Purpose and Need comments found.

FL Fish and Wildlife Conservation Commission

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/28/2017	Scott Sanders (scott.sanders@myfwc.com)	No Purpose and Need comments found.

National Marine Fisheries Service

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/14/2017	Brandon Howard (Brandon.Howard@noaa.gov)	None

National Park Service

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	03/10/2017	Anita Barnett (anita_barnett@nps.gov)	No Purpose and Need comments found.

Natural Resources Conservation Service

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	01/19/2017	Rick Robbins (rick.a.robbins@fl.usda.gov)	No Purpose and Need comments found.

South Florida Water Management District

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/20/2017	Mindy Parrott (mparrott@sfwmd.gov)	It is difficult to review a project without knowing where new interchanges will be, whether all the widening work will be completed within the existing right of way.

US Army Corps of Engineers

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/22/2017	Tarrie Ostrofsky (Tarrie.L.Ostrofsky@usace.army.mil)	The Corps understands the purpose and need for this proposed project.

US Coast Guard

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/24/2017	Randall Overton (randall.d.overton@uscg.mil)	No Purpose and Need comments found.

US Environmental Protection Agency

Acknowledgement	Date Reviewed	Reviewer	Comments
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US Fish and Wildlife Service

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/17/2017	John Wrublik (john_wrublik@fws.gov)	No Purpose and Need comments found.

Project Description Data

Project Description

The widening of Florida's Turnpike mainline (SR 91) from Jupiter to Fort Pierce will begin at milepost (MP) 116 in Palm Beach County and end at MP 152 in St. Lucie County, Florida. The total project length will be approximately 37 miles. The project consists of the widening of Florida's Turnpike from four to eight lanes by adding two express lanes in each direction. This portion of Florida's Turnpike includes numerous bridge structures that will need to be widened/reconstructed along with the mainline roadway. The project corridor contains a crossing of the Loxahatchee River and St. Lucie Canal. New interchange access locations will be considered as part of the PD&E study. These locations have not been determined as of this report.

Summary of Public Comments

Summary of Public Comments is not available at this time.

Justification

A public meeting is planned for this project. The exact date has not been determined at this time.

Planning Consistency Status

Planning Consistency Status

MPOs (if applicable)

St. Lucie TPO

Potential Lead Agencies

- FL Department of Transportation

Exempted Agencies

Agency Name	Justification	Date
Federal Transit Administration	FTA has requested to be exempt from reviewing any non-transit projects.	09/02/2016

Community Desired Features

No desired features have been entered into the database. This does not necessarily imply that none have been identified.

User Defined Communities Within 500 Feet

- Jupiter
- Mid County
- Palm City
- Port Salerno / 76
- South County

Census Places Within 500 Feet

- Fort Pierce
- Jupiter
- Palm City
- Port St. Lucie

Alternative #1

Alternative Description

Name	From	To	Type	Status	Total Length	Cost	Modes	SIS
Alternative was not named.	Indiantown Road (MP 116)	SR 70 (MP 152)	Widening	ETAT Review Complete	37.0 mi.		Roadway	Y

Segment Description(s)

Location and Length

Segment No.	Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
Unnamed Segment	Unnamed Segment			36.96			

Jurisdiction and Class

Segment No.	Jurisdiction	Urban Service Area	Functional Class
Unnamed Segment			

Base Conditions

Segment No.	Year	AADT	Lanes	Config
Unnamed Segment				

Interim Plan

Segment No.	Year	AADT	Lanes	Config
Unnamed Segment				

Needs Plan

Segment No.	Year	AADT	Lanes	Config
Unnamed Segment				

Cost Feasible Plan

Segment No.	Year	AADT	Lanes	Config
Unnamed Segment				

Funding Sources

No funding sources found.

Project Effects Overview for Alternative #1

Issue	Degree of Effect	Organization	Date Reviewed
Social and Economic			
Land Use Changes	N/A N/A / No Involvement	FL Department of Economic Opportunity	03/03/2017
Social	4 Substantial	US Environmental Protection Agency	03/22/2017
Farmlands	3 Moderate	Natural Resources Conservation Service	01/19/2017
Economic	N/A N/A / No Involvement	FL Department of Economic Opportunity	03/03/2017
Cultural			
Historic and Archaeological Sites	3 Moderate	FL Department of State	02/22/2017
Recreation Areas	3 Moderate	South Florida Water Management District	03/02/2017
Recreation Areas	3 Moderate	National Park Service	03/10/2017
Natural			
Wetlands and Surface Waters	4 Substantial	US Environmental Protection Agency	03/22/2017
Wetlands and Surface Waters	3 Moderate	US Fish and Wildlife Service	01/25/2017
Wetlands and Surface Waters	3 Moderate	National Marine Fisheries Service	02/14/2017

Wetlands and Surface Waters	3	Moderate	US Army Corps of Engineers	02/22/2017
Wetlands and Surface Waters	3	Moderate	South Florida Water Management District	03/02/2017
Wetlands and Surface Waters	3	Moderate	FL Department of Environmental Protection	03/03/2017
Water Quality and Quantity	3	Moderate	South Florida Water Management District	03/02/2017
Water Quality and Quantity	4	Substantial	US Environmental Protection Agency	03/22/2017
Floodplains	3	Moderate	South Florida Water Management District	03/02/2017
Wildlife and Habitat	4	Substantial	FL Fish and Wildlife Conservation Commission	02/28/2017
Wildlife and Habitat	3	Moderate	US Fish and Wildlife Service	01/25/2017
Wildlife and Habitat	0	None	FL Department of Agriculture and Consumer Services	03/03/2017
Coastal and Marine	3	Moderate	National Marine Fisheries Service	02/14/2017
Coastal and Marine	2	Minimal	South Florida Water Management District	03/02/2017
Physical				
Air Quality	2	Minimal	US Environmental Protection Agency	03/07/2017
Contamination	3	Moderate	US Environmental Protection Agency	03/22/2017
Contamination	2	Minimal	South Florida Water Management District	03/02/2017
Navigation	3	Moderate	US Coast Guard	02/24/2017
Navigation	2	Minimal	US Army Corps of Engineers	02/22/2017
Special Designations				
Special Designations	4	Substantial	US Environmental Protection Agency	03/22/2017
Special Designations	3	Moderate	South Florida Water Management District	03/02/2017
Special Designations	4	Substantial	US Fish and Wildlife Service	01/25/2017
Emergency Response				

ETAT Reviews and Coordinator Summary: Social and Economic

Land Use Changes

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

The Florida Department of Economic Opportunity (DEO) reviewed Comprehensive Plans for St. Lucie and Martin Counties, the Cities of Fort Pierce and Port St. Lucie, and the Town of Jupiter. The DEO identified that the Capital Improvements Plan (CIP) for St. Lucie County must be updated to include the project, while Martin County should update its Comprehensive Plan to discuss the project specifically. Similarly, the DEO determined that the City of Fort Pierce needs to update its Comprehensive Plan and CIP to include the project. The Town of Jupiter must also update its Comprehensive Plan to discuss the project specifically. The City of Port St. Lucie has indicated its desire to see a new exit established at Crosstown Parkway. The DEO also determined that the five jurisdictions have not yet identified the project within their future transportation map. Florida's Turnpike Enterprise will coordinate with each local agency to ensure the proposed project is included in the appropriate Comprehensive Plan, CIP, and future transportation map.

Degree of Effect: N/A *N/A / No Involvement* assigned 03/03/2017 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comprehensive Plan(s) Reviewed:

City of Fort Pierce Comprehensive Plan, adopted in February of 2011; *City of Port St. Lucie Comprehensive Plan*, adopted on September 10, 2012; *St. Lucie County Comprehensive Plan*, adopted in 2010; *Town of Jupiter Comprehensive Plan*, adopted on October 6, 2016; and, *Martin County Comprehensive Growth Management Plan*, adopted on October 20, 2015.

Comments on Effects to Resources:

Compatibility with Community Development Goals and Comprehensive Plan:

City of Fort Pierce: Policy 2.2.1 requires roadway improvement projects to be added to the CIP; Policy 2.61 requires coordination with local authorities for implementation of regional system improvements in the 5-year schedule of Capital Improvements; Policy 2.10.3 directs the City to participate in FDOT's five-year work program; no future number of lanes map; CIP out-of-date.

City of Port St. Lucie: The City of Port St. Lucie indicated that as this widening occurs, that a new exit off the Turnpike at Crosstown Parkway is desired. Policy 2.4.1.3 requires the City to annually review transportation improvements planned for the City and indicate the agency responsible for the improvement; roadway network was updated to include FDOT's infrastructure improvements through 2016.

Unincorporated St. Lucie County: Addition of two lanes for the Turnpike included in *Table 2-10, Roadway Needs Assessment*; not in CIP (ran through 2015), not in Long-term transportation CIP.

Town of Jupiter: The Comprehensive Plan requires coordination with FDOT, but project is not mentioned specifically; lanes not included TE Table 4 - Future conditions 2035.

Unincorporated Martin County: The Comprehensive Plan requires coordination with FDOT, but is not mentioned specifically; lanes not included in Figure 5-5C, 2035 Roadway Lanes & LOS.

Future Transportation Map:

City of Fort Pierce: The project is not identified on the Future Transportation Map. DEO staff recommends that the City of Ft. Pierce update its map to include this project.

City of Port St. Lucie: The project is not identified on the Future Transportation Map. DEO staff recommends that the City of Port St. Lucie update its map to include this project.

Unincorporated St. Lucie County: The project is not identified on the Future Transportation Map. DEO staff recommends that St. Lucie County update its map to include this project.

Town of Jupiter: The project is not identified on the Future Transportation Map. DEO staff recommends that the Town of Jupiter update its map to include this project.

Unincorporated Martin County: The project is not identified on the Future Transportation Map. DEO staff recommends that Martin County update its map to include this project.

Land Uses:

The following land uses surround the project:

City of Fort Pierce: General Commercial.

City of Port St. Lucie: Institutional, commercial Service, Open Space Recreation, Medium Density Residential, Low Density Residential, Utility, Open Space Conservation, High Density Residential, Light Industrial, Commercial General, Residential Golf Course, Commercial Highway.

Unincorporated St. Lucie County: Transportation/Utilities, Special District, Mixed Use Development, Residential/Conservation.

Town of Jupiter: Low Density Residential, Commercial, Not Designated (I-95), and Water.

Unincorporated Martin County: Public Conservation, Rural Density, Agricultural, General Institutional, Estate Density up to 2 du/acre, Industrial, Commercial Waterfront, Medium Density, Ag TEC, Agricultural Ranchette, and Recreational.

Parks:

City of Fort Pierce: Gordy Road Recreation Area.

City of Port St. Lucie: Girl Scout Friendship Park, Turtle Run Park, and Jessica Clinton Park.

Unincorporated St. Lucie County: None identified.

Town of Jupiter: None identified.

Unincorporated Martin County: Jonathan Dickinson State Park and Atlantic Ridge Preserve State Park.

FDOT should analyze potential impacts to these 4(f) resources.

Area of Critical State Concern (ACSC), Coastal High Hazard Area (CHHA), and Military Bases:

The project is not located within an Area of Critical State Concern, or the CHHA; nor does it encroach on any military bases.

Other Planning-Related Items:

None.

Contact Information:

David Kemp (Town of Jupiter) - Phone Number: (561) 741-2452. Nikki Van Vonno (Martin County) - Phone Number: (772) 288-5520.

Additional Comments (optional):

CLC Commitments and Recommendations:

Social

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 05/18/2017 by Florida's Turnpike Enterprise

Comments:

The United States Environmental Protection Agency (USEPA) commented that there are significant low-income, minority, linguistically isolated, and other special populations in the project corridor. A Sociocultural Effects Evaluation will be conducted during the Project Development and Environment (PD&E) phase to verify the presence of these populations and determine potential impacts the project may have on surrounding communities. Public outreach will be conducted during the PD&E phase to solicit input from all residents in the project area, including these special populations. Based on comments from the USEPA, the 1/4-mile buffer distance has been applied using the data provided by the Environmental Screening Tool (EST). The results of this review are summarized below.

Within the 1/4-mile assessment area, there are eleven (11) parcels of public land, twelve (12) existing recreational trails, five (5) schools, five (5) religious centers, and 36 census block groups. The average housing vacancy rate within these block groups is approximately 13 percent; however, vacancy rates of individual block groups range from 6.1 percent to 22.5 percent. The average rate of limited English proficiency (LEP) among the assessment area's block groups is 2.5 percent; however, LEP rates among individual block groups range from zero (0) to ten (10) percent. Within the assessment area, there are 150 Census Blocks that have minority populations greater than 40 percent.

The USEPA also recommended that the project comply with Executive Order 13166, *Improving Access to Services for Persons with Limited English Proficiency* and Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*. Accommodations for limited English proficiency will be provided during public involvement efforts. Additionally, a noise study report and air quality screening report will be developed as part of the PD&E study, which complies with Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* per the PD&E manual.

Degree of Effect: 4 *Substantial* assigned 03/22/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: Tech Memo Required

Coordination Document Comments:

Sociocultural Effects (SCE) Evaluation Technical Memorandum (PD&E Manual, Part 2, Chapter 9; FDOT's Sociocultural Effects Evaluation Handbook)

Children's Health Assessment Report

Noise Study Report

Direct Effects

Identified Resources and Level of Importance:

Social impacts can be defined as any action or activity that has an effect on how people live, work, play, relate to one another, organize to meet their needs, and function as individuals and/or society. In the *Agency Operating and Funding Agreement for Continuing Participation in the Efficient Transportation Decision Making and Transportation Project Development Processes between United States Environmental Protection Agency and Federal Highway Administration and Florida Department of Transportation*, January 23, 2015, FDOT requested the USEPA's focus on Environmental Justice considerations for this issue. Therefore, the resources of particular concern are low-income, disadvantaged, minority, and other special populations.

The level of importance is discussed in FDOT's ETDM Manual, PD&E Manual, Public Involvement Handbook, and summarized in this succinct paragraph from the Sociocultural Effects Evaluation Handbook (page C-1):

"Historically, minority, disadvantaged, low-mobility, and low-income populations have been underrepresented in the transportation planning and project development process. Inadequate access to decision-making and information increases the potential that a specific population will be adversely affected by a transportation project and the likelihood that their specific needs or concerns will not be fully addressed. Since 1964, federal laws and policies have been developed to ensure that the civil rights of minority, disadvantaged, low-mobility and low-income populations will be protected and that the decision-making process for those projects is free from discrimination. Compliance with Title VI of the Civil Rights Act of 1964 cuts across all sociocultural considerations."

Applicable authorities include, but are not limited to:

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations [February 11, 1994];

USDOT Order 5610.2: Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations [April 1997]; and

USDOT Order 6640.23: FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations [December 1998].

Comments on Effects to Resources:

It is not clear why a 500-foot buffer area was used in the Preliminary Environmental Discussion Comments Report (PED) to assess the potential social impacts of the project. The FDOT PD&E Manual (Part 2, Chapter 9) prescribes use of a 1/4-mile buffer area in urban areas and a 1-mile buffer area for rural areas. Because the project corridor traverses urban and rural areas, both buffers should have been used. Please provide an explanation in the ETDM Summary Report for this deviation from FDOT policy and indicate whether the Sociocultural Effects Evaluation conducted during PD&E will be consistent with the PD&E Manual and FDOT's Sociocultural Effects Evaluation Handbook.

Of note is that the 1/4-mile buffer area should be used during PD&E. As stated in the Sociocultural Effects Evaluation Handbook (page 6-11), the "1/4 Mile buffer is the preferred buffer for SCE evaluations to allow for the inclusion of community facilities and address connectivity."

Review of the Census Block Group data in the EST revealed populations of concern in the City of Port St. Lucie, which is an urbanized area as defined by the US Census Bureau (http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua71479_port_st_lucie_fl/DC10UA71479.pdf). Utilizing the prescribed 1/4-mile buffer and EJSCREEN* (<http://www2.epa.gov/ejscreen>), the following demographics characterize the various populations adjacent to the project corridor and within the city limits:

Total Population = 24,402
Minority Population = 43% [State Average = 43%]
Low Income Population = 39% [State Average = 38%]
Linguistically Isolated Population = 5% [State Average = 7%]
Population with Less than High School Education = 13% [State Average = 14%]
Population Under 5 Years of Age = 6% [State Average = 6%]
Population Over 64 Years of Age = 20% [State Average = 18%]

Unfortunately, the averaging of Census Block Group data in EJSCREEN produces a demographic picture that mostly mirrors statewide averages. Drilling down to Block Group and Block levels is therefore necessary to understand the people who will be impacted by the project.

There are nineteen (19) Census Block Groups adjacent to Florida's Turnpike corridor, in the 1/4 mile buffer, and within the Port St. Lucie city limits. As indicated in **bold** in the following demographic data from EJSCREEN, all of the Block Groups (listed from north to south) have at least one EJ-related population that is larger than the state average. Consequently, it appears that the project could have disproportionately high and adverse human health

or environmental effects on low-income, disadvantaged, minority, and other special populations.

Block Group #121113821082

Total Population = 9,295

Minority Population = 50%

Low Income Population = 41%

Linguistically Isolated Population = 6%

Population with Less than High School Education = 9%

Population Under 5 Years of Age = 6%

Population Over 64 Years of Age = 11%

Block Group #121113815023

Total Population = 6,920

Minority Population = 38%

Low Income Population = 44%

Linguistically Isolated Population = 5%

Population with Less than High School Education = 15%

Population Under 5 Years of Age = 5%

Population Over 64 Years of Age = 28%

Block Group #121113821084

Total Population = 3,010

Minority Population = 18%

Low Income Population = 19%

Linguistically Isolated Population = 0%

Population with Less than High School Education = 6%

Population Under 5 Years of Age = 0%

Population Over 64 Years of Age = 60%

Block Group #121113815033

Total Population = 3,690

Minority Population = 53%

Low Income Population = 28%

Linguistically Isolated Population = 3%

Population with Less than High School Education = 14%

Population Under 5 Years of Age = 4%

Population Over 64 Years of Age = 11%

Block Group #121113815034

Total Population = 2,876

Minority Population = 52%

Low Income Population = 43%

Linguistically Isolated Population = 2%

Population with Less than High School Education = 15%

Population Under 5 Years of Age = 8%

Population Over 64 Years of Age = 14%

Block Group #121113820083

Total Population = 3,119

Minority Population = 43%

Low Income Population = 43%

Linguistically Isolated Population = 3%

Population with Less than High School Education = 22%

Population Under 5 Years of Age = 4%

Population Over 64 Years of Age = 16%

Block Group #121113821083

Total Population = 6,515

Minority Population = 35%

Low Income Population = 32%
Linguistically Isolated Population = 5%
Population with Less than High School Education = 10%
Population Under 5 Years of Age = 3%
Population Over 64 Years of Age = 32%

Block Group #121113820082

Total Population = 2,362

Minority Population = 68%

Low Income Population = 58%

Linguistically Isolated Population = 9%

Population with Less than High School Education = 18%

Population Under 5 Years of Age = 14%

Population Over 64 Years of Age = 19%

Block Group #121113820081

Total Population = 1,585

Minority Population = 47%

Low Income Population = 33%

Linguistically Isolated Population = 4%

Population with Less than High School Education = 14%

Population Under 5 Years of Age = 5%

Population Over 64 Years of Age = 6%

Block Group #121113821114

Total Population = 4,632

Minority Population = 59%

Low Income Population = 44%

Linguistically Isolated Population = 7%

Population with Less than High School Education = 22%

Population Under 5 Years of Age = 2%

Population Over 64 Years of Age = 11%

Block Group #121113820071

Total Population = 4,913

Minority Population = 48%

Low Income Population = 39%

Linguistically Isolated Population = 2%

Population with Less than High School Education = 19%

Population Under 5 Years of Age = 6%

Population Over 64 Years of Age = 15%

Block Group #121113821132

Total Population = 1,512

Minority Population = 24%

Low Income Population = 31%

Linguistically Isolated Population = 10%

Population with Less than High School Education = 18%

Population Under 5 Years of Age = 5%

Population Over 64 Years of Age = 12%

Block Group #121113820061

Total Population = 3,329

Minority Population = 36%

Low Income Population = 45%

Linguistically Isolated Population = 9%

Population with Less than High School Education = 6%

Population Under 5 Years of Age = 8%

Population Over 64 Years of Age = 16%

Block Group #121113821131

Total Population = 3,025

Minority Population = 49%

Low Income Population = 69%

Linguistically Isolated Population = 10%

Population with Less than High School Education = 13%

Population Under 5 Years of Age = 9%

Population Over 64 Years of Age = 9%

Block Group #121113820063

Total Population = 2,622

Minority Population = 20%

Low Income Population = 26%

Linguistically Isolated Population = 0%

Population with Less than High School Education = 4%

Population Under 5 Years of Age = 5%

Population Over 64 Years of Age = 45%

Block Group #121113821134

Total Population = 2,094

Minority Population = 55%

Low Income Population = 66%

Linguistically Isolated Population = 16%

Population with Less than High School Education = 14%

Population Under 5 Years of Age = 13%

Population Over 64 Years of Age = 10%

Block Group #121113820062

Total Population = 2,041

Minority Population = 34%

Low Income Population = 30%

Linguistically Isolated Population = 4%

Population with Less than High School Education = 7%

Population Under 5 Years of Age = 6%

Population Over 64 Years of Age = 19%

Block Group #121113821133

Total Population = 6,247

Minority Population = 43%

Low Income Population = 39%

Linguistically Isolated Population = 8%

Population with Less than High School Education = 19%

Population Under 5 Years of Age = 6%

Population Over 64 Years of Age = 13%

Block Group #121113821121

Total Population = 7,086

Minority Population = 46%

Low Income Population = 35%

Linguistically Isolated Population = 9%

Population with Less than High School Education = 13%

Population Under 5 Years of Age = 13%

Population Over 64 Years of Age = 14%

An additional Block Group that could be impacted by the project is located in Jupiter in Palm Beach County:

Block Group #120990002131

Total Population = 1,701

Minority Population = 63%
Low Income Population = 69%
Linguistically Isolated Population = 15%
Population with Less than High School Education = 22%
Population Under 5 Years of Age = 10%
Population Over 64 Years of Age = 9%

According to the PD&E Manual (Part 1, Chapter 3), the PED should have considered "the community demographics (e.g., age, income, minority populations), underserved populations/environmental justice concerns, community cohesion, safety/emergency response, community character, community goals, and describe potential involvement with them as appropriate." However, the only demographic discussed was "minority populations greater than 40 percent." Please explain in the ETDM Summary Report why impacts on other special populations were not considered.

Because demographic data indicates the presence of linguistically-isolated and less educated populations in the project corridor, the USEPA recommends complying with Executive Order 13166, *Improving Access to Services for Persons with Limited English Proficiency* (<https://www.fhwa.dot.gov/civilrights/programs/lep.cfm>), as described in the Federal Highway Administration's *How to Engage Low-Literacy and Limited-English-Proficiency Populations in Transportation Decisionmaking* (www.fhwa.dot.gov/planning/publications/low-limited/). Please indicate in the ETDM Summary Report whether LEP considerations will be included in the public involvement process.

Moreover, please discuss the public involvement process in the ETDM Summary Report. The only reference to public involvement in the project documentation is the statement in the Purpose and Need that "[a] public meeting is planned for this project. The exact date has not been determined at this time." The USEPA does not understand how one public meeting will address public concerns along a 37-mile project corridor that impacts three cities (Fort Pierce, Port St. Lucie, and Jupiter), one Census Designated Place (Palm City), and unincorporated areas in three counties, and that will necessitate relocations to acquire right-of-way for the widening of Florida's Turnpike from four lanes to eight and adding new interchanges. It is also not clear how holding one public meeting is consistent with federal and state requirements, as well as the Department's own policies and procedures (e.g., PD&E Manual, Public Involvement Handbook, etc.), for conducting meaningful public involvement activities.

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, directs federal agencies (and their designees) to minimize environmental health and safety risks to children, and to prioritize the identification and assessment of environmental health and safety risks that may have a disproportionate impact on children. Given the higher than average populations of children under 5 years of age in 7 Census Block Groups, the presence of 4 schools in the 500-foot buffer area (i.e., Citrus Grove Elementary School and South Fork High School in Martin County; Southeast Military Academy, and West Gate K-8 School in St. Lucie County), and 5 more schools in the 1000-foot buffer area (i.e., Bayshore Elementary School, Parkway Elementary School, Renaissance Charter School of St. Lucie, St. Lucie West K-8 School, and St. Lucie West Centennial High School in St. Lucie County), the USEPA recommends conducting a Children's Health Assessment during the PD&E phase to define these populations and identify all sensitive receptors that could be impacted, including preschools and childcare centers. The resulting report needs to specifically address potential air quality and noise impacts on children's health and safety. Information about protecting children's environmental health is available online at <https://www.epa.gov/children>.

The USEPA endorses conducting the noise study mentioned in the PED. Of particular concern is the proximity of several schools (i.e., West Gate K-8 School at 150 feet and South Fork High School at 225 feet) and residences (e.g., the Cove at St. Lucie apartments in Block Group #121113815023 at 150 feet, homes on NW North Macedo Blvd in Block Group #121113815033 at 220 feet, homes in Block Groups #121113821132 and 121113821131 at 180 feet, and a home in Savannah Estates in Martin County at 135 feet) to the turnpike and the impact of widening to eight lanes on buffers that may already be inadequate. The noise study should identify all sensitive receptors and determine if predicted noise levels will approach or exceed the Noise Abatement Criterion. Please confirm in the ETDM Summary Report that a Noise Study Report will be prepared.

* EJSCREEN is a pre-decisional screening tool. It was not designed to be the basis for agency decision-making or determinations regarding the existence or absence of EJ concerns, nor should it be used to identify or label an area as an "EJ Community." Rather, EJSCREEN highlights locations that may be candidates for further review and/or outreach. EJSCREEN data needs to be supported by community-specific demographic information and local knowledge. (https://www.epa.gov/sites/production/files/2015-05/documents/ejscreen_technical_document_20150505.pdf)

Additional Comments (optional):

Sociocultural Effects (SCE) Evaluation Technical Memorandum (PD&E Manual, Part 2, Chapter 9; FDOT's Sociocultural Effects Evaluation Handbook)

Children's Health Assessment Report

Noise Study Report

Relocation Potential

Project Effects

Coordinator Summary Degree of Effect: **2** *Minimal* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

No ETAT reviews were submitted for this issue. However, 2008 geographic information systems (GIS) data provided in the Environmental Screening Tool (EST), indicates there are five residential areas (3.38 acres) within the 100-foot buffer, and 42 residential areas (543 acres) within the 500-foot buffer. A Conceptual Stage Relocation Plan will be prepared for this project if right-of-way acquisition results in the need for relocations.

None found

Farmlands

Project Effects

Coordinator Summary Degree of Effect: **3** *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

This project is being completed without a federal agency or financial or technical assistance from a federal agency. The documentation for this project is a State Environmental Impact Report (SEIR). Pursuant to Part 2, Chapter 28 of the FDOT PD&E Manual, the project is not subject to the provisions of the Farmland Protection Policy Act of 1981, 7 CFR Part 658.

The geographic information systems (GIS) data provided in the Environmental Screening Tool indicates that approximately 68 percent of the total project area is classified as Farmland of Unique Importance. If impacts to farmlands are anticipated, a GIS shapefile depicting these farmlands will be provided to the Natural Resource Conservation Service (NRCS).

Degree of Effect: **3** *Moderate* assigned 01/19/2017 by Rick Allen Robbins, Natural Resources Conservation Service

Coordination Document: To Be Determined: Further Coordination Required

Coordination Document Comments:

The GIS analysis data indicates that approximately 68 percent of the total project area is classified as Farmland of Unique Importance. The Farmland Protection Policy Act (FPPA) (PL 97-98; 7 U.S.C. 4201 et seq.) was enacted to protect the amount of open farmland which has substantially decreased as a result of land use changes. It states that Federal programs which contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses will be minimized. Agencies are also to consider alternative actions and ensure that their programs are compatible with state and local government programs.

Environmental assessments must be prepared for actions which may adversely affect such unique geographic characteristics as prime farmlands. The regulations apply to construction activities, development grants and loans, and certain Federal land management decisions that contribute either directly or indirectly to loss of farmland.

A Farmland Protection Policy Act form (AD-1006) may be required for this project. Please refer to the link below for more information:

<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/fl/soils/?cid=stelprdb1101661>

Direct Effects

Identified Resources and Level of Importance:

The USDA-NRCS considers soil map units with important soil properties for agricultural uses to be Prime Farmland (Important Farmland soils). Prime Farmland (as defined in ETDM) is classified in several different categories based on specific criteria. **Prime Farmland** must meet specific soil-related criteria, as defined by the USDA-Natural Resources Conservation Service. **Farmland of Unique Importance** is based on the ability of the soil to grow very specific crops, such as citrus, vegetables, sugar cane, and other high-value specialty crops. It is also based on the extent that a soil is used for these crops within a specific county. Therefore, a soil in one county may be Unique Farmland, but not in an adjacent county. **Farmland of Local Importance** is classified as being important to the local entities (counties) and worthy of special consideration. Locally Important Farmland soils were designated by local governance (Soil and Water Conservation Districts).

Nationally, there has been a reduction in the overall amount of Prime, Locally Important, and Unique Farmlands through conversion to non-farm uses. This trend has the possibility of impacting the nation's food supply and exporting capabilities.

Comments on Effects to Resources:

Conducting GIS analysis of Prime Farmland (using USDA-NRCS data) and Important Farmland Analysis (using 2008 SFWMD data and 2015 SSURGO

data) has resulted in the determination that there are soils designated as Farmland of Unique Importance at all buffer widths within the Project footprint. In addition, there are areas currently used for agricultural production at all buffer widths.

At the 100 foot buffer width, there are 616.5 acres of Farmland of Unique Importance. At the 200 foot buffer width, there are 1231.3 acres of Farmland of Unique Importance. At the 500 foot buffer width, there are 3068.4 acres of Farmland of Unique Importance.

Land used for agricultural production (SFWMD Ag Lands 2008-*primarily pasture and citrus*, but includes others) ranges from 2.6 acres at the 100 foot buffer width to 530.8 acres at the 500 foot buffer width.

More importantly, land in agricultural use (primarily -*see list above*) that also classifies as Farmland of Unique Importance ranges from 2.6 acres at the 100 foot buffer width to 512.9 acres at the 500 foot buffer width. This combination of Important Farmland that is agricultural production amounts to less than 1 to 11% of the Project footprint (depending on buffer width).

An evaluation of more recent orthoimagery suggests that there has been a reduction of citrus production since the 2008 SFWMD land use data was gathered. Many of the groves within the proposed project footprint have transitioned from citrus due to citrus greening and other diseases. Under normal circumstances, the USDA-NRCS would have rated the Degree of Effect as Substantial. However, due to land use changes, project design (widening), and the proximity of the project to other existing transportation corridors we have downgraded the Degree of Effect to Moderate.

Additional Comments (optional):

The GIS analysis data indicates that approximately 68 percent of the total project area is classified as Farmland of Unique Importance. The Farmland Protection Policy Act (FPPA) (PL 97-98; 7 U.S.C. 4201 et seq.) was enacted to protect the amount of open farmland which has substantially decreased as a result of land use changes. It states that Federal programs which contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses will be minimized. Agencies are also to consider alternative actions and ensure that their programs are compatible with state and local government programs.

Environmental assessments must be prepared for actions which may adversely affect such unique geographic characteristics as prime farmlands. The regulations apply to construction activities, development grants and loans, and certain Federal land management decisions that contribute either directly or indirectly to loss of farmland.

A Farmland Protection Policy Act form (AD-1006) may be required for this project. Please refer to the link below for more information:

<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/fl/soils/?cid=stelprdb1101661>

CLC Commitments and Recommendations:

Aesthetic Effects

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

No ETAT reviews were submitted for this issue. The project is not likely to create any adverse impacts to aesthetics. Public involvement will solicit public opinion on project effects and general design concepts related to aesthetics.

None found

Economic

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

The proposed improvements have the potential to stimulate new development and generate additional employment opportunities.

Degree of Effect: N/A *N/A / No Involvement* assigned 03/03/2017 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comprehensive Plan(s) Reviewed:

City of Fort Pierce Comprehensive Plan, adopted in February of 2011; *City of Port St. Lucie Comprehensive Plan*, adopted on September 10, 2012; *St.*

Lucie County Comprehensive Plan, adopted in 2010; *Town of Jupiter Comprehensive Plan*, adopted on October 6, 2016; and, *Martin County Comprehensive Growth Management Plan*, adopted on October 20, 2015.

Comments on Effects to Resources:

The project *is not* located within a Rural Area of Opportunity.

The project does have the potential to attract new development and create additional employment opportunities.

Additional Comments (optional):

CLC Commitments and Recommendations:

Mobility

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

No ETAT reviews were submitted for this issue. The project will increase roadway capacity throughout the project limits and create the potential to attract new development in the surrounding areas.

None found

ETAT Reviews and Coordinator Summary: Cultural

Section 4(f) Potential

Project Effects

Coordinator Summary Degree of Effect: N/A *N/A / No Involvement* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

No ETAT reviews were submitted for this issue. Section 4(f) is not applicable for state-funded projects.

None found

Historic and Archaeological Sites

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

The Florida Department of State and the Seminole Tribe of Florida commented that a Cultural Resource Assessment Survey (CRAS) will be required for the project. Florida's Turnpike Enterprise will prepare a CRAS in coordination with the State Historic Preservation Office (SHPO).

Degree of Effect: 3 *Moderate* assigned 02/22/2017 by Daniel McClarnon, FL Department of State

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

The Area of Potential Effect will need to be surveyed. Our office looks forward to reviewing the CRAS.

Comments on Effects to Resources:

n/a

Additional Comments (optional):

CLC Commitments and Recommendations:

Recreation Areas

Project Effects

Coordinator Summary Degree of Effect:

3 *Moderate* assigned 05/18/2017 by Florida's Turnpike Enterprise

Comments:

The National Park Service (NPS) noted that the Loxahatchee River, crossed by the Florida's Turnpike mainline, is one of two rivers in Florida designated as a *Wild and Scenic River*. The NPS also identified two Land and Water Conservation Fund (LWCF) sites within the 200- and 500-foot buffers, as well as two LWCF sites within one mile of the proposed project. Any right-of-way (R/W) that converts the use of these sites to any use other than public outdoor recreation will constitute a Section 6(f)(3) conversion, which will require replacement property of equal or greater financial and ecological value. The NPS also recommended an Environmental Assessment (EA) or an Environmental Impact Survey (EIS) and 4(f) evaluation be prepared. The South Florida Water Management District (SFWMD) noted additional criteria will be required for protecting the Loxahatchee River, an aquatic preserve. It also indicated that the Loxahatchee River and Ten Mile Creek area are both part of Comprehensive Everglades Restoration Plan (CERP) projects, and will require additional coordination with CERP leadership.

Florida's Turnpike Enterprise will coordinate with SFWMD staff and CERP project managers during the PD&E study.

Degree of Effect: **3** *Moderate* assigned 03/02/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: To Be Determined: Further Coordination Required

Coordination Document Comments:

For these issues additional coordination is required, especially if new on ramps/ exits or expanded intersections are proposed, or if the project components will occur outside of the current FDOT right of way. Coordination with CERP project managers, SFWMD land management staff, SFWMD Right of Way permitting staff and FDEP state park staff is highly recommended.

Also, for the area of the project within the Loxahatchee River, review by the Loxahatchee River Management Coordinating Council is needed.

Direct Effects

Identified Resources and Level of Importance:

The project is within or adjacent to substantial public lands that serve as important habitat and are also used for recreation:

- Jonathan Dickinson State Park,
- the Wild and Scenic section of the Loxahatchee River
- the Loxahatchee River Aquatic Preserve.
- SFWMD Lands: Cypress Creek and Loxahatchee River Management Area and the Ten Mile Creek parcels.

The Ten Mile Creek area and the Loxahatchee River area are part of a CERP project.

The C-23, C-24 and C-25 canals are SFWMD Right of Way.

There are several existing conservation easements dedicated to the SFWMD adjacent to the Turnpike Right of Way.

The Loxahatchee River, Cypress Creek, South Fork of the St. Lucie River, Ten Mile Creek, possibly Bessey Creek are likely state owned lands that require public easements from the Board of Trustees, or modification of existing easements.

Comments on Effects to Resources:

To protect the Loxahatchee River, there are additional criteria that apply for aquatic preserves. Use of submerged lands also has additional criteria, as do use of SFWMD Right of Way.

The Loxahatchee River and Ten Mile Creek area are both CERP -related projects. While designing the project, efforts should be taken to avoid construction outside of the existing right of ways in these areas.

Additional Comments (optional):

For these issues additional coordination is required, especially if new on ramps/ exits or expanded intersections are proposed, or if the project components will occur outside of the current FDOT right of way. Coordination with CERP project managers, SFWMD land management staff, SFWMD Right of Way permitting staff and FDEP state park staff is highly recommended.

Also, for the area of the project within the Loxahatchee River, review by the Loxahatchee River Management Coordinating Council is needed.

CLC Commitments and Recommendations:

Degree of Effect: **3** *Moderate* assigned 03/10/2017 by Anita Barnett, National Park Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

The National Park Service has reviewed the Efficient Transportation Decision Making (ETDM) project # 14295 for Turnpike Mainline Widening from Juniper to Fort Pierce and offers the following comments:

Wild and Scenic Rivers

The Loxahatchee River was designated as a National Wild and Scenic River under Section 2(a)(ii) of the Wild and Scenic Rivers Act in 1985. It was designated by the Secretary of the Interior at the request of the Governor of the State of Florida, and is therefore considered a "state-administered" Wild and Scenic River. Although the federal government is precluded by Section 2(a)(ii) from owning lands or directly managing the river corridor, the National Park Service (NPS) is tasked with ensuring that any federally-assisted, permitted, licensed, or funded water resources project (e.g., bridges or highway spans) will not adversely affect the values for which the river was designated. In accordance with Section 7(a) of the Wild and Scenic Rivers Act, the NPS must conclude, based on information provided by the project proponent that the project will not have a "direct and adverse" effect on the free flowing condition, water quality, or the outstandingly remarkable values for which the Loxahatchee River was designated. Open consultation in the early stages of the project will be paramount to ensuring a timely and successful conclusion to project planning. Please coordinate with Jeffrey R. Duncan, PhD, at National Park Service-Southeast Region, Science and Natural Resources Division, Fisheries and Aquatic Resource, 100 West Martin Luther King, Jr. Blvd, Suite 214, Chattanooga, TN 37402. Mr. Duncan can be reached at 423-987-6127.

Land and Water Conservation Fund

The following Land and Water Conservation Fund sites are within the area of potential affect: 1) Phipp park and Recreation, Land and Water Conservation Fund (LWCF) site # 12-00626 is within 200 feet of the proposed widening, 2) South Fork St Lucie River Park has changed its name to Sandspruit Park, LWCF site # 12-00300 is with located with 500 feet, 3&4) Both the Community Center Park LWCF# 12-00457 and Cypress Creek Natural Area, LWCF # 12-00627 are within a mile of the proposed project.

Further information is needed to determine the degree of effect and mitigation. We recommend that an EA or EIS and 4F evaluation be prepared. Any right of way needed from the LWCF sites listed above, in whole or in part, that converts the use of a portion of the park to other than public outdoor recreation, would constitute a Section 6(f)(3) conversion. A conversion of use will include the Florida Department of Transportation providing replacement property that not only is equal or greater in fair market value to the converted site, but also, is of reasonable equivalent usefulness. Also, all NEPA requirements must be satisfactorily completed as well as other requirements as outlined in the LWCF Act (36 CFR 59.3)

If a conversion should occur, the Florida Department of Environmental Protection, Division of State Lands, 3900 Commonwealth Blvd, Tallahassee, FL 32399-3000, should be contacted for early coordination. If you have any questions concerning a conversion, contact Linda Reeves, Operations Management Consultant Manager--linda.reeves@dep.state.fl.us--(850) 245-2501.

Please keep us informed as the project progresses through the PD&E phase and if the proposed project changes please contact Anita Barnett at National Park Service, 100 Alabama Street, 1924 Bldg., Atlanta Georgia, 30303, 404-507-5706; Anita_Barnett@nps.gov. Thank you for the opportunity to review and provide comments.

Comments on Effects to Resources:

The National Park Service has reviewed the Efficient Transportation Decision Making (ETDM) project # 14295 for Turnpike Mainline Widening from Juniper to Fort Pierce and offers the following comments:

Wild and Scenic Rivers

The Loxahatchee River was designated as a National Wild and Scenic River under Section 2(a)(ii) of the Wild and Scenic Rivers Act in 1985. It was designated by the Secretary of the Interior at the request of the Governor of the State of Florida, and is therefore considered a "state-administered" Wild and Scenic River. Although the federal government is precluded by Section 2(a)(ii) from owning lands or directly managing the river corridor, the National Park Service (NPS) is tasked with ensuring that any federally-assisted, permitted, licensed, or funded water resources project (e.g., bridges or highway spans) will not adversely affect the values for which the river was designated. In accordance with Section 7(a) of the Wild and Scenic Rivers Act, the NPS must conclude, based on information provided by the project proponent that the project will not have a "direct and adverse" effect on the free flowing condition, water quality, or the outstandingly remarkable values for which the Loxahatchee River was designated. Open consultation in the early stages of the project will be paramount to ensuring a timely and successful conclusion to project planning. Please coordinate with Jeffrey R. Duncan, PhD, at National Park Service-Southeast Region, Science and Natural Resources Division, Fisheries and Aquatic Resource, 100 West Martin Luther King, Jr. Blvd, Suite 214, Chattanooga, TN 37402. Mr. Duncan can be reached at 423-987-6127.

Land and Water Conservation Fund

The following Land and Water Conservation Fund sites are within the area of potential affect: 1) Phipp park and Recreation, Land and Water

Conservation Fund (LWCF) site # 12-00626 is within 200 feet of the proposed widening, 2) South Fork St Lucie River Park has changed its name to Sandsprit Park , LWCF site # 12-00300 is with located with 500 feet, 3&4) Both the Community Center Park LWCF# 12-00457 and Cypress Creek Natural Area, LWCF # 12-00627 are within a mile of the proposed project.

Further information is needed to determine the degree of effect and mitigation. We recommend that an EA or EIS and 4F evaluation be prepared. Any right of way needed from the LWCF sites listed above, in whole or in part, that converts the use of a portion of the park to other than public outdoor recreation, would constitute a Section 6(f)(3) conversion. A conversion of use will include the Florida Department of Transportation providing replacement property that not only is equal or greater in fair market value to the converted site, but also, is of reasonable equivalent usefulness. Also, all NEPA requirements must be satisfactorily completed as well as other requirements as outlined in the LWCF Act (36 CFR 59.3)

If a conversion should occur, the Florida Department of Environmental Protection, Division of State Lands, 3900 Commonwealth Blvd, Tallahassee, FL 32399-3000, should be contacted for early coordination. If you have any questions concerning a conversion, contact Linda Reeves, Operations Management Consultant Manager--linda.reeves@dep.state.fl.us--(850) 245-2501.

Please keep us informed as the project progresses through the PD&E phase and if the proposed project changes please contact Anita Barnett at National Park Service, 100 Alabama Street, 1924 Bldg., Atlanta Georgia, 30303, 404-507-5706; Anita_Barnett@nps.gov . Thank you for the opportunity to review and provide comments.

Additional Comments (optional):

CLC Commitments and Recommendations:

ETAT Reviews and Coordinator Summary: Natural

Wetlands and Surface Waters

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

During the PD&E phase, a wetland evaluation will be conducted as part of the Natural Resource Evaluation (NRE) report, in accordance with Part 2, Chapter 18 of the FDOT PD&E Manual, to determine the potential adverse impacts to wetlands. All necessary measures will be taken to avoid and/or minimize impacts to wetlands to the greatest extent feasible during project design. Should avoidance and/or minimization not be feasible, a mitigation plan will be prepared. An Environmental Resource Permit (ERP) will be obtained for the project, as well as a Section 404 Permit.

Florida's Turnpike Enterprise will continue to coordinate with the US Army Corps of Engineers (USACE), United States Environmental Protection Agency (USEPA), United States Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC), Florida Department of Environmental Protection (FDEP), South Florida Water Management District(SFWMD), and National Marine Fisheries Service (NMFS) during the PD&E and design phases of the project.

Degree of Effect: 4 *Substantial* assigned 03/22/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20), and
Wetlands Evaluation Report (PD&E Manual, Part 2, Chapter 18).

Direct Effects

Identified Resources and Level of Importance:

Wetlands and other surface waters provide important and beneficial functions, including providing essential fish and wildlife habitat, buffering water quality impacts, storing floodwaters, and maintaining surface water flow during dry periods. However, "[a]s development increased and more paved areas covered the land, stormwater runoff became the primary source of pollution to surface waters in Florida"

(http://www.sfwmd.state.fl.us/publications/files/stormwater_systems.pdf). The most common contaminants in highway runoff are heavy metals, inorganic salts, volatile organics, petroleum hydrocarbons, bacteria, pesticides/herbicides, and suspended solids that accumulate on the road surface as a result of regular highway operation and maintenance activities.

Various federal, state, and local laws have been enacted to protect surface water resources. The Clean Water Act (CWA) established the basic structure for regulating discharges of pollutants into the waters of the United States (which include wetlands) and provides statutory authority for various regulatory programs. CWA Section 402 requires permitting of all municipal, industrial and commercial facilities that discharge wastewater or stormwater directly from a point source into a surface water of the United States. These National Pollutant Discharge Elimination System (NPDES) permits are written to ensure receiving waters will achieve Water Quality Standards established pursuant to CWA Section 303(c). In October 2000, the USEPA delegated authority to the Florida Department of Environmental Protection (FDEP) to implement the NPDES permitting program, which includes Municipal Separate Storm Sewer System (MS4) permits.

A separate type of permit is required to dispose of dredged or fill material in the nation's waters, including wetlands. Authorized by CWA Section 404, this permit program is administered by the U.S. Army Corps of Engineers, subject to and using the Section 404(b)(1) Guidelines developed by the USEPA in coordination with the Corps and codified in 40 CFR Part 230 (<https://www.epa.gov/cwa-404/section-404b1-guidelines-40-cfr-230>).

Comments on Effects to Resources:

As described in the Preliminary Environmental Discussion Comments Report (PED), the EST identified approximately 382 acres of Palustrine wetlands, 51 acres of Riverine wetlands, 34.5 acres of Lacustrine wetlands and 17 acres of Estuarine wetlands within the 500-foot buffer.

Additional Comments (optional):

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20), and Wetlands Evaluation Report (PD&E Manual, Part 2, Chapter 18).

CLC Commitments and Recommendations:

Degree of Effect: 3 *Moderate* assigned 01/25/2017 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Wetlands

Comments on Effects to Resources:

Wetlands provide important habitat for fish and wildlife. Wetlands may occur within and near the project site. We recommend that these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the FDOT provide mitigation that fully compensates for the loss of important resources.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: 3 *Moderate* assigned 02/14/2017 by Brandon Howard, National Marine Fisheries Service

Coordination Document: Tech Memo Required

Coordination Document Comments:

EFH Assessment

Direct Effects

Identified Resources and Level of Importance:

Magnuson-Stevens Act and Fish and Wildlife Coordination Act: Where the following waterbodies and the Turnpike cross are essential fish habitat (EFH):

- The Loxahatchee River and its tributary crossings at the following 3 locations: 26.954450 , -80.165199 ; 26.964772 , -80.173156 ; and 26.972063 , -80.178423 .
- The South Fork of the St. Lucie River at 27.117673 , -80.274832 .
- The tributary to the South Fork of the St. Lucie River at 27.128295 , -80.282304 .

- The South Florida Water Management District canal at 27.262455 , -80.352264 .
- Ten Mile Creek at 27.402611 , -80.397842 .

These water bottoms and wetlands are EFH for white shrimp (*Litopenaeus setiferus*). These habitats vary in quality from low to very high. The South Atlantic Fishery Management Council (SAFMC) designates forested palustrine wetlands as EFH for juvenile white shrimp. If FDOT requires additional information on the EFH in the project area, the South Atlantic Fishery Management Council provides detailed information on EFH in amendments to fishery management plans and in *Fishery Ecosystem Plan of the South Atlantic Region* (available at www.safmc.net).

Comments on Effects to Resources:

Impacts to these wetlands should be sequentially avoided, minimized, and compensated with in-kind mitigation. The NMFS is not aware of a mitigation bank servicing the area providing tidal freshwater credits. Freshwater wetlands not receiving tidal influence impacted by the project may be offset at mitigation banks after avoidance and minimization have taken place. If the project continues to PD&E without this sequential mitigation, NMFS would likely find it necessary to issue EFH conservation recommendations.

With construction of the new lanes, impervious surface area will be replaced or expanded. Surface and stormwater runoff into the surrounding waters may result. The discharge of hydrocarbons and other contaminants may degrade water quality. Subsequently, NOAA trust resources located in the receiving waters could be adversely affected. To the extent practicable, runoff from the new roads should be treated before being discharged into the canal.

Additional Comments (optional):

EFH Assessment

CLC Commitments and Recommendations:

Degree of Effect: 3 *Moderate* assigned 02/22/2017 by Tarrie L Ostrofsky, US Army Corps of Engineers

Coordination Document: Permit Required

Coordination Document Comments:

According to the information provided, there would be impacts to waters of the United States for this proposed project. Therefore, a Section 404 permit would be required. This may be a Nationwide Permit, Regional General Permit, or a Standard Permit, depending on the proposed impact totals.

Direct Effects

Identified Resources and Level of Importance:

According to the information provided, the National Wetlands Inventory data indicated that there are approximately 382 acres of Palustrine wetlands, 51 acres of Riverine wetlands, 35 acres of Lacustrine wetlands and 17 acres of Estuarine wetlands within the 500-foot buffer. Also, National Inventory of Dams data indicates that there is one Major Dam located within the 500-foot project buffer (Control Structure #2/Gordy Road Structure). Control Structure #2 is owned by St. Lucie County and is within the North St. Lucie Water Control District. Given the high acreage of wetlands identified, the initial determination of the potential direct effects on resources is moderate. Moderate has been selected due to the potential that much of the identified wetland acreage may be located near the outer limits of the 500-foot buffer and may not be directly impacted. Also, given the nature of the project being to widen an existing roadway, it is likely that the wetlands located adjacent to the existing roadway have been disturbed and possibly maintained.

Comments on Effects to Resources:

Direct effects to resources would involve permanent filling of wetlands and surface waters for the placement of the roadway. Temporary direct effects may occur for construction activities for access, temporary staging areas, best management practices, etc. Hydrology may be directly affected in areas where permanent fill is proposed. Crossings of streams may result in direct fill in the waterways for the construction of the crossings. Reduced channel widths may also result. If surface waters are present and filled, but not re-established elsewhere within the project limits, hydrology would be further affected.

Additional Comments (optional):

According to the information provided, there would be impacts to waters of the United States for this proposed project. Therefore, a Section 404 permit would be required. This may be a Nationwide Permit, Regional General Permit, or a Standard Permit, depending on the proposed impact totals.

CLC Commitments and Recommendations:

Degree of Effect: **3** *Moderate* assigned 03/02/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

An ERP is required. Pre-application meetings are strongly encouraged.

Direct Effects

Identified Resources and Level of Importance:

There are wetlands and mitigation areas along the Turnpike in Palm Beach, Martin and St. Lucie Counties. There are wetlands on state park and other state and county preservelands adjacent or near the Turnpike in these counties. Wetlands associated with rivers and creeks are of particular concern due to downstream connectivity for water, fish and wildlife.

Comments on Effects to Resources:

Without information on the potential new interchanges, locations of stormwater facilities and bridge widening needs, it is difficult to determine the effects of this project. If significant widening is proposed within wetlands or within preserve lands the level of effect may be Substantial. Reduction and elimination of impacts, particularly in the Loxahatchee River and other river/ creek systems is important. The project must meet the criteria in the ERP Applicant's Handbook Vol. I, Section 10 and additional criteria for Outstanding Florida Waters and Aquatic Preserves, including mitigation. Impacts to wetlands under conservation easement may require additional mitigation.

Additional Comments (optional):

An ERP is required. Pre-application meetings are strongly encouraged.

CLC Commitments and Recommendations:

Degree of Effect: **3** *Moderate* assigned 03/03/2017 by Suzanne E. Ray, FL Department of Environmental Protection

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

According to the information provided, the National Wetlands Inventory data indicated that there are approximately 382 acres of Palustrine wetlands, 51 acres of Riverine wetlands, 35 acres of Lacustrine wetlands and 17 acres of Estuarine wetlands within the 500-foot buffer. There are wetlands on state park and other state and county preservelands adjacent or near the Turnpike in these counties. Wetlands associated with rivers and creeks are of particular concern due to downstream connectivity for water, fish and wildlife.

Comments on Effects to Resources:

With construction of the new lanes, impervious surface area will be replaced or expanded. Surface and stormwater runoff into the surrounding waters may result. Runoff from the new roads should be treated before being discharged into the canal. If new on-ramps/exits or expanded intersections are proposed, or if the project components will occur outside of the current FDOT right of way, coordination with CERP project managers, SFWMD land management and permitting staff and FDEP state park staff is highly recommended.

Additional Comments (optional):

CLC Commitments and Recommendations:

Water Quality and Quantity

Project Effects

Coordinator Summary Degree of Effect: **3** *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

The PD&E phase will include a Water Quality Impact Evaluation (WQIE) in accordance with Part 2, Chapter 20 of the FDOT PD&E Manual which will identify potential effects on the surface and groundwater resources, identify the impaired waters and other waterbody classifications (Class I, II, Outstanding Florida Water, etc.) that could be affected by this project. In addition, a pond siting evaluation will be conducted to identify alternatives for stormwater management and treatment. The effects on water quality and means to avoid, minimize and mitigate impacts will be evaluated during the study based on the project-specific effects from the alternatives developed during the study. Florida's Turnpike Enterprise will continue to coordinate with the United States Environmental Protection Agency (USEPA), United States Army Corps of Engineers (USACE), South Florida Water Management

District (SFWMD), and Florida Department of Environmental Protection (FDEP) during PD&E and Design phases of the project.

Degree of Effect: 3 *Moderate* assigned 03/02/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

An Environmental Resource Permit is required. Existing SFWMD Permit 43-00568-S in Martin County may be modified. A pre-application meeting is strongly encouraged.

Direct Effects

Identified Resources and Level of Importance:

Surface waters, including Outstanding Florida Waters and waters that may discharge to Aquatic Preserves.

Comments on Effects to Resources:

The project should be designed to meet the storm water quality and quantity criteria of the ERP Applicant's Handbook Vols. I & II, including Vol. II, Appendix E: Procedure for Environmental Resource Permit Water Quality Evaluations for Applications Involving Discharges to Outstanding Florida Waters and Water Bodies that Do Not Meet State Water Quality Standards.

Additional Comments (optional):

An Environmental Resource Permit is required. Existing SFWMD Permit 43-00568-S in Martin County may be modified. A pre-application meeting is strongly encouraged.

CLC Commitments and Recommendations:

Degree of Effect: 4 *Substantial* assigned 03/22/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

Direct Effects

Identified Resources and Level of Importance:

"Untreated stormwater runoff is now considered the state's leading source of pollution"

(<http://www.broward.org/WATERMATTERS/Pages/waterquality.aspx>). Stormwater from impervious surfaces in urban environments, including roadways, conveys contaminants to surface water bodies, wetlands, and groundwater. The most common pollutants in highway runoff are heavy metals, inorganic salts, volatile organics, petroleum hydrocarbons, bacteria, pesticides/herbicides, and suspended solids that accumulate on the road surface as a result of regular highway operation and maintenance activities.

The principal law governing pollution of the nation's surface waters is the Federal Water Pollution Control Act, or Clean Water Act. Prior to 1987, surface water protection programs were primarily directed at point source pollution (i.e., wastes discharged from discrete sources, such as pipes from manufacturing facilities and wastewater treatment plants). Recognizing the need to address nonpoint source pollution, including stormwater, the U.S. Congress revised the Clean Water Act in 1987. The USEPA responded to this legislation by implementing the Municipal Separate Storm Sewer System (MS4) permitting program via the Phase I (1990) and Phase II (1999) stormwater regulations. In October 2000, the USEPA delegated authority to the Florida Department of Environmental Protection (FDEP) to implement the MS4 programs.

As a permitted Phase II MS4 operator in the St. Lucie watershed (Permit #FLR04E049) and co-permittee on Palm Beach County's Phase I MS4 permit (#FLS000018), Florida's Turnpike Enterprise (FTE) is required to develop and implement a comprehensive Stormwater Management Program (SWMP) that includes illicit discharge detection and control, construction and post-construction runoff control, pollution prevention measures, and public education and involvement. The specific SWMP requirements are discussed in the FDOT Statewide Stormwater Management Plan for Phase I MS4s (<http://www.fdot.gov/maintenance/FDOTStormWaterMgmtPlan2012.pdf>) and on FDEP's website for Phase II MS4s (http://www.dep.state.fl.us/water/stormwater/npdes/MS4_5.htm).

In addition to the delegated NPDES program, the State administers its own Environmental Resource Permitting (ERP) program for activities involving the alteration of surface water flows (<http://www.dep.state.fl.us/WATER/wetlands/erp/index.htm>). The ERP program is implemented by the Florida Department of Environmental Protection (FDEP) and the five Water Management Districts.

Comments on Effects to Resources:

As discussed in FDOT's PD&E Manual (Part 1, Chapter 3, page 3-7), the Preliminary Environmental Discussion Comments Report (PED) should include "a brief description of existing stormwater treatment, additional treatment which may be required and the possible options for treatment." The PD&E Manual (in Part 2, Chapter 20) also specifies inclusion of the following surface water information in the PED:

- Identification of surface waterbody to which the stormwater ultimately discharges;
- Any special designations of receiving waterbodies (Outstanding Florida Water (OFW), Aquatic Preserve, etc.);
- Whether the project is within a permitted MS4;
- Waterbody Identification Number(s) (WBIDs) in which the project is located, and associated FDEP Group Number and Name;
- Water Management District (WMD) in which the project is located;
- Water Control District (if applicable);
- Waterbody Class (e.g., Class I, II, III, etc.);
- Listing status (i.e., whether the WBID is identified as impaired, has a TMDL and/or is in a BMAP or RAP);
- The appropriate numeric nutrient criteria waterbody classification and related numeric nutrient limits (e.g., TMDL, Lakes, Spring Vents, Streams, Estuaries, etc.) if applicable; and
- If project discharges to a waterbody identified as impaired, identify the pollutant(s) of concern, numeric criteria or TMDL (whichever applies).

However, this information was not provided in the project documentation. Verified impaired waters in the 500-foot buffer area were identified, but the PED did not indicate if stormwater outfalls discharged to any of them. In light of the requirement in Chapter 62-624, F.A.C., to maintain an inventory describing all existing controls and major outfalls that discharge from MS4s, this information should be readily available. Please discuss the current stormwater management system in the ETDM Summary Report.

Furthermore, "if a TMDL is approved for any waterbody into which the MS4 discharges, and the TMDL includes requirements for control of stormwater discharges, the operator must review its stormwater management program for consistency with the TMDL allocation"

(http://www.dep.state.fl.us/water/stormwater/npdes/docs/Phase_II_MS4_GP.pdf). Although the GIS Analysis Report generated by the EST listed 7 TMDLs in the 100-foot buffer area and another one in the 200-foot buffer, none of them were discussed in the PED - nor was the Basin Management Action Plan (BMAP) for implementation of the nutrients and DO TMDLs in the St. Lucie River and Estuary Basin

(<http://www.dep.state.fl.us/water/watersheds/docs/bmap/stlucie-estuary-nutr-bmap.pdf>). Despite the *de minimis* Total Nitrogen and Total Phosphorus load allocations, the BMAP should have been acknowledged in the PED. At a minimum, please discuss the TMDLs with Wasteload Allocations (WLAs) assigned to FTE in the ETDM Summary Report.

Additional Comments (optional):

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

CLC Commitments and Recommendations:

Floodplains

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

Improvements to the Turnpike mainline may result in impacts to floodplains. An analysis of the potential floodplain effects will be conducted in accordance with the Part 2, Chapter 24 of the FDOT PD&E Manual. All new floodplain impacts and previously permitted floodplain impacts will be adequately mitigated for, in accordance with the South Florida Water Management District (SFWMD) Applicant's Handbook Volumes I & II, including Volume II, Appendix E: Procedure for Environmental Resource Permit Water Quality Evaluations for Application Involving Discharges to Outstanding Florida Waters and Water Bodies that Do Not Meet State Water Quality Standards. A Location Hydraulics Report will be prepared during the PD&E phase to determine potential impacts to area floodplains.

Degree of Effect: 3 *Moderate* assigned 03/02/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

An Environmental Resource Permit is required. Existing SFWMD Permit 43-00568-S in Martin County may be modified. A pre-application meeting is strongly encouraged.

Direct Effects

Identified Resources and Level of Importance:

Surface waters, including Outstanding Florida Waters and waters that may discharge to Aquatic Preserves.

Comments on Effects to Resources:

The project should be designed to meet the storm water quality and quantity criteria of the ERP Applicant's Handbook Vols. I & II, including Vol. II, Appendix E: Procedure for Environmental Resource Permit Water Quality Evaluations for Applications Involving Discharges to Outstanding Florida Waters and Water Bodies that Do Not Meet State Water Quality Standards.

Additional Comments (optional):

An Environmental Resource Permit is required. Existing SFWMD Permit 43-00568-S in Martin County may be modified. A pre-application meeting is strongly encouraged.

CLC Commitments and Recommendations:

Wildlife and Habitat

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

A Natural Resources Evaluation (NRE) will be prepared in accordance with Part 2, Chapter 27, of the FDOT PD&E Manual. Surveys will be conducted for listed species potentially occurring in the study area, and the effects on the listed species will be evaluated. Avoidance, minimization and mitigation for unavoidable impacts will be assessed during the alternatives development. Best management practices will be used to avoid adverse impacts to wetlands, aquatic resources, and wildlife habitats. Florida's Turnpike Enterprise will continue to coordinate with the Florida Department of Agriculture and Consumer Services (FDACS), Florida Fish and Wildlife Conservation Commission (FWC), and United States Fish and Wildlife Service (USFWS) during the PD&E phase.

Degree of Effect: 4 *Substantial* assigned 02/28/2017 by Scott Sanders, FL Fish and Wildlife Conservation Commission

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed ETDM #14295, St. Lucie, Martin, and Palm Beach Counties, and provides the following comments related to potential effects to fish and wildlife resources of this Programming Phase project.

The Project Description Summary states that this project involves the widening Florida's Turnpike from four lanes to eight lanes within the project limits by adding two express lanes in each direction. The total length of the project is approximately 37 miles. Since the Turnpike has no expansion space in the median, construction will involve expansion along the outer edges of the highway. Numerous new or expanded bridges will be required over streams and canals, with the most notable being Tenmile Creek, Rim Ditch, Winters Creek, County Line Canal, Danforth Creek, Mapps Creek, Saint Lucie Canal, Cypress Creek, and the Loxahatchee River.

An assessment of the project area was performed on lands within 500 feet of the proposed alignment to determine potential impacts to habitat which supports listed species and other fish and wildlife resources. Our inventory included a review of aerial and ground-level photography, various wildlife observation and landcover data bases, along with coordination with FWC biologists and other State and Federal agencies. A GIS analysis was performed using the Florida Department of Transportation's (FDOT) Environmental Screening Tool to determine the potential quality and extent of upland and wetland habitat, and other wildlife and fisheries resource information. We have reviewed the Preliminary Environmental Discussion Comments Report provided by the FDOT, and offer the following comments and recommendations.

Although 63.7% of the assessment area is classified as Urban landcover, primarily in the City of Port St. Lucie, a variety of other landcover types in the study area include: Agriculture (9.49%, 422.47 acres), Mesic Flatwoods (8.29%, 372.95 acres), Cultural-Lacustrine (stormwater and borrow lakes - 3.67%, 165.01 acres), Wet Prairie (2.41%, 108.6 acres), Rural (2.02%, 91.03 acres), Cultural-Riverine (canals - 1.40%, 63.08 acres), Pine Flatwoods and Dry Prairie (1.32%, 59.16 acres), Wet Flatwoods (1.18%, 52.9 acres), Marshes (1.16%, 52.11 acres), Freshwater Forested Wetlands (1.04%, 46.95 acres), Shrub and Brushland (0.86%, 38.7 acres), Mixed Hardwood-Coniferous (0.72%, 32.49 acres), Exotic Plants (0.65%, 29.33 acres), Palmetto Prairie (0.48%, 21.79 acres), Cypress (0.39%, 17.72 acres), Cypress/Tupelo (0.38%, 17.27 acres), Natural Rivers and Streams (0.17%, 7.78 acres), Freshwater Non-Forested Wetlands (0.16%, 7.09 acres), Scrubby Flatwoods (0.14%, 6.45 acres), High Pine and Scrub (0.13%, 5.68 acres), Scrub

(0.11%, 4.99 acres), Other Hardwood Wetlands (0.09%, 3.98 acres), Bare Soil (0.06%, 2.77 acres), Riverine (0.05%, 2.08 acres), and Dome Swamp (0.01%, 0.37 acres).

The most valuable wildlife habitats within the project area are within the complex of public conservation lands adjacent to the southern portion of the project. Most prominent of these is the 11,459-acre Jonathan Dickinson State Park, managed by the Department of Environmental Protection's Division of Parks and Recreation. The Turnpike crosses the streambeds and forested floodplains of the Loxahatchee River and its tributary Cypress Creek within the boundaries of the state park. The Loxahatchee River is one of only two rivers in Florida federally-designated as a Wild and Scenic River. Other adjacent lands in this area include the 16,969-acre John C. and Mariana Jones/Hungryland Wildlife and Environmental Area, managed by the FWC and owned by the South Florida Water Management District (SFWMD), the 4,438-acre Cypress Creek/Loxahatchee tract, owned and managed by SFWMD, and the 2,083-acre Cypress Creek Natural Area, owned and managed by Palm Beach County. All of these public lands were purchased for the protection of unique natural systems with native plant communities that provide excellent habitat for fish and wildlife resources. Additional lands in this area are proposed for acquisition as part of the Pal-Mar Florida Forever project.

Other public conservation lands adjacent to the Turnpike right-of-way (ROW) include Ten Mile Creek Natural Area, Varn Parcel, and Hendler Parcels, all owned and managed by St. Lucie County; Ten Mile Creek, owned and managed by the SFWMD; and Phipps Park Conservation Area, owned and managed by Martin County. Not adjacent, but within the 500-foot assessment area is the South Fork Addition, owned by the SFWMD and managed by Martin County.

Based on range and preferred habitat type, the following species listed by the Federal Endangered Species Act and the State of Florida as Federally Endangered (FE), Federally Threatened (FT), State-Threatened (ST), or State Species of Special Concern (SSC) may occur along the project area: American alligator (FT based on similarity of appearance to American crocodile), Eastern indigo snake (FT), crested caracara (FT), snail kite (FE), Florida scrub jay (FT), red-cockaded woodpecker (FE), wood stork (FT), Florida manatee (FE), Florida pine snake (ST), gopher tortoise (ST), burrowing owl (ST), southeastern American kestrel (ST), Florida sandhill crane (ST), least tern (FT), little blue heron (ST), tricolored heron (ST), roseate spoonbill (ST), and Sherman's fox squirrel (SSC). All of these species either likely or potentially utilize appropriate habitats in the project vicinity.

The GIS analysis revealed several specific characteristics associated with lands along the project alignment that provide an indication of potential habitat quality or sensitivity that will require field studies to verify the presence or absence of listed wildlife species and the quality of wildlife habitat resources. Within the assessment area, 1,182.66 acres (26.30%) are classified by the FWC's Integrated Wildlife Habitat Ranking System as high, moderately high, or medium value, and 632.69 acres (14.06%) have a medium or moderately high value on the FWC's Potential Habitat Richness ranking. The FWC's Strategic Habitat Conservation Area Priority Rankings classify 43.81 acres of the assessment area as high or medium value, based on habitat suitability for either the swallow-tailed kite, Cooper's hawk, or the snail kite. In the Florida Natural Areas Inventory Critical Lands and Waters Identification Project (CLIP), 349.38 acres (7.77%) is ranked Priority 1 or 2 (high) for Biodiversity Resources. Drainage basins crossed by the project are inhabited by the ironcolor shiner, river goby, and opossum pipefish, which are species classified as Rare and Imperiled Fish. The project is within U.S. Fish and Wildlife Service Consultation Areas for Caracara, Florida Grasshopper Sparrow, Scrub Jay, Red-cockaded Woodpecker, Snail Kite, and Manatee, and the core foraging area of wood stork rookeries.

Primary wildlife issues associated with this project include: potential loss of valuable floodplain swamp habitat within Jonathan Dickinson State Park resulting from expansion of the Loxahatchee River Bridge and the Cypress Creek Bridge; potential loss of public conservation lands and valuable wildlife habitat via expansion of the ROW; potential adverse effects to a moderate number of species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern; potential impacts to manatees from in-water work associated with construction of numerous bridges over waterways with manatee access; potential for increased wildlife roadkill; and potential water quality degradation as a result of additional stormwater runoff from the expanded impervious surface draining into adjacent wetlands, streams, canals, the Loxahatchee River, the St. Lucie River, and the Indian River Lagoon.

Comments on Effects to Resources:

Based on the project information provided, we believe that direct and indirect effects of this project could be substantial, because the 37-mile length of proposed construction will impact a wide variety of natural wildlife habitats along the edge of the ROW, including public conservation lands. Effects of the project could be reduced by confining construction to areas of cleared ROW to the greatest degree possible, placing any new drainage retention areas (DRAs) away from areas of undisturbed natural habitat, and adopting Best Management Practices in the project design to avoid degradation of adjacent or downstream water quality.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: 3 *Moderate* assigned 01/25/2017 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Federally listed species and fish and wildlife resources

Comments on Effects to Resources:

Federally-listed species -

The Service has reviewed our Geographic Information Systems (GIS) database for recorded locations of Federally listed threatened and endangered species on or adjacent to the project study area. The GIS database is a compilation of data received from several sources. Based on review of our GIS database, the Service notes that the following Federally listed species may occur in or near the project area.

Wood Stork

The project corridor is located in the Core Foraging Areas (CFA)(within 18.6 miles) of five active nesting colonies of the endangered wood stork (*Mycteria americana*). The Service believes that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork, we recommend that any lost foraging habitat resulting from the project be replaced within the CFA of the affected nesting colony. Moreover, wetlands provided as mitigation should adequately replace the wetland functions lost as a result of the action. The Service does not consider the preservation of wetlands, by itself, as adequate compensation for impacts to wood stork foraging habitat, because the habitat lost is not replaced. Accordingly, any wetland mitigation plan proposed should include a restoration, enhancement, or creation component. In some cases, the Service accepts wetlands compensation located outside the CFA of the affected wood stork nesting colony. Specifically, wetland credits purchased from a "Service Approved" mitigation bank located outside of the CFA would be acceptable to the Service, provided that the impacted wetlands occur within the permitted service area of the bank.

For projects that impact 5 or more acres of wood stork foraging habitat, the Service requires a functional assessment be conducted using our "Wood Stork Foraging Analysis Methodology" (Methodology) on the foraging habitat to be impacted and the foraging habitat provided as mitigation. The Methodology can be found at: <http://www.fws.gov/verobeach/ListedSpeciesBirds.html> .

Florida Scrub-Jay

The project occurs within the geographic range of the threatened Florida Scrub-Jay (*Aphelocoma coerulescens*). If suitable habitat occurs in or near the project footprint, we recommend that nest surveys based on Service protocol be conducted to determine the status of Florida scrub-jay in the project area. The Service's Florida scrub-jay survey guidance can be found at <https://www.fws.gov/verobeach/BirdsPDFs/FSJConservationGuidelinesALLINCLUSIVE1.pdf>

Audubon's crested caracara

The project occurs within the geographic range of the threatened Audubon's crested caracara (*Polyborus cheriway* = *Polyborus plancus audubonii*). If suitable habitat occurs in or near the project footprint, we recommend that nest surveys based on Service protocol be conducted to determine the status of caracara nesting in the project area. The Service's caracara nest survey guidance can be found at: <http://www.fws.gov/verobeach/ListedSpeciesBirds.html>

The Service believes that the following federally listed species have the potential to occur in or near the project site: eastern indigo snake (*Drymarchon couperi* = *Drymarchon corais couperi*), Florida scrub-jay, Audubon's crested caracara, West Indian manatee (*Trichechus manatus*), Everglade snail kite (*Rostrhamus socialis plumbeus*), wood stork, and Federally listed plants (<http://www.fws.gov/verobeach/ListedSpeciesPlants.html>). Accordingly, the Service recommends that the Florida Department of Transportation (FDOT) prepare a Biological Assessment for the project (as required by 50 CFR 402.12) during the FDOT's Project Development and Environment process.

Fish and Wildlife Resources -

Wetlands provide important habitat for fish and wildlife. Wetlands may occur within and near the project site. We recommend that these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the FDOT provide mitigation that fully compensates for the loss of important resources.

Other Comments -

To benefit pollinators, provide a more aesthetically appealing project site, and assist in native plant conservation, the Service recommends that the FDOT consider planting native flowering plants to stabilize the soil surrounding the proposed roadway, and include the planting of native shrubs and trees as part of the landscaping for the proposed roadway. We understand that these areas are usually planted with sod to stabilize the soil. The Service notes that small native flowering plants can be managed by mowing, a management technique that is typically employed for areas stabilized with sod only. Due to the uncertainty of native plant availability, soil stabilization of the entire project area with native plants may not be achievable at this time If

this is the case, we recommend that the FDOT develop a soil stabilization design that incorporates the planting, or creation through seeding, of small islands of small native flowering plant species at regular intervals along the project corridor, along with various native tree and shrub species.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: 0 *None* assigned 03/03/2017 by Steve Bohl, FL Department of Agriculture and Consumer Services

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Additional Comments (optional):

CLC Commitments and Recommendations:

Coastal and Marine

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

This project is subject to Coastal Zone Consistency Determination, as required by Code of Federal Regulations (CFR) Title 15 930 (15 CFR 930). This project is located in coastal counties; therefore, Coastal Barrier Resources Act applies.

Florida's Turnpike Enterprise will make every attempt to avoid or minimize impacts to coastal and marine resources, identified within the project area. Further, Florida's Turnpike Enterprise will adhere to any additional criteria for in-water work so as not to harm the Florida manatee. Florida's Turnpike Enterprise will continue coordination with the South Florida Water Management District (SFWMD) and National Marine Fisheries Service (NMFS) during the PD&E phase.

Degree of Effect: 3 *Moderate* assigned 02/14/2017 by Brandon Howard, National Marine Fisheries Service

Coordination Document: Tech Memo Required

Coordination Document Comments:

EFH Assessment

Direct Effects

Identified Resources and Level of Importance:

Magnuson-Stevens Act and Fish and Wildlife Coordination Act: Where the following waterbodies and the Turnpike cross are essential fish habitat (EFH):

- The Loxahatchee River and its tributary crossings at the following 3 locations: 26.954450 , -80.165199 ; 26.964772 , -80.173156 ; and 26.972063 , -80.178423 .
- The South Fork of the St. Lucie River at 27.117673 , -80.274832 .
- The tributary to the South Fork of the St. Lucie River at 27.128295 , -80.282304 .
- The South Florida Water Management District canal at 27.262455 , -80.352264 .
- Ten Mile Creek at 27.402611 , -80.397842 .

These water bottoms and wetlands are EFH for white shrimp (*Litopenaeus setiferus*). These habitats vary in quality from low to very high. The South Atlantic Fishery Management Council (SAFMC) designates forested palustrine wetlands as EFH for juvenile white shrimp. If FDOT requires additional information on the EFH in the project area, the South Atlantic Fishery Management Council provides detailed information on EFH in amendments to

fishery management plans and in *Fishery Ecosystem Plan of the South Atlantic Region* (available at www.safmc.net).

Comments on Effects to Resources:

Impacts to these wetlands should be sequentially avoided, minimized, and compensated with in-kind mitigation. The NMFS is not aware of a mitigation bank servicing the area providing tidal freshwater credits. Freshwater wetlands not receiving tidal influence impacted by the project may be offset at mitigation banks after avoidance and minimization have taken place. If the project continues to PD&E without this sequential mitigation, NMFS would likely find it necessary to issue EFH conservation recommendations.

With construction of the new lanes, impervious surface area will be replaced or expanded. Surface and stormwater runoff into the surrounding waters may result. The discharge of hydrocarbons and other contaminants may degrade water quality. Subsequently, NOAA trust resources located in the receiving waters could be adversely affected. To the extent practicable, runoff from the new roads should be treated before being discharged into the canal.

Additional Comments (optional):

EFH Assessment

CLC Commitments and Recommendations:

Degree of Effect: 2 *Minimal* assigned 03/02/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Several rivers, creeks and canals connect to coastal waters. However, coastal resources (mangroves, seagrasses) are minimal in the project area due to low salinity.

Comments on Effects to Resources:

The water bodies crossed by the Turnpike may be accessible to manatees. Additional criteria will apply for any in-water work.

Additional Comments (optional):

CLC Commitments and Recommendations:

ETAT Reviews and Coordinator Summary: Physical

Noise

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

No ETAT reviews were submitted for this issue. A noise study will be conducted as part of the PD&E study, in accordance with Part 2, Chapter 17 of the PD&E Manual.

None found

Air Quality

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

The United States Environmental Protection Agency (USEPA) noted that the project is currently in attainment with the National Ambient Air Quality Standards set forth by the USEPA. An air quality screening evaluation will be conducted in accordance with Part 2, Chapter 16 of the FDOT PD&E Manual.

Degree of Effect: 2 *Minimal* assigned 03/07/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Direct Effects

Identified Resources and Level of Importance:

Resource: Air quality that complies with standards established by the USEPA pursuant to the federal Clean Air Act.

Level of Importance: To protect public health and welfare nationwide, the USEPA has established National Ambient Air Quality Standards (NAAQS) for six "criteria pollutants": particulate matter, ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead. States are required to adopt enforceable plans to achieve and maintain air quality that meets these standards.

Comments on Effects to Resources:

The project area is currently in attainment with the National Ambient Air Quality Standards. The USEPA does not anticipate emissions of criteria pollutants from the project being significant enough to impact the area's attainment status.

Additional Comments (optional):

Air Quality Technical Memorandum (PD&E Manual, Part 2, Chapter 16)

CLC Commitments and Recommendations:

Contamination

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

Data from the Environmental Screening Tool (EST) identified the following contaminated sites within the 500-foot buffer of the project:

- 10 Hazardous Waste Facilities
- 21 Petroleum Contamination Monitoring Sites
- 2 Solid Waste Facilities
- 22 Storage Tank Monitoring Sites

A Contamination Screening Evaluation Report (CSER) will be prepared as part of the PD&E Study in accordance with Part 2, Chapter 22 of the FDOT PD&E Manual.

Degree of Effect: 3 *Moderate* assigned 03/22/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Contamination Screening Evaluation Report (PD&E Manual, Part 2, Chapter 22)

Direct Effects

Identified Resources and Level of Importance:

"Contamination in soil, groundwater, surface water and structures may have the following impacts to an FDOT project: i) human exposure, ii) potential or actual human health concerns, iii) exacerbation of the contamination by FDOT construction activities, iv) design modifications or special construction provisions for work within contaminated areas, and v) requirements for the proper handling and disposal of contaminated material." FDOT defines 'Contamination' as: "The presence of any regulated material or chemical contained within the soil, surface water or groundwater on or adjacent to FDOT property, or proposed property, that may require assessment, remediation, or special handling, or that has a potential for liability. These materials would include, but not be limited to, those substances normally referred to as petroleum or petroleum products, solvents, organic and inorganic substances, metals, hazardous materials or substances." [Source: FDOT PD&E Manual, Part 2, Chapter 22 Contamination]

Major federal laws govern the remediation of contaminated sites, including the Resource Conservation and Recovery Act of 1976 (RCRA), as amended; and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, which includes the Small Business Liability Relief and Brownfields Revitalization Act (Brownfields).

Comments on Effects to Resources:

The EST reports RCRA-regulated facilities in several categories: Hazardous Waste (HW) Facilities; Large Quantity Generators (LQGs) of Hazardous Waste; Treaters, Storers, and Disposers (TSDs) of Hazardous Waste; and USEPA RCRA-Regulated Facilities. However, only the HW Facilities category includes USEPA RCRA ID numbers.

According to the EST, the following populations of facilities that generate, treat, store, or dispose of hazardous waste are located in the 500-foot buffer area of the project:

HW Facilities = 10

LQGs = 0

TSDs = 0

USEPA RCRA-Regulated Facilities = 15

Review of the lists revealed 8 duplications, 1 facility in the HW Facilities list that is not in the USEPA RCRA-Regulated Facilities category, 1 invalid USEPA ID number (Treasure Coast Marble & Granite, FLR 000 108 142), and 7 facilities identified as USEPA RCRA-Regulated Facilities that were not included in the HW Facilities category. As a result, it appears that the following 16 RCRA-regulated facilities (i.e., facilities with USEPA RCRA ID numbers) are located in the 500-foot buffer:

Armellini Express Lines

3446 SW Armellini Avenue, Palm City 34990

USEPA ID #FLD 982 171 027

FDEP documents available online, https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_results_docs.asp?epaid=FLD982171027

Dixie Clamp & Scaffold

3510 SW Martin Hwy, Palm City

USEPA ID #FLT 950 050 799

No information available in FDEP (https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_sel.asp) or EPA

(<https://www3.epa.gov/enviro/facts/rcrainfo/search.html>) online databases

Expert Shutter Service

1626 SW Biltmore Street, Port St. Lucie

USEPA ID #FLR 000 197 111

FDEP documents available online, https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_results_docs.asp?epaid=FLR000197111

Florida RF Labs

8851 SW Old Kansas Ave, Stuart 34997

USEPA ID #FLR 000 019 380

FDEP documents available online, <http://webapps.dep.state.fl.us/DepNexus/public/electronic-documents/FLR000019380/gis-facility!search>

Highway Enterprises Inc.

3584 SW Armellini Avenue, Palm City 34990

USEPA ID #FLR 000 078 402

FDEP documents available online, https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_results_docs.asp?epaid=FLR000078402

Martin County Petroleum

3586 SW Martin Hwy, Palm City 34990

USEPA ID #FLT 010 069 151

No information available in FDEP or EPA online databases

Martin County Utilities - Martin Downs WWTP

4450 SW Mallard Creek Trail, Palm City

USEPA ID #FLR 000 027 367

FDEP documents available online, https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_results_docs.asp?epaid=FLR000027367

Mavidon Corp.

3953 SW Bruner Terrace, Palm City 34990

USEPA ID #FLD 984 219 949

FDEP documents available online, https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_results_docs.asp?epaid=FLD984219949

NAPA Auto & Truck Parts

1974 SW Biltmore Street, Suite 201, Port St. Lucie 34984

USEPA ID #FLD 984 231 720

FDEP documents available online, https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_results_docs.asp?epaid=FLD984231720

St. Lucie Cultural Marble

1266 SW Biltmore Street, Fort Pierce 34983

USEPA ID #FLR 000 025 833

FDEP documents available online, https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_results_docs.asp?epaid=FLR000025833

Scotts Tire & Auto

1889 SW Biltmore Street, Port St. Lucie

USEPA ID #FLT 010 068 039

No information available in FDEP or EPA online databases

SGS Industrial Services

669 SW Sea Holly Terrace, Port St. Lucie

USEPA ID #FLT MP9 203 479

No information available in FDEP or EPA online databases

Thornhill Maintenance Facility

450 SW Thornhill Drive, Port St. Lucie

USEPA ID #FLT 960 054 930

No information available in FDEP or EPA online databases

Treasure Coast Marble & Granite

1749 SW South Macedo Blvd, Port St. Lucie 34984

USEPA ID #FLR 000 052 407

FDEP documents available online, https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_results_docs.asp?epaid=FLR000052407

Tropical Farms WTP & WWTP

8595 SW Kansas Avenue, Stuart

USEPA ID #FLT 140 084 971

No information available in FDEP or EPA online databases

Virginias Manufacturing & Distributing

1974 SW Biltmore Street, Suite 209, Port St. Lucie 34984

USEPA ID #FLD 984 219 584

FDEP documents available online, https://fldeploc.dep.state.fl.us/www_rcra/reports/handler_results_docs.asp?epaid=FLD984219584

Based on information in the EST, there are no federal Superfund sites or Brownfields sites where federal grant monies have been expended within one mile of the project corridor.

Additional Comments (optional):

Contamination Screening Evaluation Report (PD&E Manual, Part 2, Chapter 22)

CLC Commitments and Recommendations:

Degree of Effect: 2 *Minimal* assigned 03/02/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: To Be Determined: Further Coordination Required

Coordination Document Comments:

If dewatering is necessary, a water use permit may be required. A general permit is available in rule 40E-2.061(2), FAC. Projects that do not qualify for the general permit will require a water use permit from SFWMD.

Direct Effects

Identified Resources and Level of Importance:

Ground and surface waters in the vicinity of the proposed project.

Comments on Effects to Resources:

Construction methodologies, such as dewatering, must be designed to minimize movement of contaminant plumes.

Additional Comments (optional):

If dewatering is necessary, a water use permit may be required. A general permit is available in rule 40E-2.061(2), FAC. Projects that do not qualify for the general permit will require a water use permit from SFWMD.

CLC Commitments and Recommendations:

Infrastructure

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

There were no ETAT comments submitted for this issue. The Florida's Turnpike Enterprise has noted several infrastructure sites that may be impacted by the proposed improvements, including;

- 10 Hazardous Waste Facilities,
- 1 Grade Level Railroad Crossing,
- 2 Solid Waste Facilities,
- 2 Wastewater Facilities,
- 4 Federal Aviation Administration (FAA) Flight Towers,
- 1 School,
- 4 Wireless Antennae Structures,
- 1 Major Dam,

A utility evaluation will be conducted as part of the PD&E phase.

None found

Navigation

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 05/12/2017 by Florida's Turnpike Enterprise

Comments:

This project will require, one, or all of the following actions: construction, replacement, or modification of bridge(s) which cross navigable waters of the United States that are protected under Section 10 of the Rivers and Harbors Act.

During the PD&E phase, Florida's Turnpike Enterprise will coordinate with the United States Coast Guard (USCG) and United States Army Corp of Engineers (USACE) to minimize impacts on navigation and obtain the appropriate permits required.

Degree of Effect: 3 *Moderate* assigned 02/24/2017 by Randall D Overton, US Coast Guard

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

Navigable waters of the United States.

Comments on Effects to Resources:

I assigned a projects effects level of moderate because the project asdescribed will requireone or all of the following actions:construction, replacement, or modification of bridge(s) which cross navigable waters of the United States and therefore require a Coast Guard permit. One of the waterways

crossed is the St. Lucie River at Lat/Long (27.117681, -80.274901), the St. Lucie river at this location is part of the Okeechobee Waterway which is a Congressional authorized Federal Navigation Project channel.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: 2 *Minimal* assigned 02/22/2017 by Tarrie L Ostrofsky, US Army Corps of Engineers

Coordination Document: Permit Required

Coordination Document Comments:

A Section 10 and Section 404 permit may be required if fill is proposed within the waterway for purposes other than bridges. A Section 404 permit would be necessary for fill associated with USCG bridges, as well. A Department of the Army Permit may be in the form of a Nationwide Permit, Regional General Permit, or a Standard Permit.

Direct Effects

Identified Resources and Level of Importance:

According to the information provided, analysis of navigation datashows that there is 1 potential navigable waterway, 1 public boat ramp, and 1 major dam within the 500-foot buffer. The St. Lucie River is a navigable waterway and intersects Florida's Turnpike (SR 91) and may be affected by proposed roadway improvements. If there are fill impacts proposed for construction of a USCG bridge, the Corps would regulate the fill under Section 404. Additionally, if fill is proposed in Section 10 waters which is not associated with a bridge, the Corps would regulate the fill under Section 404 and Section 10. Given the information provided, there is a chance that fill may be proposed for a non bridge activity in tidal waters. Therefore, the initial determination of direct effects on navigation is minimal until further information is provided.

Comments on Effects to Resources:

Direct effects may be reduced widths of tidal waters if fill is proposed at the shoreline locations. Direct effects may also include increased depths if dredging is proposed.

Additional Comments (optional):

A Section 10 and Section 404 permit may be required if fill is proposed within the waterway for purposes other than bridges. A Section 404 permit would be necessary for fill associated with USCG bridges, as well. A Department of the Army Permit may be in the form of a Nationwide Permit, Regional General Permit, or a Standard Permit.

CLC Commitments and Recommendations:

ETAT Reviews and Coordinator Summary: Special Designations

Special Designations

Project Effects

Coordinator Summary Degree of Effect: 4 *Substantial* assigned 05/18/2017 by Florida's Turnpike Enterprise

Comments:

Within the project area there are two Outstanding Florida Waters: the Loxahatchee River Aquatic Preserve and Jonathan Dickinson State Park, one Aquatic Preserve: The Loxahatchee River-Lake Worth Creek Aquatic Preserve, and one Wild and Scenic River: The Loxahatchee River. There are no Scenic Highways in the project area. Florida's Turnpike Enterprise will continue to coordinate with the United States Environmental Protection Agency (USEPA), South Florida Water Management District (SFWMD), the National Parks Service (NPS) and the United States Fish and Wildlife Service (USFWS) to ensure that impacts to these resources are minimized and adequately mitigated.

Degree of Effect: 4 *Substantial* assigned 03/22/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

Direct Effects

Identified Resources and Level of Importance:

The PD&E Manual (Part I, Chapter 3) defines the Special Designations category as comprised of Outstanding Florida Waters (Rule 62-302.700, F.A.C.), Aquatic Preserves (Rule 62-302.700(2)(f), F.A.C.), Scenic Highways (PD&E Manual, Part 2, Chapter 29), and Wild & Scenic Rivers (Rule 62-302.700(2)(d), F.A.C.).

The project corridor crosses the Northwest Fork of the Loxahatchee River, portions of which are designated as a National Wild & Scenic River (<https://www.rivers.gov/rivers/loxahatchee.php>), a Florida Scenic & Wild River, a State Aquatic Preserve (<http://www.dep.state.fl.us/coastal/sites/loxahatchee/>), and an Outstanding Florida Water (i.e., waters in Jonathan Dickinson State Park, <https://www.floridastateparks.org/park/Jonathan-Dickinson>). The National Wild & Scenic Rivers System was created by Congress in 1968 (Public Law 90-542, 16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values for the enjoyment of present and future generations (<https://www.rivers.gov/wsr-act.php>). Rivers may be designated by Congress or, if certain requirements are met, the Secretary of the Interior. The Northwest Fork of the Loxahatchee River was designated by the Secretary in May 1985 as the first National Wild & Scenic River in Florida.

The Northwest Fork of the Loxahatchee River is also the focus of the Loxahatchee River Watershed Restoration Project (<http://www.saj.usace.army.mil/Missions/Environmental/Ecosystem-Restoration/Loxahatchee-River-Watershed-Restoration-Project/>). The objectives of the project, which is a component of the Comprehensive Everglades Restoration Plan (CERP), include improving water distribution and timing to restore the natural system's ecological function and re-establishing connections among natural areas that have become spatially and/or hydrologically fragmented (http://www.saj.usace.army.mil/Portals/44/docs/FactSheets/Loxahatchee_FS_January2015_revised.pdf). CERP is the largest ecosystem restoration program in the history of Florida.

Additionally, in the *Agency Operating and Funding Agreement for Continuing Participation in the Efficient Transportation Decision Making and Transportation Project Development Processes between United States Environmental Protection Agency and Federal Highway Administration and Florida Department of Transportation*, January 23, 2015, FDOT requested the USEPA's focus on Sole Source Aquifer considerations for the Special Designations issue. The Sole Source Aquifer Protection Program is authorized by Section 1424(e) of the Safe Drinking Water Act of 1974.

The Biscayne aquifer, which underlies Miami-Dade, Broward, and part of Palm Beach counties, supplies virtually all of the potable water needs for almost 6 million residents in southeastern Florida, including the Florida Keys. Consistent with the Safe Drinking Water Act, which defines a Sole Source Aquifer as an underground water source that supplies at least 50% of the drinking water to the overlying area (<http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/solesourceaquifer.cfm>), the USEPA designated the Biscayne aquifer as a Sole Source Aquifer (44 Federal Register 58797, October 11, 1979). The portion of the project corridor located in Palm Beach County is in the recharge zone for the Biscayne aquifer, which was included in the Sole Source Aquifer designation (<https://archive.epa.gov/pesticides/region4/water/groundwater/web/html/r4ssa.html>).

Once an area is designated as a Sole Source Aquifer (SSA), no commitments of federal financial assistance may be made to projects that the USEPA determines could contaminate the aquifer and create a significant hazard to public health. To ensure compliance with SDWA requirements, FDOT, FHWA, and the USEPA executed a Sole Source Aquifer Memorandum of Understanding (MOU) that identifies the types of proposed projects to be forwarded to the USEPA for evaluation and comment. The MOU, executed in January 1999, also memorializes FDOT's commitment to designing federal-aid projects in SSA-designated areas in a manner that will prevent the introduction of contaminants in quantities or concentrations that could create a significant hazard to public health, or which may require a public water system to install additional treatment to prevent such adverse effect ([http://www.fdot.gov/environment/pubs/SSA MOU.pdf](http://www.fdot.gov/environment/pubs/SSA%20MOU.pdf)). Pursuant to the MOU (see Attachment C, [http://www.fdot.gov/environment/pubs/SSA MOU Attachments.pdf](http://www.fdot.gov/environment/pubs/SSA%20MOU%20Attachments.pdf)), the following types of projects will be referred to the USEPA Region 4's Ground Water/Drinking Water Branch for review and comment prior to the commitment of federal funding:

1. All projects for which an EIS or EA/FONSI will be prepared.
2. Projects which have the potential to contaminate the aquifer, such as a new or stage construction involving extensive grading, widening or addition of lanes to an existing highway, replacement or rehabilitation/reconstruction of bridges over the Volusia-Floridan or Biscayne Aquifers or their designated recharge zones, and public rest areas which include domestic wastewater facilities which do not discharge to a central wastewater collection system.
3. All other projects which FHWA determines may be reasonably expected to contaminate the designated SSAs.

Federal responsibilities pursuant to the Safe Drinking Water Act also include wellhead protection (<http://www.epa.gov/sourcewaterprotection/source-water-protectionbasics>). The project is within Wellfield Protection Areas in Palm Beach County (http://discover.pbcgov.org/pzb/planning/PDF/Projects/LoxGroves/LU_4_1.pdf) and St. Lucie County (http://www.cityofpsl.com/planning-zoning/pdf/comprehensive_plan/comprehensive_plan_maps.pdf). The USEPA was not able to determine definitively if wellfields in Martin County could be impacted by the project. We recommend confirming the location of the Martin Downs Wellfield shown in the USGS/SFWMD Water Resources Investigations Report 99-4214 (https://fl.water.usgs.gov/PDF_files/wri99_4214_hittle.pdf) and any other wellfields that may be located in the project

vicinity (e.g., wells supplying the Tropical Farms Water Treatment Plant).

Comments on Effects to Resources:

Loxahatchee River

The FDEP and SFWMD are the lead agencies responsible for implementing the Loxahatchee National Wild & Scenic River Management Plan (<https://www.rivers.gov/documents/plans/loxahatchee-plan.pdf>). The SFWMD has also been involved with the Loxahatchee River Watershed Restoration Project (http://141.232.10.32/pm/projects/proj_17_lox_river.aspx). Please coordinate with these agencies regarding the potential impacts on the river of project construction and stormwater runoff (<https://www.dep.state.fl.us/water/wqssp/docs/ofw-factsheet.pdf>).

Biscayne Sole Source Aquifer

It is not clear if federal funding will be used for the project. Even though the Preliminary Environmental Discussion Comments Report (PED) implied, in the Section 4(f) Potential comments, that state funds will be used, no funding information was provided in the Purpose and Need.

If federal funds are used, the project needs to be reviewed by the USEPA Region 4's Ground Water/Drinking Water Branch prior to commitment of the funds. We recommend including the following information in the review request:

1. Location of project and name of Sole Source Aquifer.
2. Project description and federal funding source.
3. Is there any increase in impervious surface? If so, what is the area?
4. Describe how stormwater is currently treated along the project corridor.
5. How will stormwater be treated during construction and throughout the life of the project?
6. Are there any underground storage tanks present or to be installed? Include details of such tanks.
7. Will there be any liquid or solid waste generated? If so, how will it be disposed of?
8. What is the depth of excavation?
9. Are there any wells in the area that may provide contaminants with direct access to the aquifer and how close are they to the project?
10. Are there any hazardous waste sites in the project area? In particular, are there any sites with groundwater plumes and monitoring wells that may be disturbed? Include details.
11. Are there any deep pilings that may provide access to the aquifer?
12. Are Best Management Practices planned to address any possible risks or concerns? Include details.
13. Does the project include improvements that may be beneficial to the aquifer?
14. Any other information that could be helpful in determining if this project could impact the aquifer.

Wellfield Protection Areas

The USEPA does not understand why wellfield protection areas in the project corridor were not addressed in the PED. Consistent with the PD&E Manual (Part 2, Chapter 20), the PED should have discussed the potential project involvement with groundwater resources, which include wellfield protection areas. Please explain this oversight in the ETDM Summary Report and confirm that the various municipalities with wellfield protection areas in the project corridor will be contacted to determine if regulations restricting development and/or regulating land uses may apply to the project.

Additional Comments (optional):

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

CLC Commitments and Recommendations:

Degree of Effect: 3 *Moderate* assigned 03/02/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: To Be Determined: Further Coordination Required

Coordination Document Comments:

For these issues additional coordination is required, especially if new on ramps/ exits or expanded intersections are proposed, or if the project components will occur outside of the current FDOT right of way. Coordination with CERP project managers, SFWMD land management staff, SFWMD Right of Way permitting staff and FDEP state park staff is highly recommended.

Also, for the area of the project within the Loxahatchee River, review by the Loxahatchee River Management Coordinating Council is needed.

Direct Effects

Identified Resources and Level of Importance:

The project is within or adjacent to substantial public lands that serve as important habitat and are also used for recreation:

- Jonathan Dickinson State Park,
- the Wild and Scenic section of the Loxahatchee River
- the Loxahatchee River Aquatic Preserve.
- SFWMD Lands: Cypress Creek and Loxahatchee River Management Area and the Ten Mile Creek parcels.

The Ten Mile Creek area and the Loxahatchee River area are part of a CERP project.

The C-23, C-24 and C-25 canals are SFWMD Right of Way.

There are several existing conservation easements dedicated to the SFWMD adjacent to the Turnpike Right of Way.

The Loxahatchee River, Cypress Creek, South Fork of the St. Lucie River, Ten Mile Creek, possibly Bessey Creek are likely state owned lands that require public easements from the Board of Trustees, or modification of existing easements.

Comments on Effects to Resources:

To protect the Loxahatchee River, there are additional criteria that apply for aquatic preserves. Use of submerged lands also has additional criteria, as do use of SFWMD Right of Way.

The Loxahatchee River and Ten Mile Creek area are both CERP -related projects. While designing the project, efforts should be taken to avoid construction outside of the existing right of ways in these areas.

Additional Comments (optional):

For these issues additional coordination is required, especially if new on ramps/ exits or expanded intersections are proposed, or if the project components will occur outside of the current FDOT right of way. Coordination with CERP project managers, SFWMD land management staff, SFWMD Right of Way permitting staff and FDEP state park staff is highly recommended.

Also, for the area of the project within the Loxahatchee River, review by the Loxahatchee River Management Coordinating Council is needed.

CLC Commitments and Recommendations:

Degree of Effect: 4 *Substantial* assigned 01/25/2017 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Public Conservation Lands

Comments on Effects to Resources:

The project corridor is located within, or immediately adjacent to, valuable public conservation lands that provide important habitat for fish and wildlife (Palm Beach County's Cypress Creek Natural Area, and South Florida Water Management District's Cypress Creek and Loxahatchee River Management Area). The project corridor is also located within lands that may be targeted for acquisition for conservation purposes (the Pal Mar Florida Forever Board of Trustees Project and the Atlantic Ridge Ecosystem). Impacts to these areas should be avoided to the greatest extent practicable through widening within the existing center median. If impacts to currently protected public conservation lands are unavoidable, the Service requests that additional public lands be acquired by the FDOT to offset the conservation lands lost due to the project.

Additional Comments (optional):

CLC Commitments and Recommendations:

ETAT Reviews and Coordinator Summary: Emergency Response

Eliminated Alternatives

There are no eliminated alternatives for this project.

Project Scope

General Project Recommendations

There are no general project recommendations identified for this project in the EST.

Anticipated Permits

Permit	Type	Conditions	Review Org	Review Date
NPDES General Permit	FDEP		Florida's Turnpike Enterprise	11/29/16
Bridge Permit	USCG		Florida's Turnpike Enterprise	09/02/16
SFWMD Environmental Resource Permit	Water		Florida's Turnpike Enterprise	11/29/16
Section 404 Individual Permit	USACE		Florida's Turnpike Enterprise	11/29/16

Anticipated Technical Studies

Technical Study Name	Type	Conditions	Review Org	Review Date
Location Hydraulics Report	ENGINEERING		Florida's Turnpike Enterprise	11/29/2016
Drainage/Pond Siting Report	ENGINEERING		Florida's Turnpike Enterprise	11/29/2016
Geotechnical Report	ENGINEERING		Florida's Turnpike Enterprise	11/29/2016
Bridge Hydraulic Report	ENGINEERING		Florida's Turnpike Enterprise	11/29/2016
Noise Study Report	ENVIRONMENTAL		Florida's Turnpike Enterprise	11/29/2016
Air Quality Report	ENVIRONMENTAL		Florida's Turnpike Enterprise	11/29/2016
Contamination Screening Evaluation Report	ENVIRONMENTAL		Florida's Turnpike Enterprise	11/29/2016
Conceptual Stage Relocation Plan	ENVIRONMENTAL		Florida's Turnpike Enterprise	11/29/2016
Sociocultural Effects Evaluation	Other		Florida's Turnpike Enterprise	11/29/2016
Preliminary Engineering Report	ENGINEERING		Florida's Turnpike Enterprise	11/29/2016
Endangered Species Biological Assessment Technical Memorandum	ENVIRONMENTAL		Florida's Turnpike Enterprise	11/29/2016
Water Quality Impact Evaluation (WQIE)	ENVIRONMENTAL		Florida's Turnpike Enterprise	11/29/2016
Cultural Resource Assessment Survey	ENVIRONMENTAL		Florida's Turnpike Enterprise	11/29/2016
Utility Assessment Technical Memorandum	ENGINEERING		Florida's Turnpike Enterprise	11/29/2016
Bridge Analysis Report	ENGINEERING		Florida's Turnpike Enterprise	11/29/2016
Natural Resources Evaluation (NRE)	ENVIRONMENTAL		Florida's Turnpike Enterprise	11/29/2016

Dispute Resolution Activity Log

There are no dispute actions identified for this project in the EST.

Hardcopy Maps: Alternative #1

Indiantown Road (MP 116) to SR 70 (MP 152)

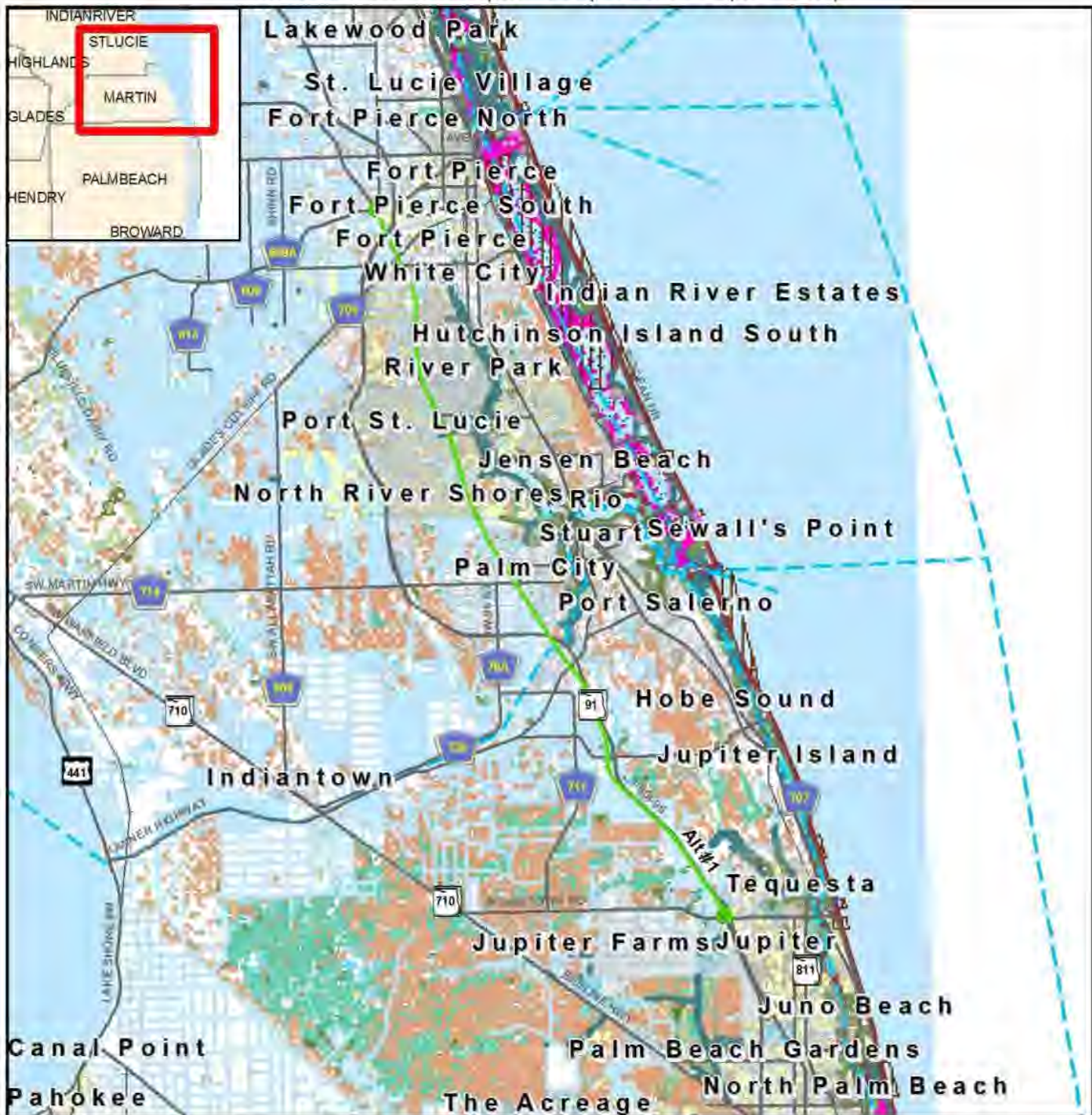


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14295 Turnpike Mainline Widening from Jupiter to

Fort Pierce, Alternative #1

Indiantown Road (MP 116) to SR 70 (MP 152)

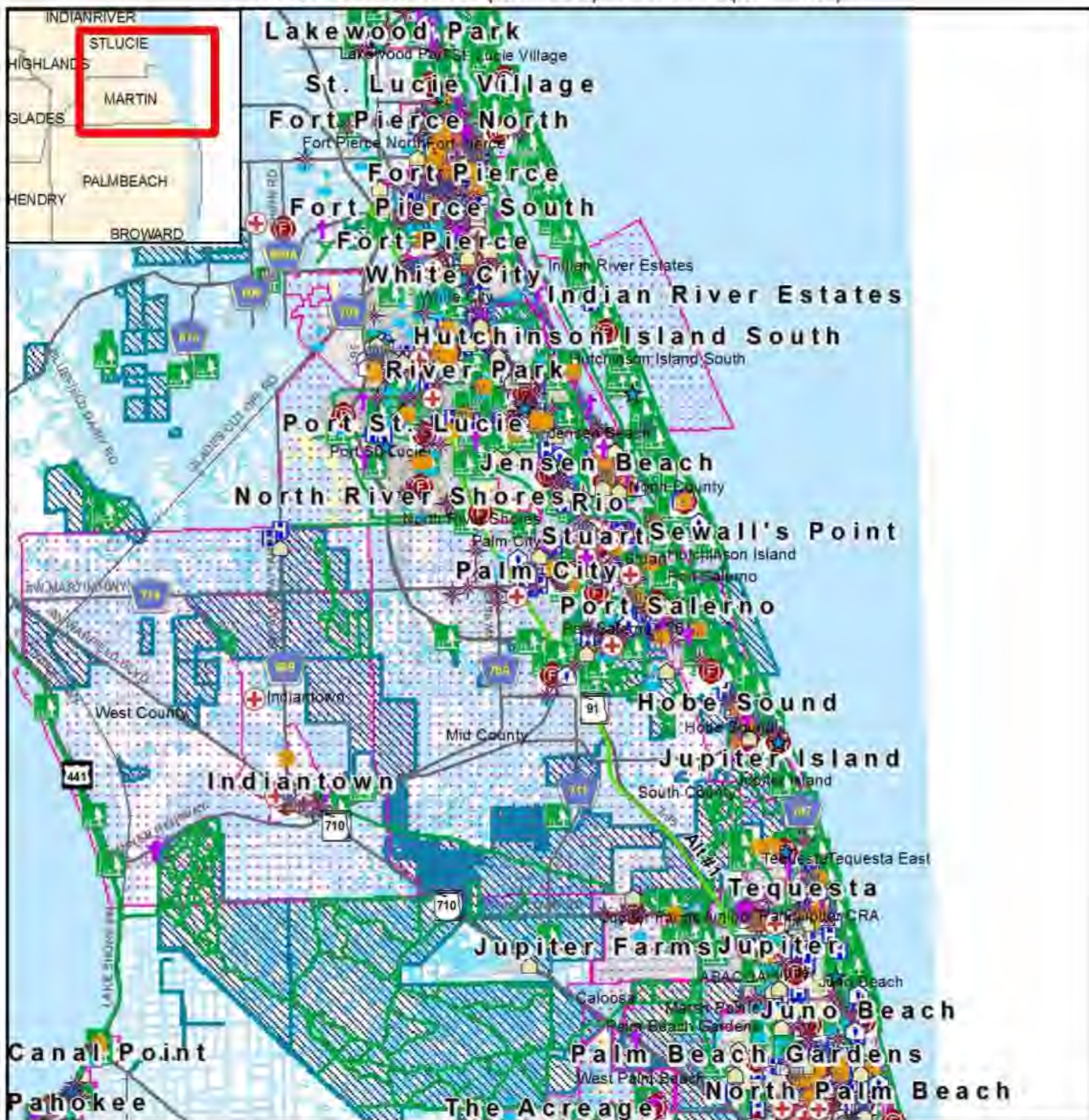


Coastal and Marine Map



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B-44



Community Services Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Government
- Civic Center
- ↑ Cemetery
- + Social Service
- Community Center
- ★ Law Enforcement
- ✠ Place of Worship
- ⌂ Cultural Center
- ⚡ Fire Station
- ⌂ Health Care
- ⌂ School
- ⌂ Park
- Recreational Trail
- Community Boundary
- Conservation or Recreation Area

Data Sources: US Geological Survey; FL Department of Transportation; NAVTEQ; FL Property Appraisers; FL Natural Areas Inventory

0 1 2 3 4 Miles

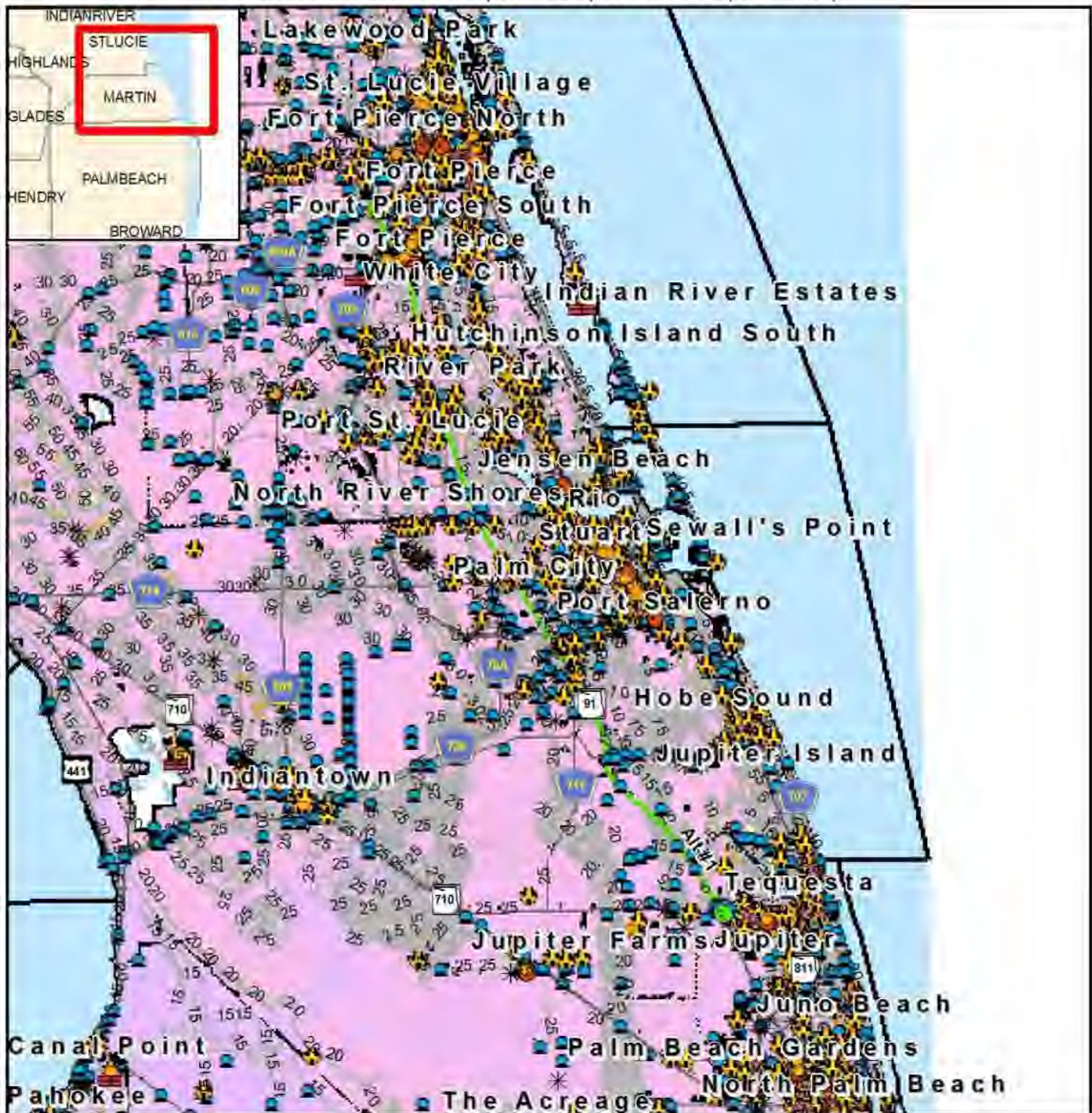


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Contamination Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Toxic Release Inventory
- ★ Dry Cleaning Facility
- ✱ Solid Waste Facility
- ✱ Hazardous Material Site
- ✱ Power Plant
- ✱ Superfund Site
- ✱ Nuclear Site
- FDEP Tanks
- 5 FT Contour
- NPL Remediation Site
- Brownfield Area
- Somewhat Excessively Drained
- Moderately Well Drained
- Excessively Drained
- Well Drained
- Somewhat Poorly Drained
- Poorly Drained
- Very Poorly Drained
- Unclassified

Data Sources: NAVTEQ, U.S. Geological Survey, FL Department of Transportation, FL Department of Environmental Protection, FL Water Management Districts, US Environmental Protection Agency, Natural Resource Conservation Service

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Cultural Resources Data Map

- ETDM Alternative
- Major Road
- Local Road or Trail
- ★ Historic Structure
- Historic Bridge
- State Historic Highway
- Historic Cemetery
- Historic Resource Group
- Cultural Resource Field Survey Area
- ETDM Alternative
- Year Built**

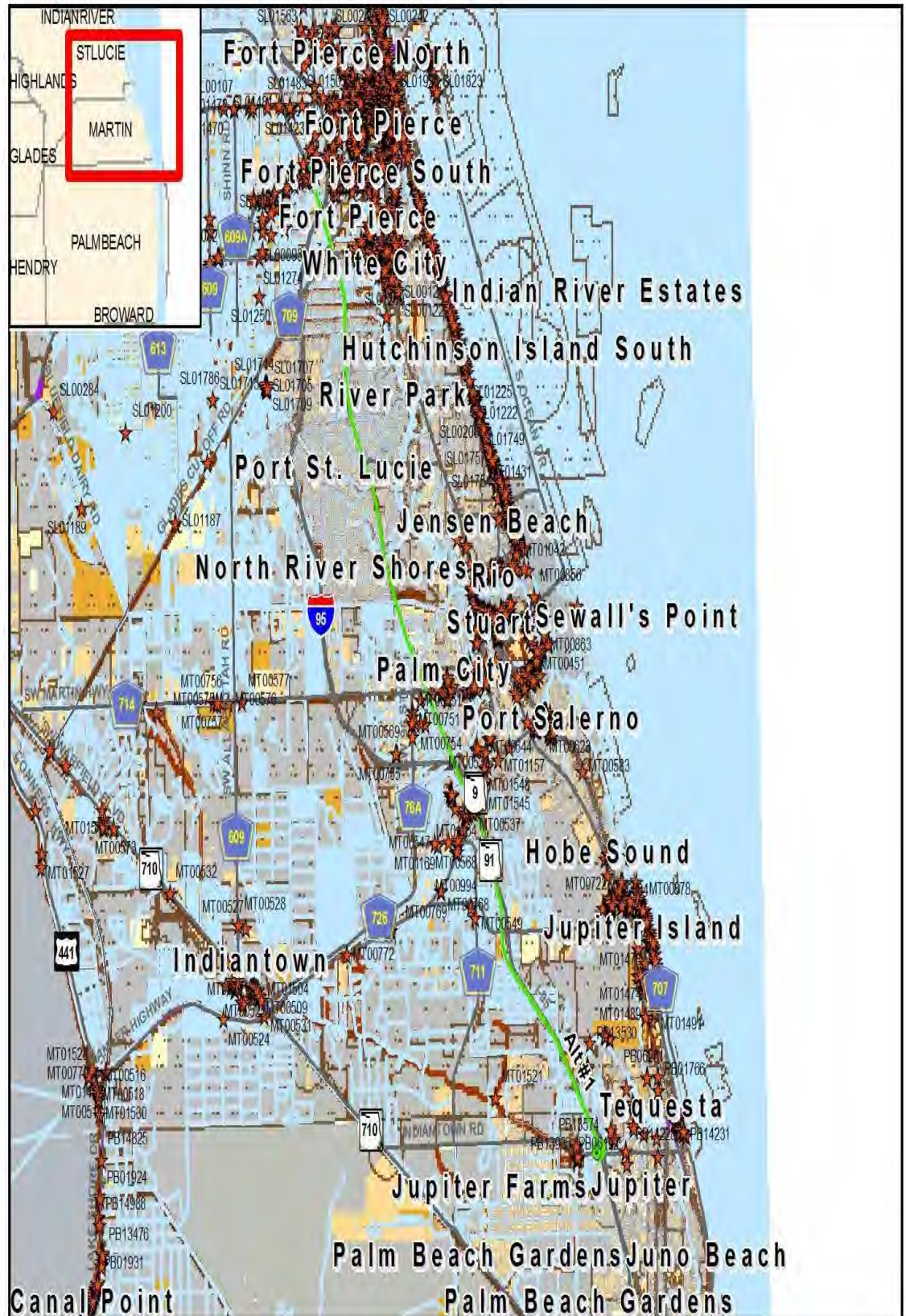
- Pre 1970
- Post 1980
- 1970 - 1979
- Parcels w/ no values



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Data Sources:
NAVTEQ
US Geological Survey
Florida Department of Transportation
Florida Department of State,
Bureau of Archaeological Research



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Note: Historic properties depicted on this map represent resources listed in the Florida Master Site File excluding archeological site locations, which, pursuant to Chapter 267.135, Florida Statutes, may be exempt from public record (Chapter 119.07, Florida Statutes). Absence of features on the map does not necessarily indicate an absence of resources in the project vicinity.

Indiantown Road (MP 116) to SR 70 (MP 152)



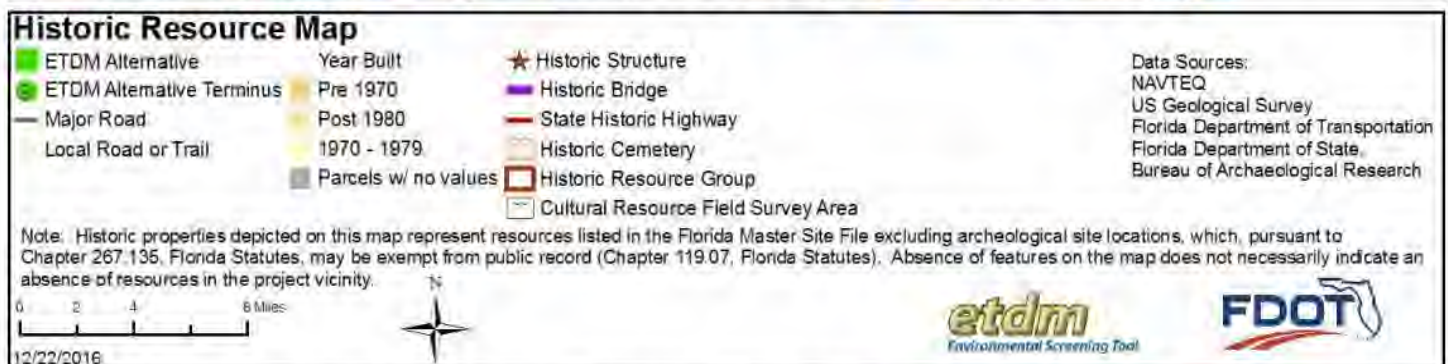
B-48

Indiantown Road (MP 116) to SR 70 (MP 152)



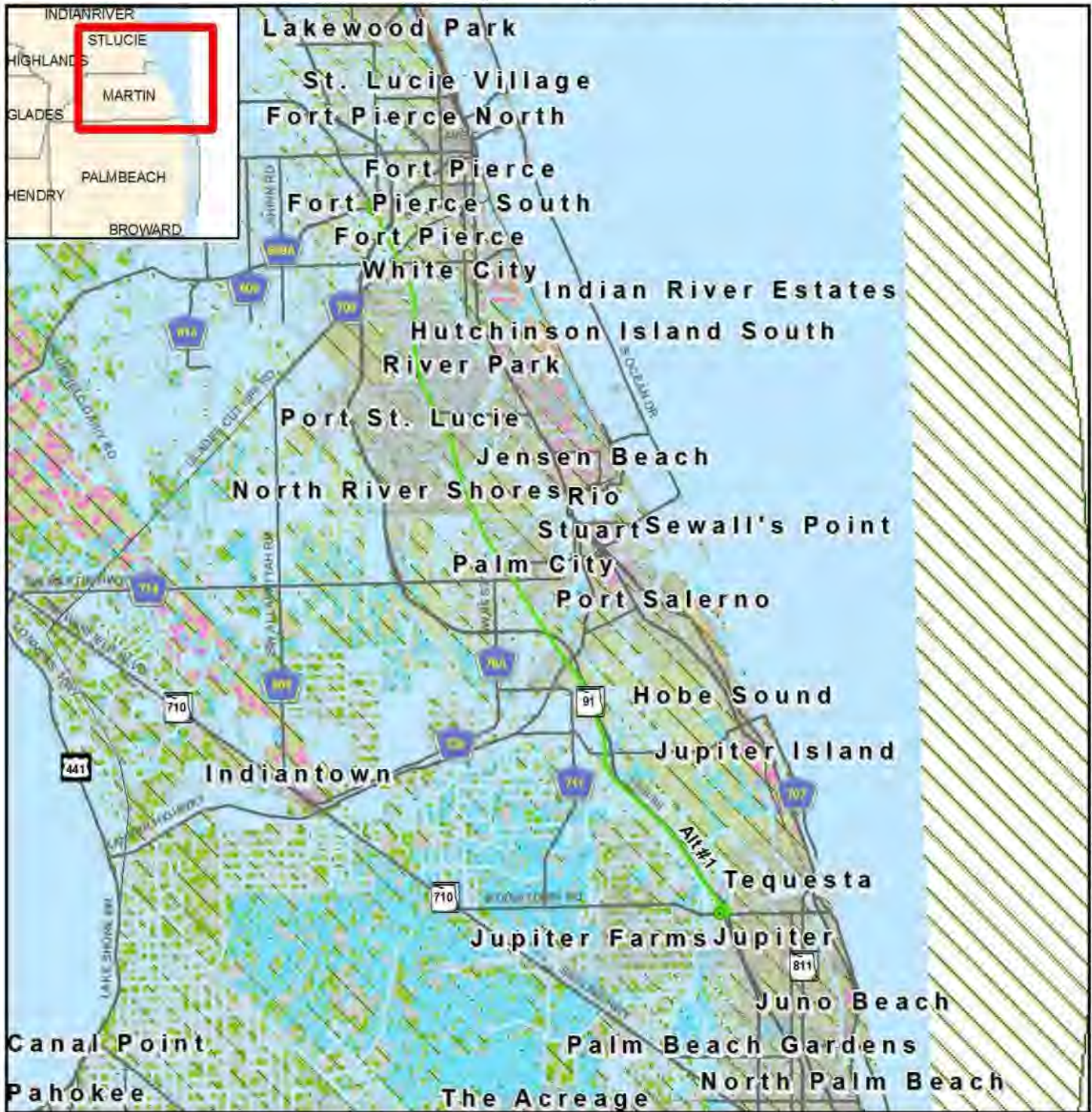
B-49

**14295 Turnpike Mainline Widening from Jupiter to
Fort Pierce, Alternative #1
Indiantown Road (MP 116) to SR 70 (MP 152)**

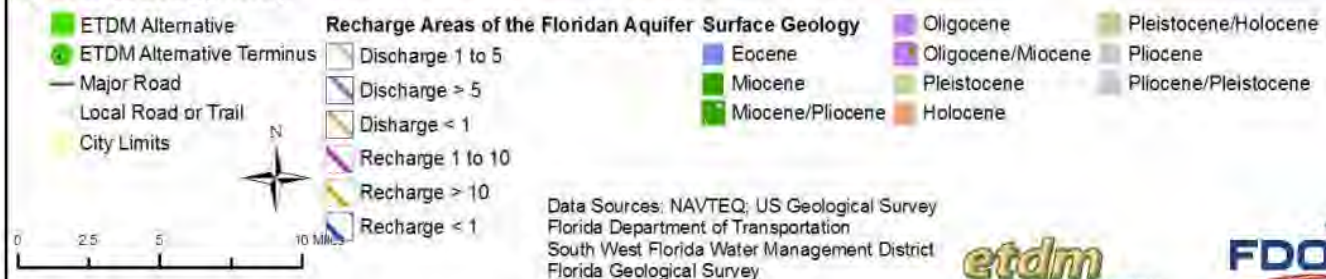


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**14295 Turnpike Mainline Widening from Jupiter to
Fort Pierce, Alternative #1**
Indiantown Road (MP 116) to SR 70 (MP 152)

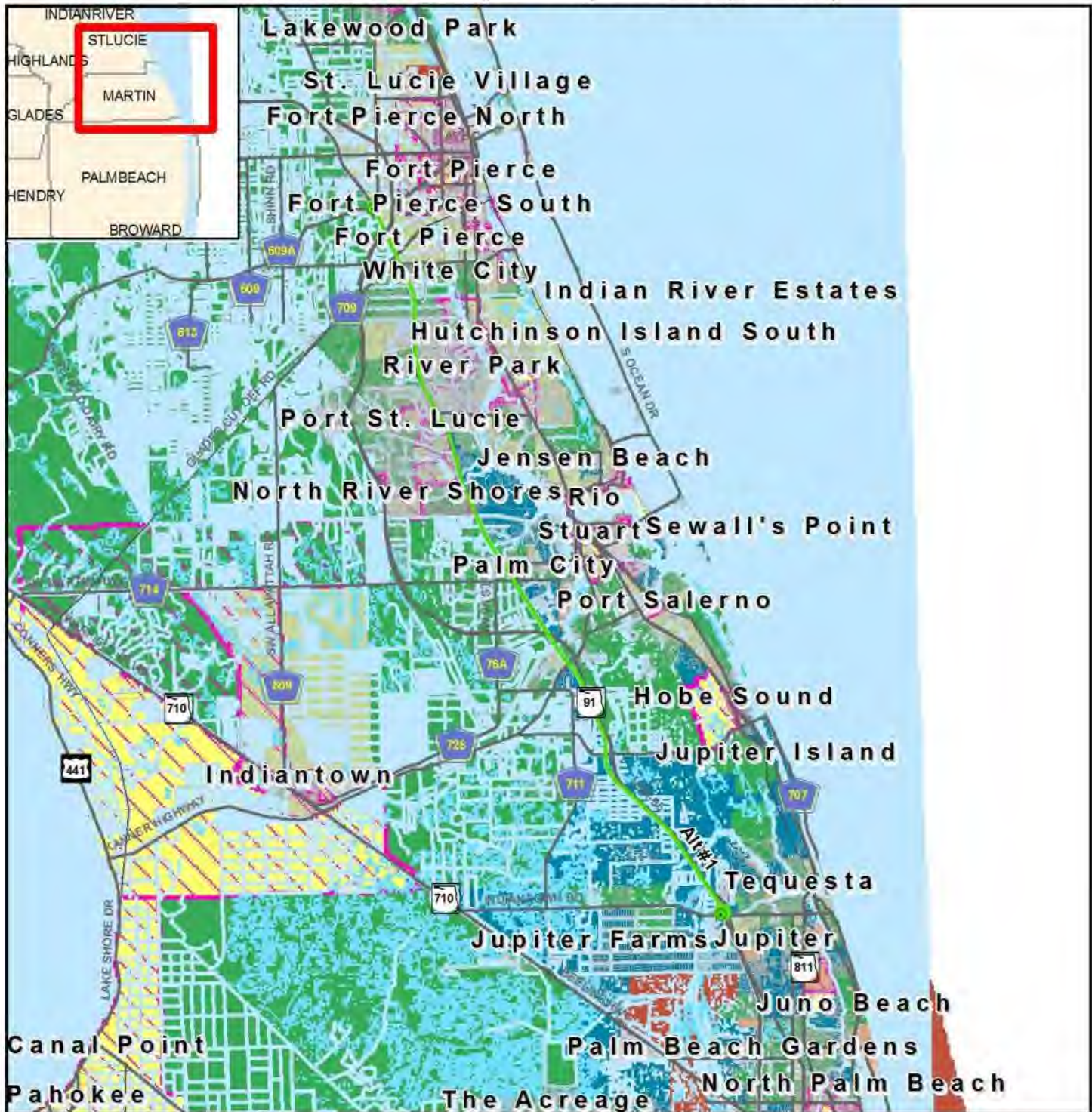


Hydrogeology Map

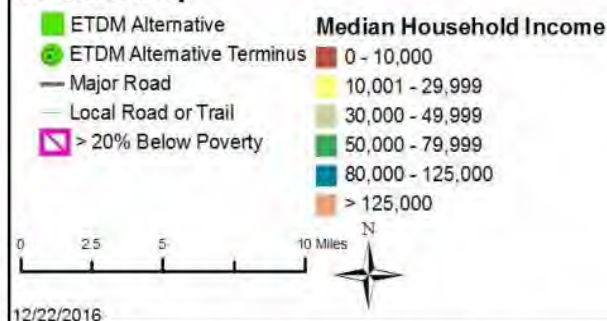


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Income Map



Data Sources:
US Geological Survey
FL Department of Transportation
NAVTEQ
US Census Bureau (2010)

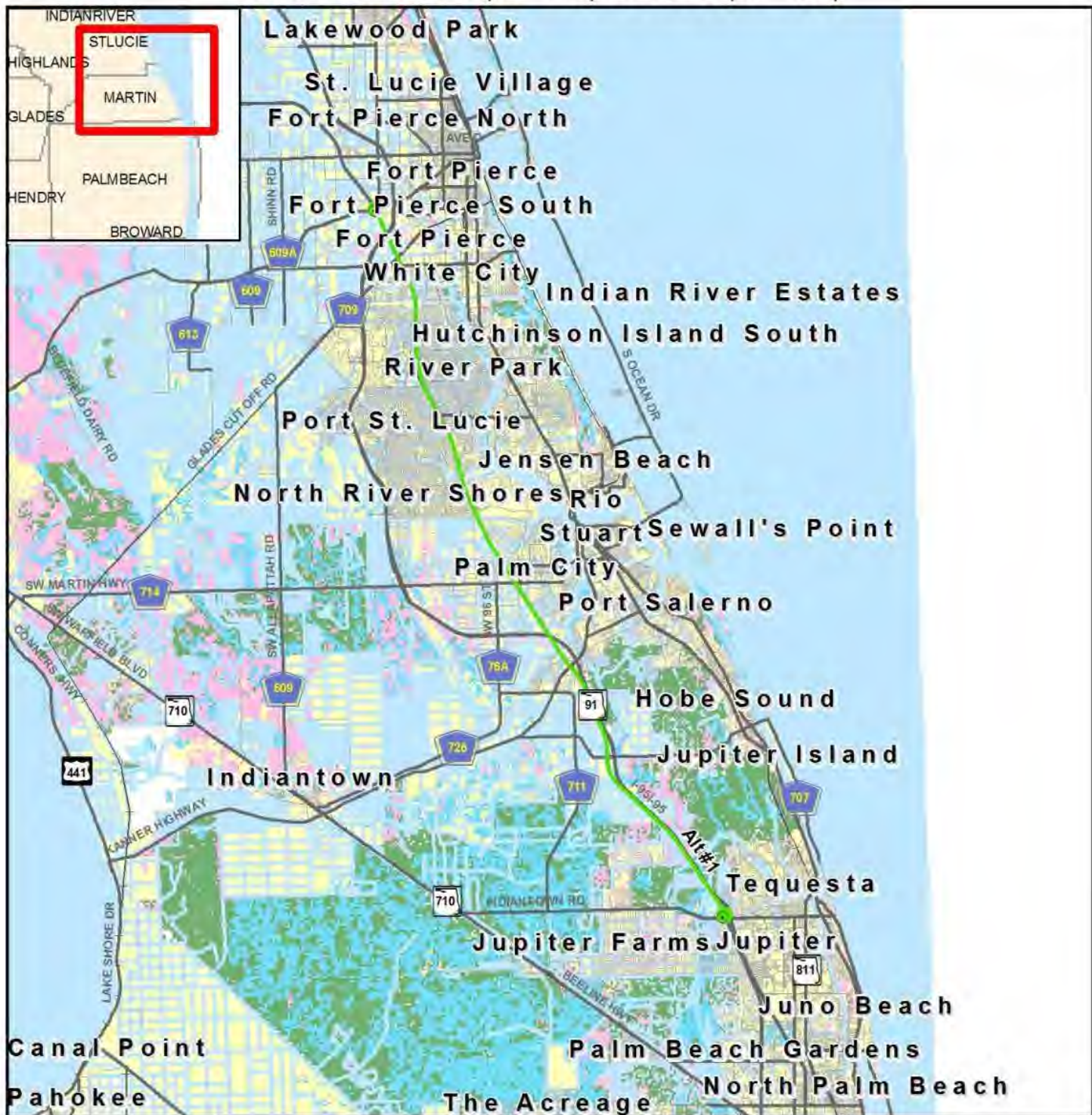
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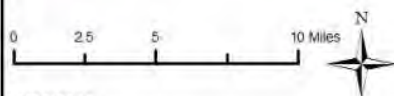
B-52



Integrated Wildlife Model Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Low Habitat Quality
- Medium Habitat Quality
- High Habitat Quality

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Fish & Wildlife Conservation Commission

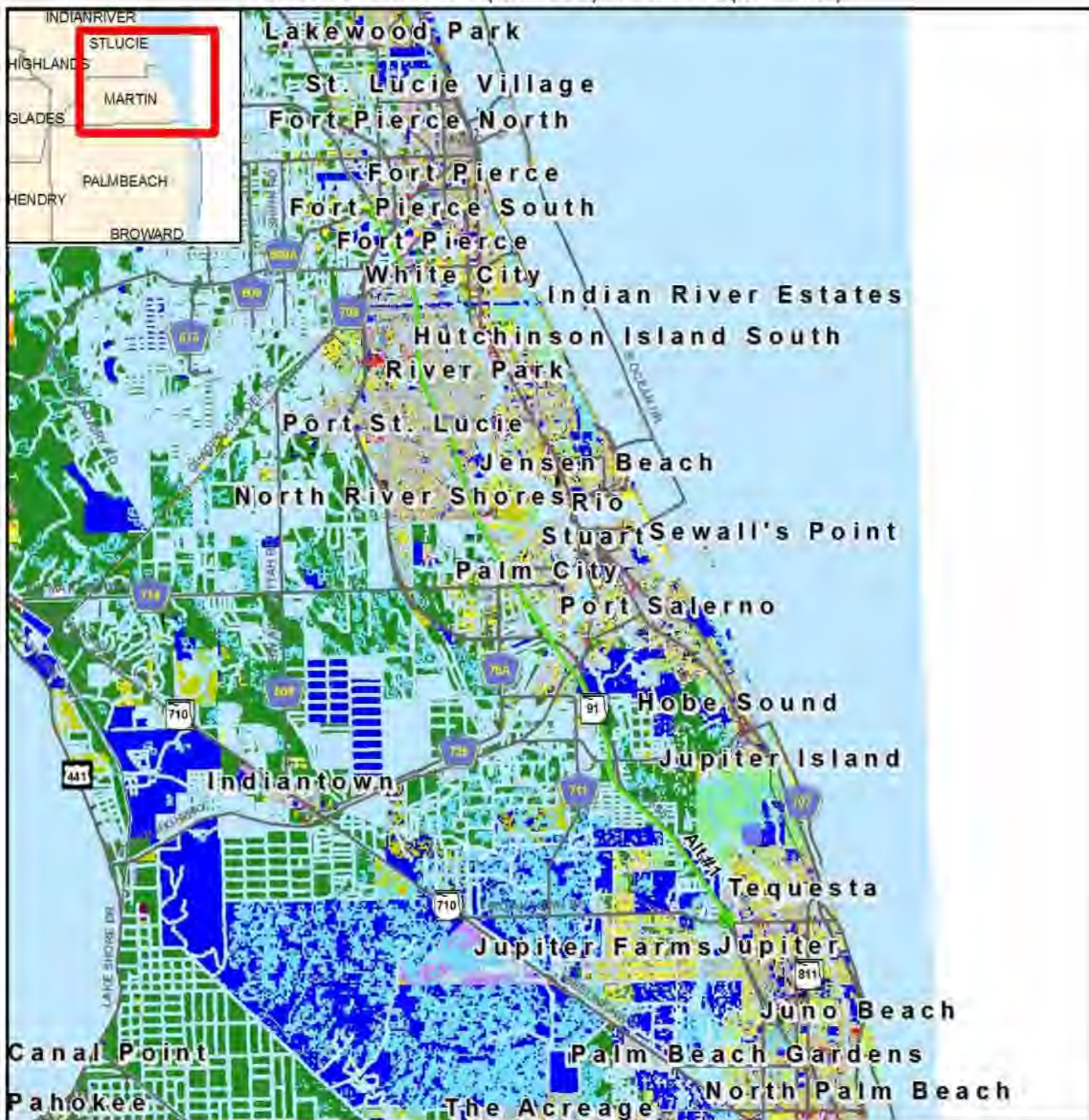


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Land Use Map



Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Revenue
 Florida Department of Transportation
 Florida County Property Appraiser Offices

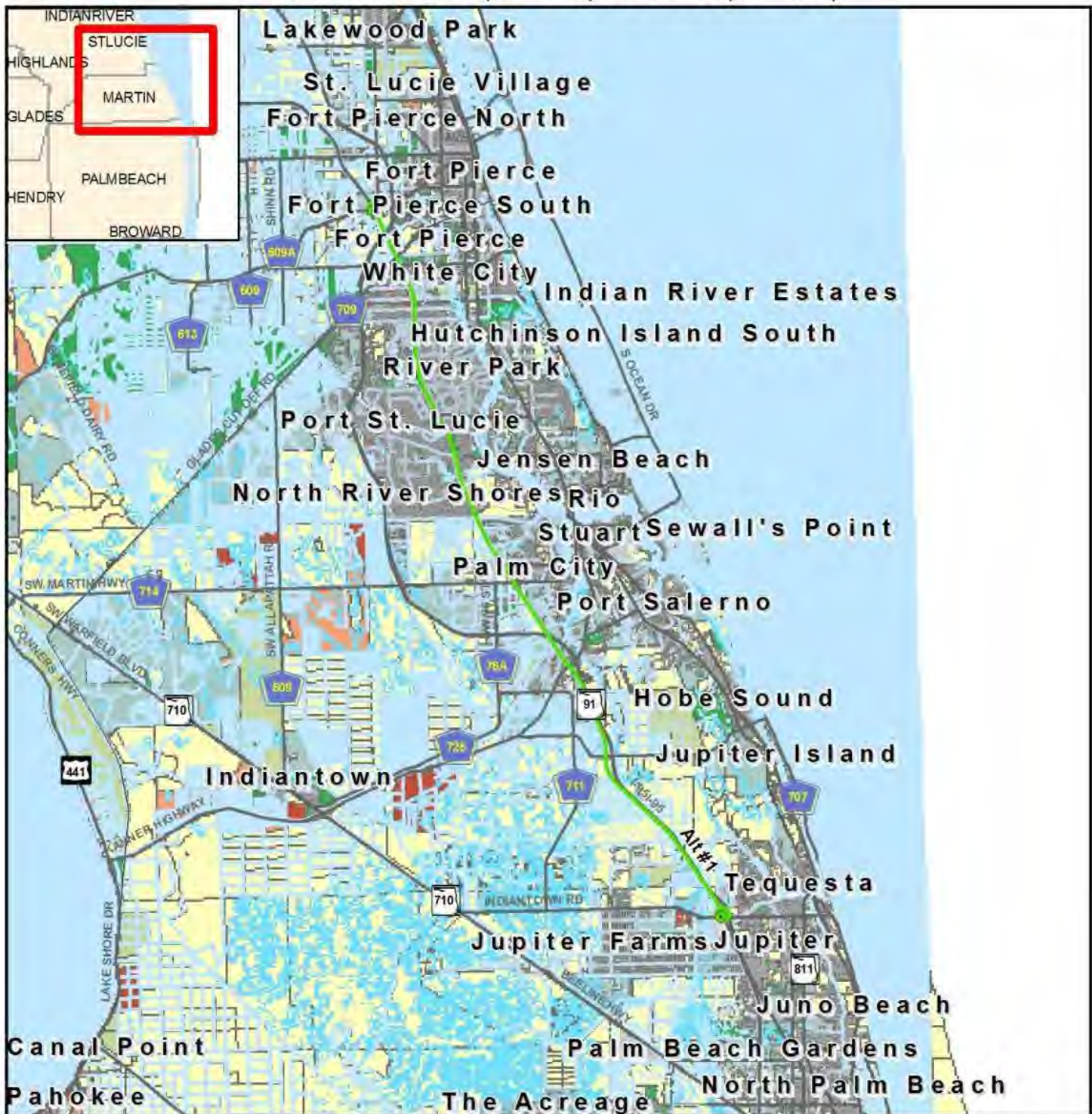


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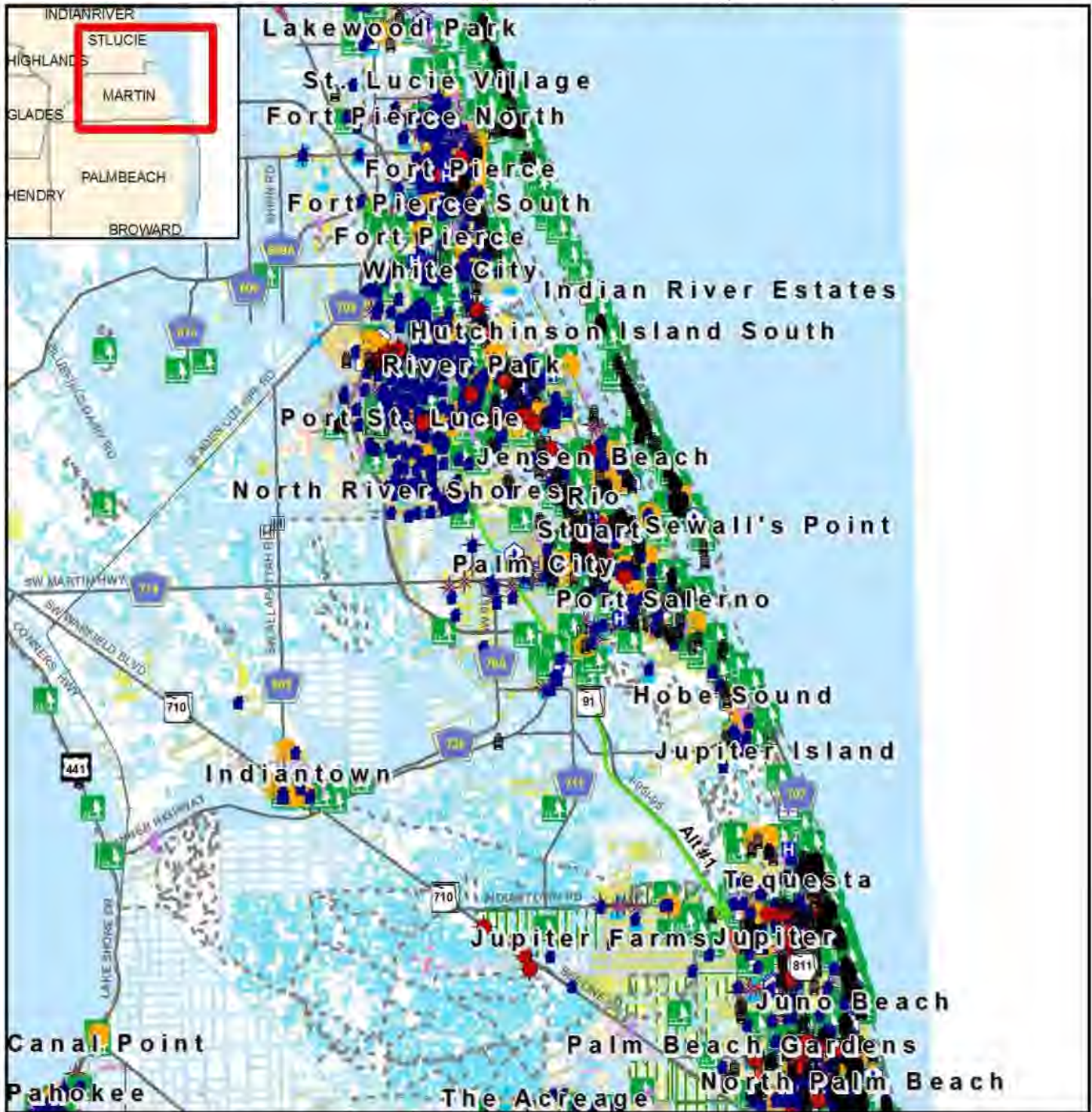


Minority Population Map



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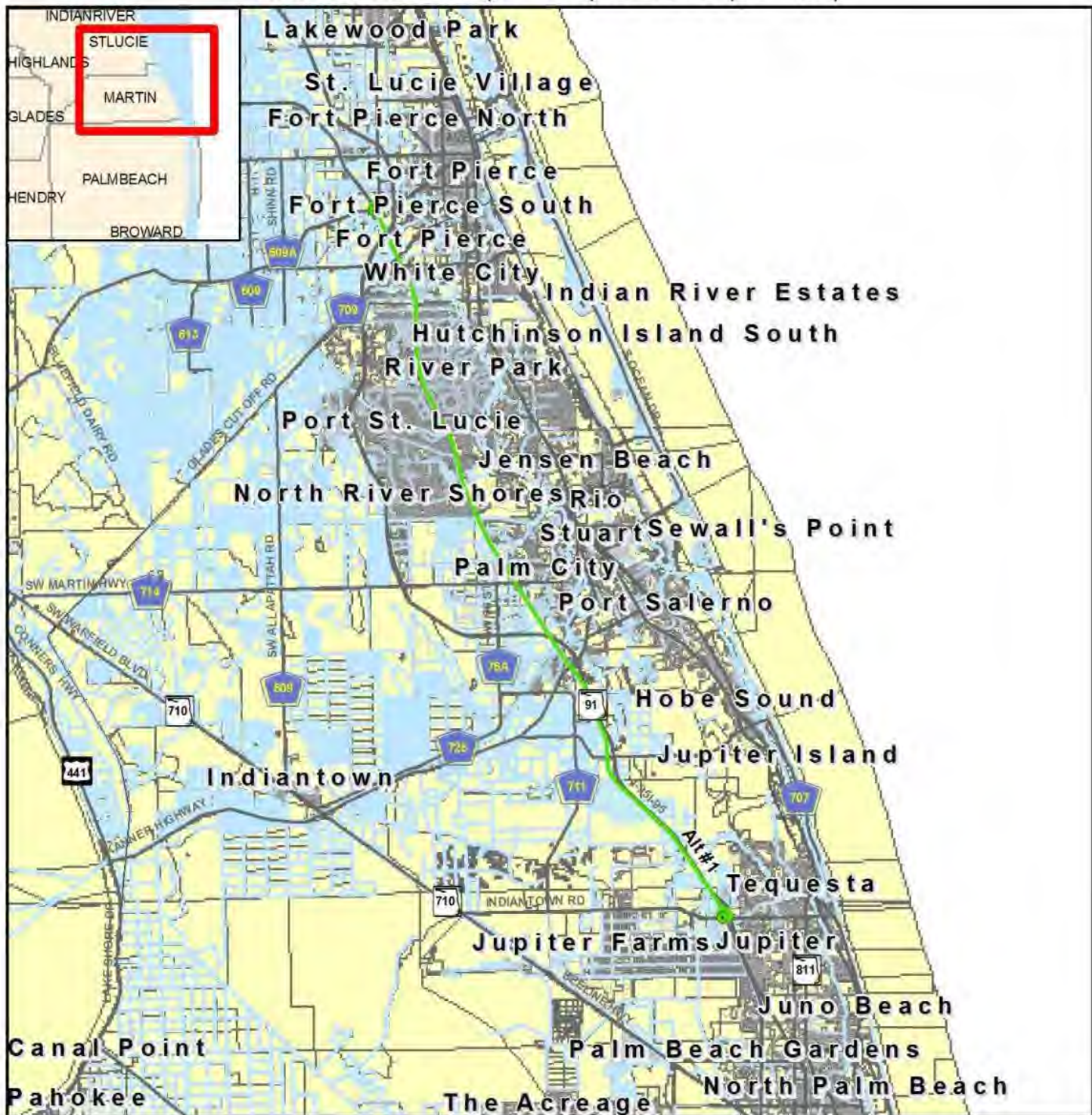
**14295 Turnpike Mainline Widening from Jupiter to
Fort Pierce, Alternative #1**
Indiantown Road (MP 116) to SR 70 (MP 152)



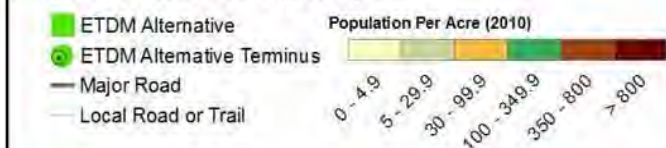
Noise Map



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Population Density Map



Data Sources:
 US Geological Survey
 FL Department of Transportation
 NAVTEQ
 US Census Bureau (2010)



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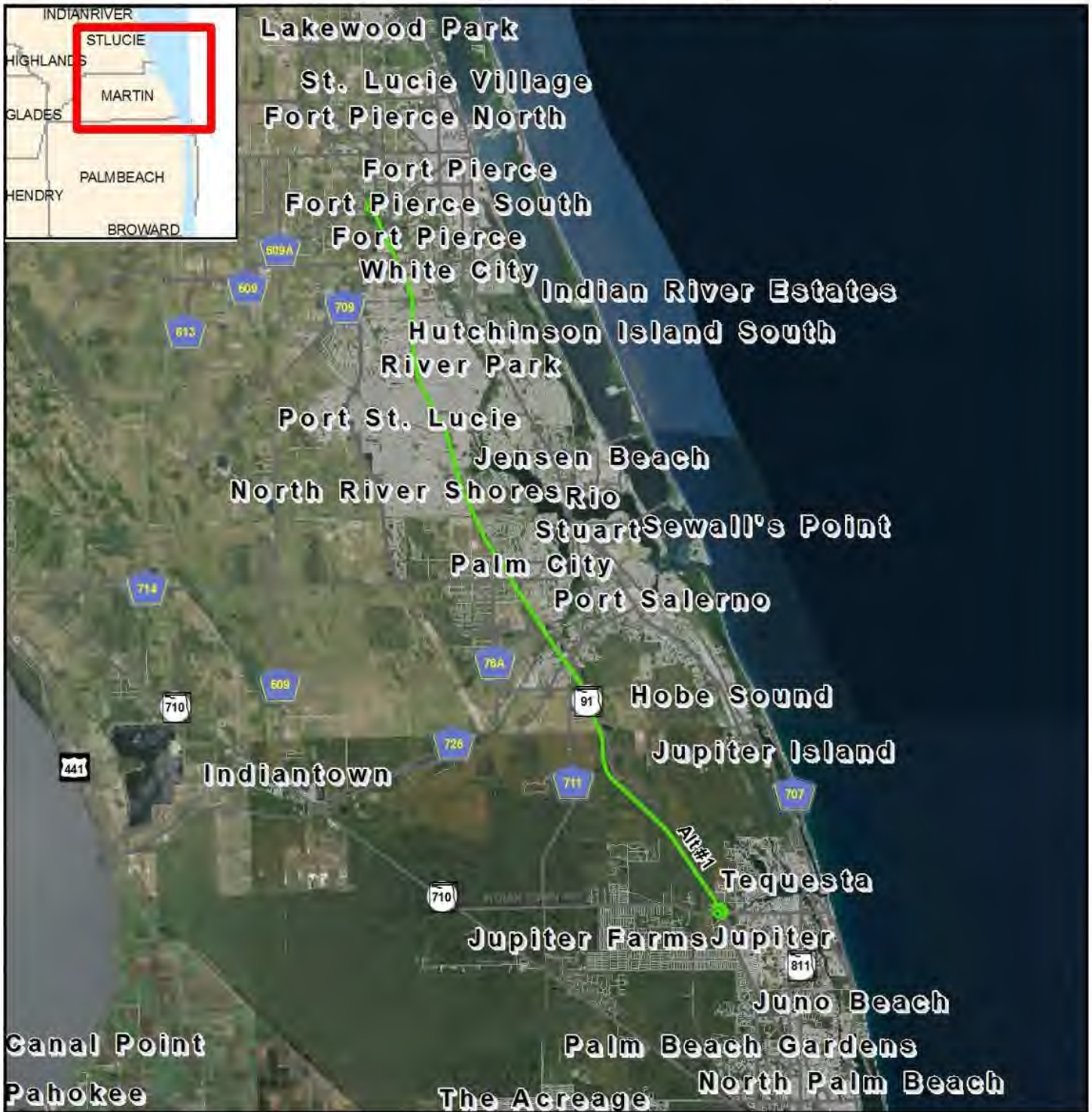
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14295 Turnpike Mainline Widening from Jupiter to

Fort Pierce, Alternative #1

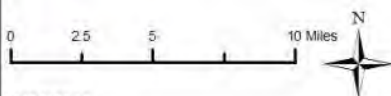
Indiantown Road (MP 116) to SR 70 (MP 152)



Project Aerial Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail

Data Sources:
Highways - NAVTEQ
Digital Orthophotograph - ArcGIS Online



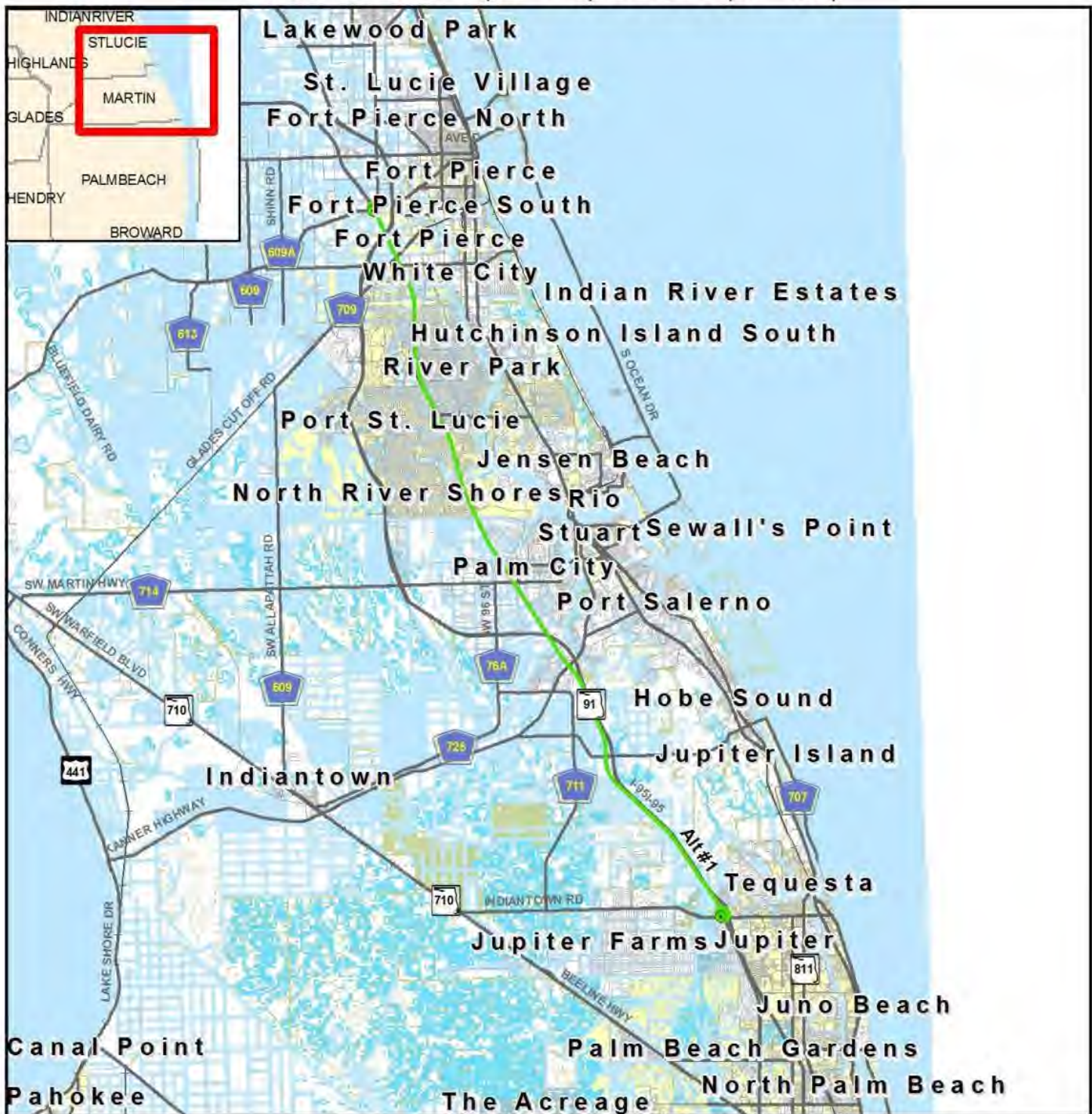
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Project Base Map

- ETDM Alternative
- ETDM Alternative Terminus
- Local Road or Trail
- Major Road
- City Limits
- Managed Conservation Lands

Data Sources:
 NAVTEQ
 US Geological Survey
 US Census Bureau
 County Property Appraisers
 Florida Natural Areas Inventory



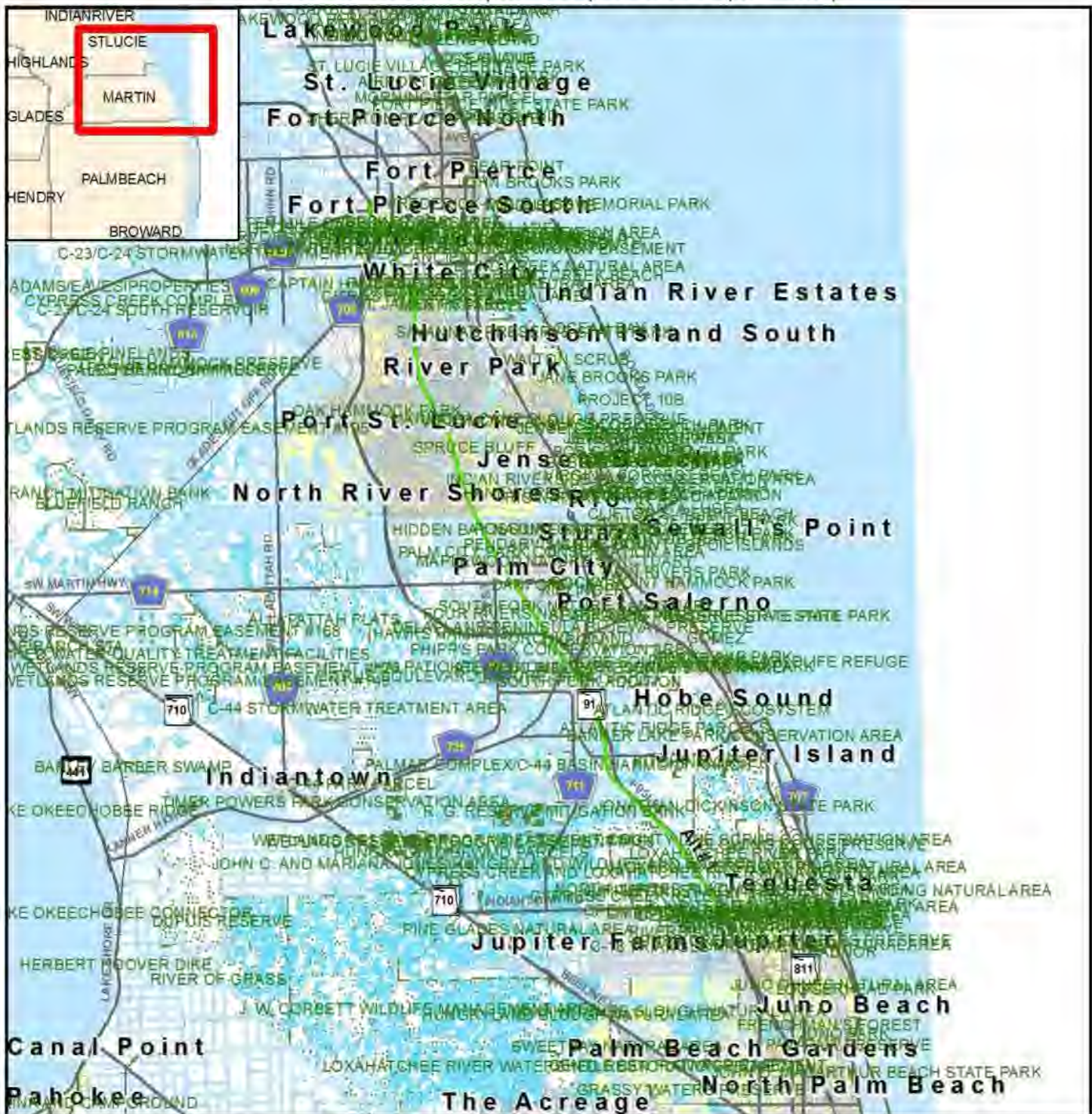
12/22/2016

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**14295 Turnpike Mainline Widening from Jupiter to
Fort Pierce, Alternative #1
Indiantown Road (MP 116) to SR 70 (MP 152)**



Recreational Areas Map

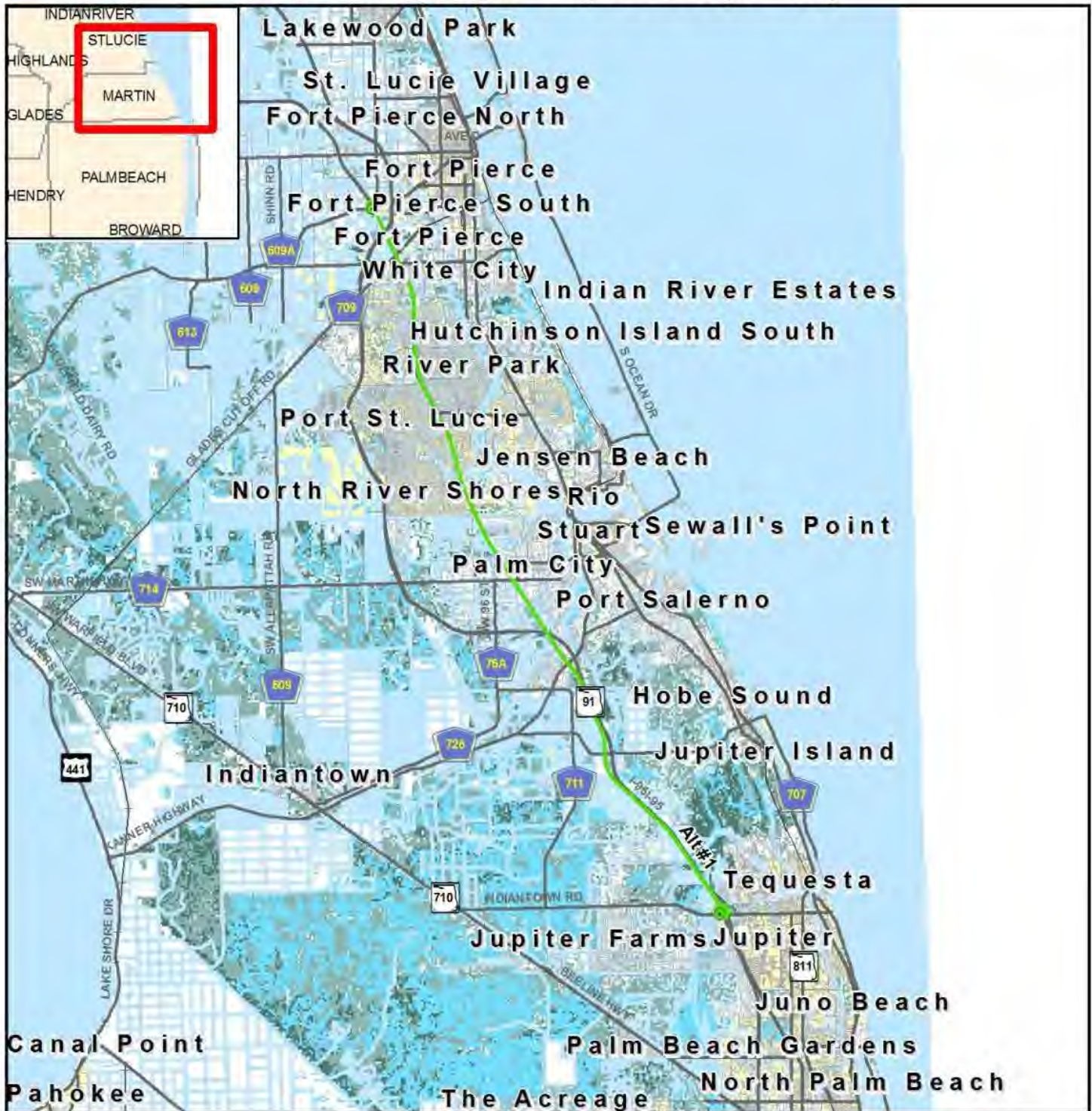


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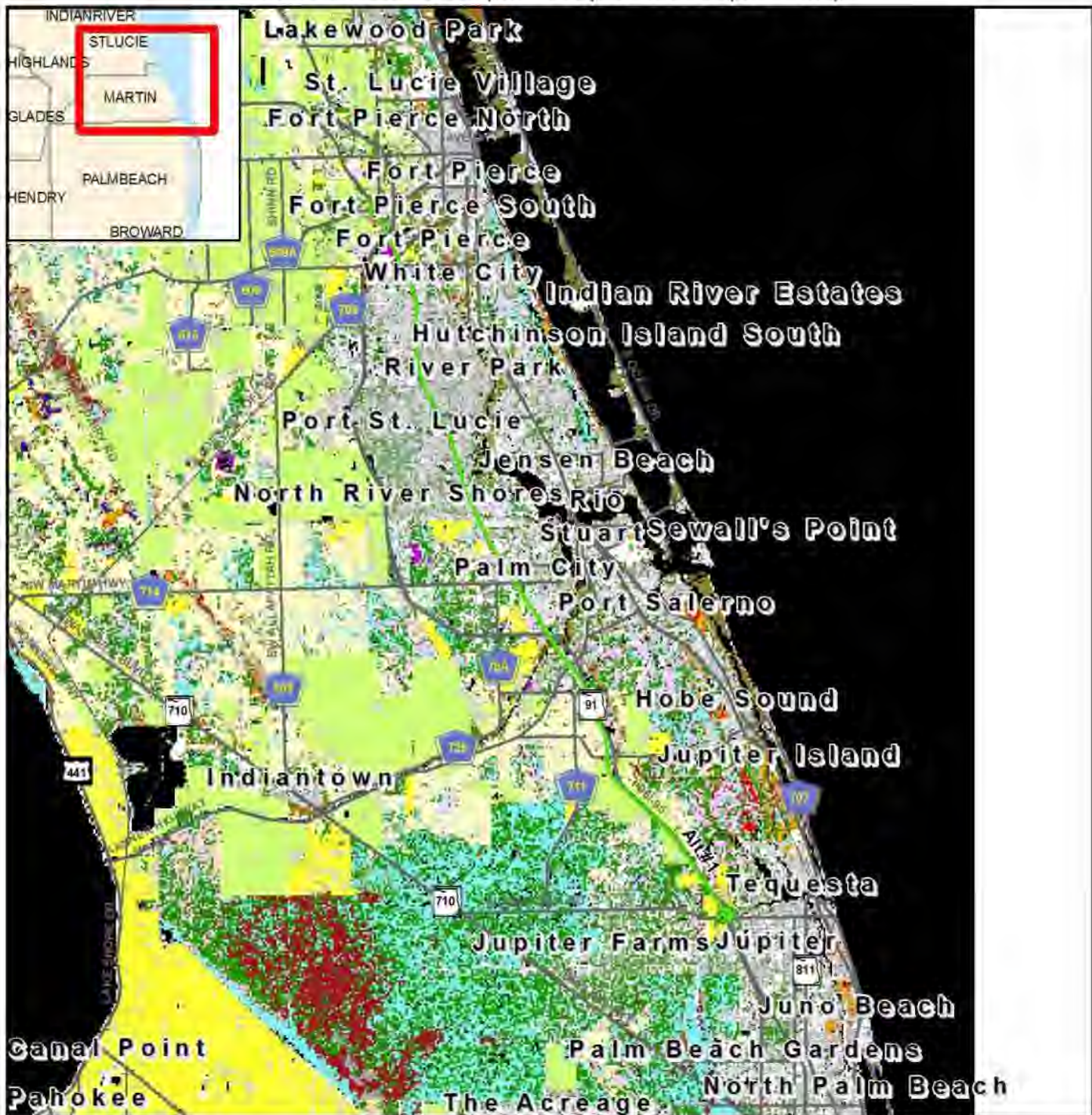
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**14295 Turnpike Mainline Widening from Jupiter to
Fort Pierce, Alternative #1**
 Indiantown Road (MP 116) to SR 70 (MP 152)



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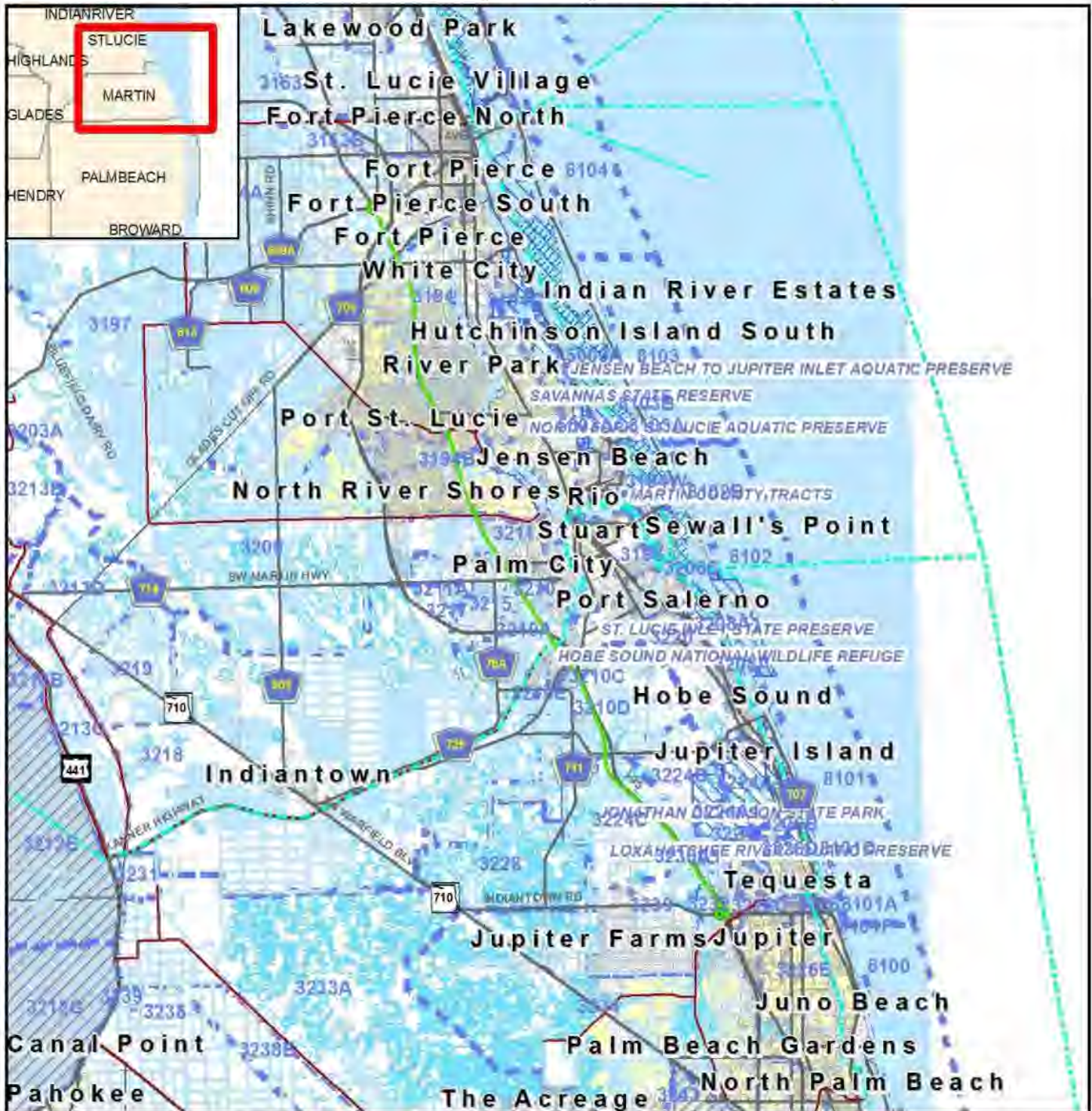


Vegetation Map



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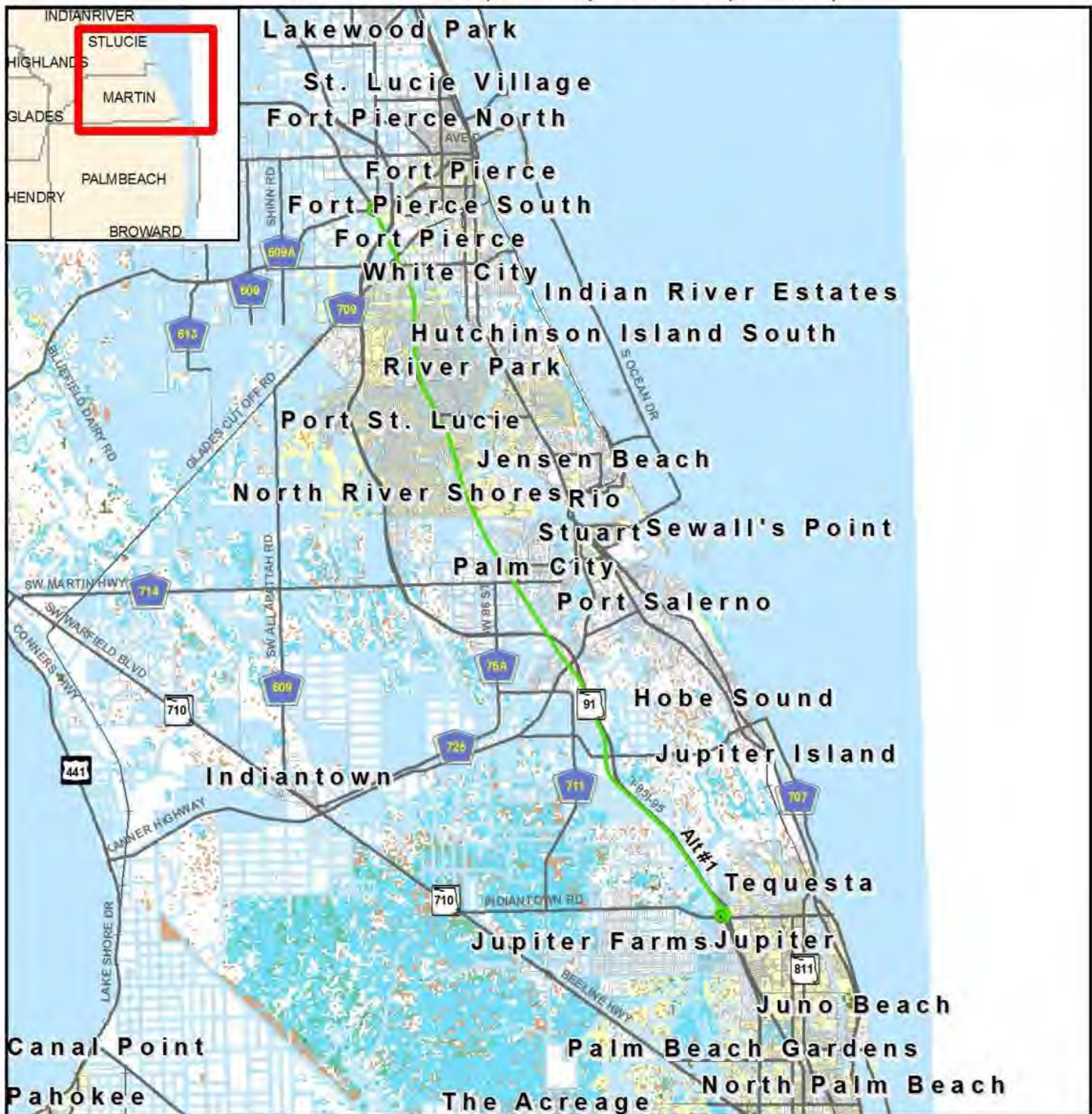
**14295 Turnpike Mainline Widening from Jupiter to
Fort Pierce, Alternative #1**
Indiantown Road (MP 116) to SR 70 (MP 152)



Water Resource Map



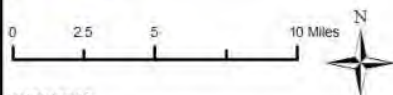
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Wetlands and Surface Waters Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Non-vegetated Wetland
- Vegetated Non-forested Wetland
- Wetland Forested Mixed
- Wetland Coniferous Forest
- Wetland Hardwood Forest

Data Sources:
NAVTEQ
Florida Water Management Districts
US Geological Survey



12/22/2016

etdm
Environmental Screening Tool



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Appendices

PED Comments

Advance Notification Comments

US Army Corps of Engineers Comment --

The Corps has reviewed the information and has provided comments in the Wetlands and Navigation sections under the Project Effects.

--Tarrie L Ostrofsky, 2/22/2017

Response --

--, \$tools.date.format("M/d/yyyy",\$comment.responseTimestamp)

GIS Analyses

Since there are so many GIS Analyses available for Project #14295 - Turnpike Mainline Widening from Jupiter to Fort Pierce, they have not been included in this ETDM Summary Report. GIS Analyses, however, are always available for this project on the Public ETDM Website. Please click on the link below (or copy this link into your Web Browser) in order to view detailed GIS tabular information for this project:

<http://etdmpub.fla-etat.org/est/index.jsp?tpID=14295&startPageName=GIS%20Analysis%20Results>

Special Note: Please be sure that when the GIS Analysis Results page loads, the **Project Published 5/19/2017 Milestone** is selected. GIS Analyses snapshots have been taken for Project #14295 at various points throughout the project's life-cycle, so it is important that you view the correct snapshot.

Project Attachments

There are no attachments for this project.

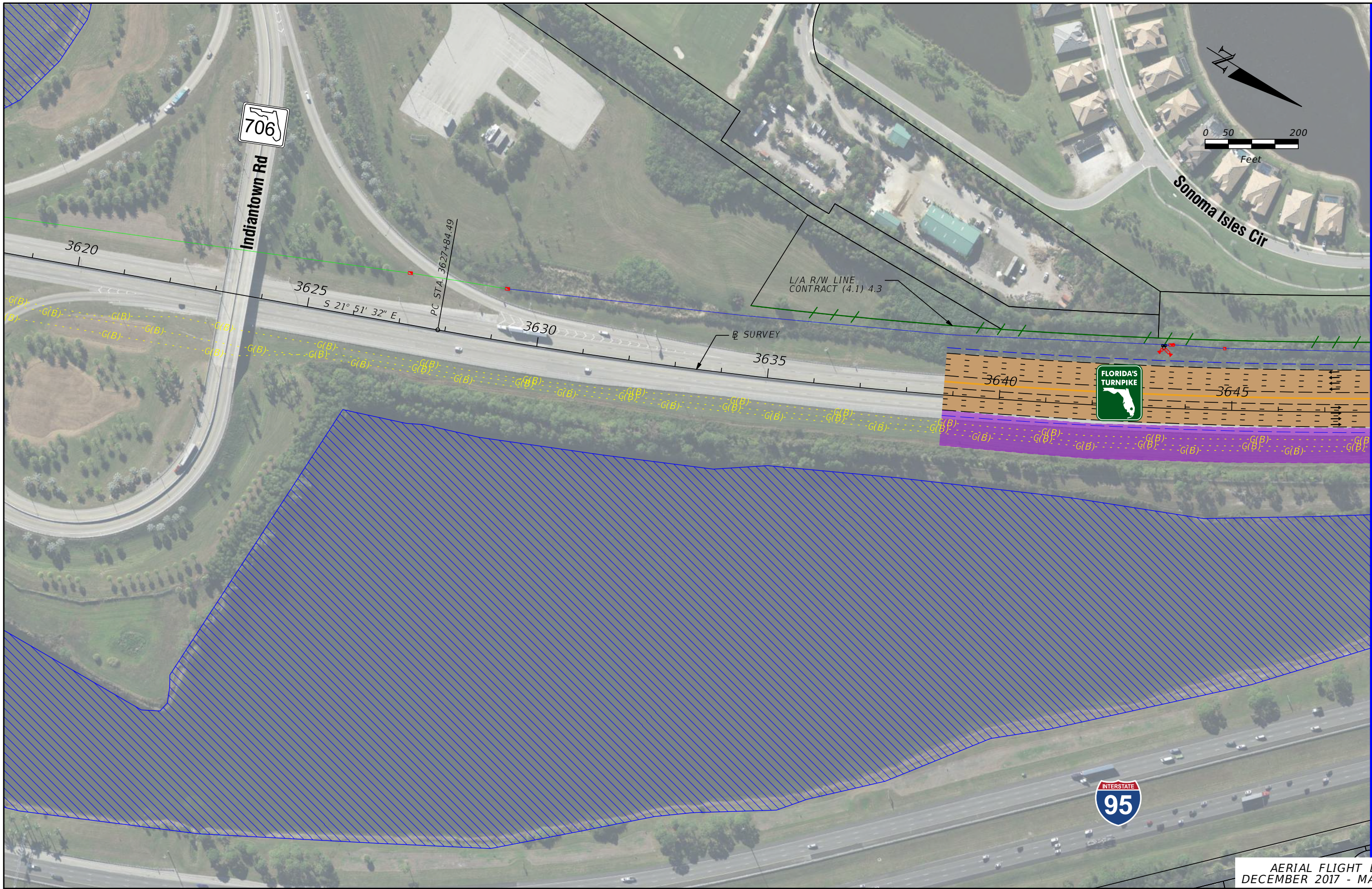
Degree of Effect Legend

Color Code	Meaning	ETAT	Public Involvement
N/A	Not Applicable / No Involvement	There is no presence of the issue in relationship to the project, or the issue is irrelevant in relationship to the proposed transportation action.	
0	None (after 12/5/2005)	The issue is present, but the project will have no impact on the issue; project has no adverse effect on ETAT resources; permit issuance or consultation involves routine interaction with the agency. The <i>None</i> degree of effect is new as of 12/5/2005.	No community opposition to the planned project. No adverse effect on the community.
1	Enhanced	Project has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement.	Affected community supports the proposed project. Project has positive effect.
2	Minimal	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
2	Minimal to None (assigned prior to 12/5/2005)	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
3	Moderate	Agency resources are affected by the proposed project, but avoidance and minimization options are available and can be addressed during development with a moderated amount of agency involvement and moderate cost impact.	Project has adverse effect on elements of the affected community. Public Involvement is needed to seek alternatives more acceptable to the community. Moderate community interaction will be required during project development.
4	Substantial	The project has substantial adverse effects but ETAT understands the project need and will be able to seek avoidance and minimization or mitigation options during project development. Substantial interaction will be required during project development and permitting.	Project has substantial adverse effects on the community and faces substantial community opposition. Intensive community interaction with focused Public Involvement will be required during project development to address community concerns.
5	Potential Dispute (Planning Screen)	Project may not conform to agency statutory requirements and may not be permitted. Project modification or evaluation of alternatives is required before advancing to the LRTP Programming Screen.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
5	Dispute Resolution (Programming Screen)	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.

	No ETAT Consensus	ETAT members from different agencies assigned a different degree of effect to this project, and the ETDM coordinator has not assigned a summary degree of effect.
	No ETAT Reviews	No ETAT members have reviewed the corresponding issue for this project, and the ETDM coordinator has not assigned a summary degree of effect.

APPENDIX C

Preferred Alternative Conceptual Plans



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

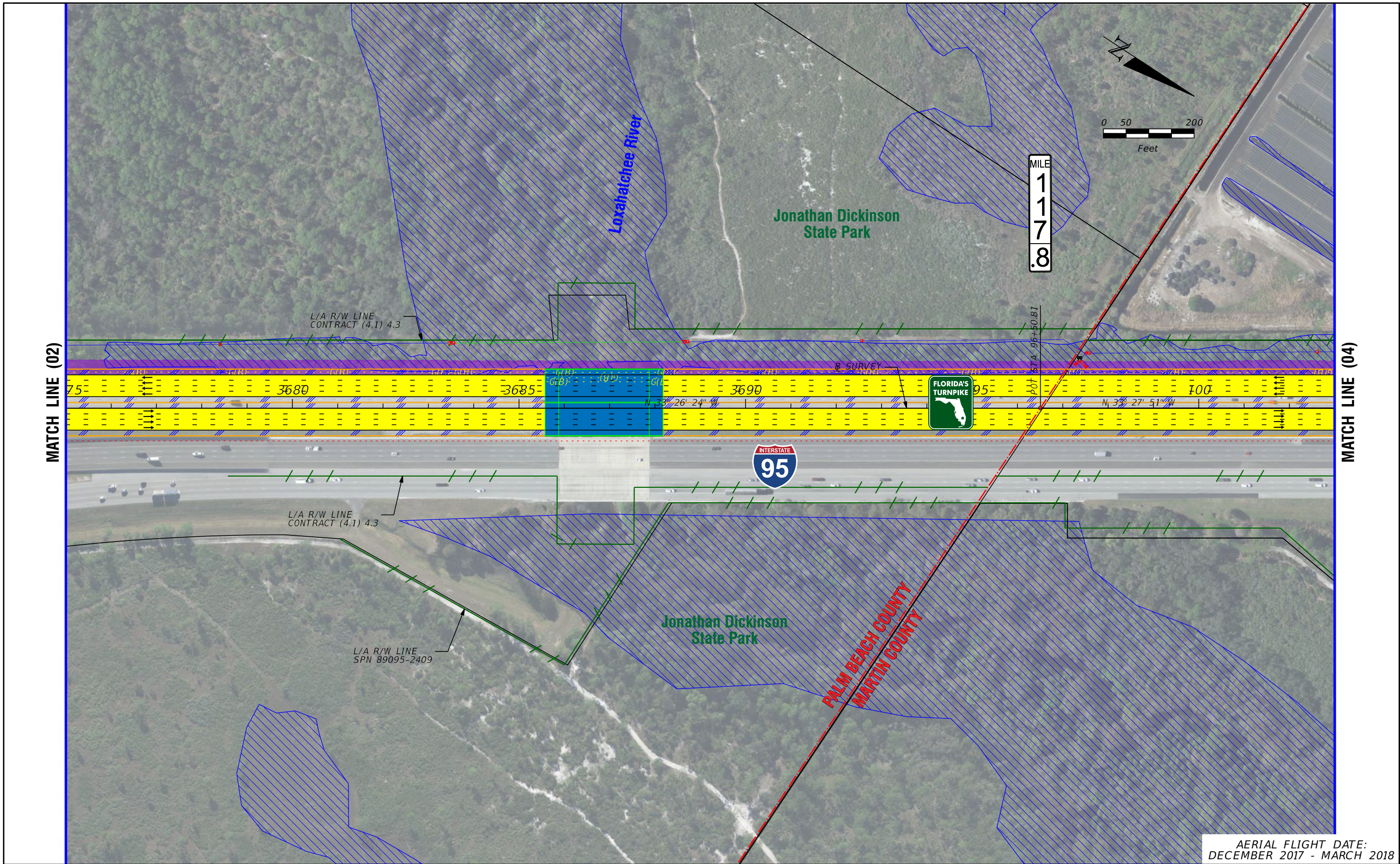
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—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
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SHEET
NO.
C-1



AERIAL FLIGHT DATE:
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LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD		

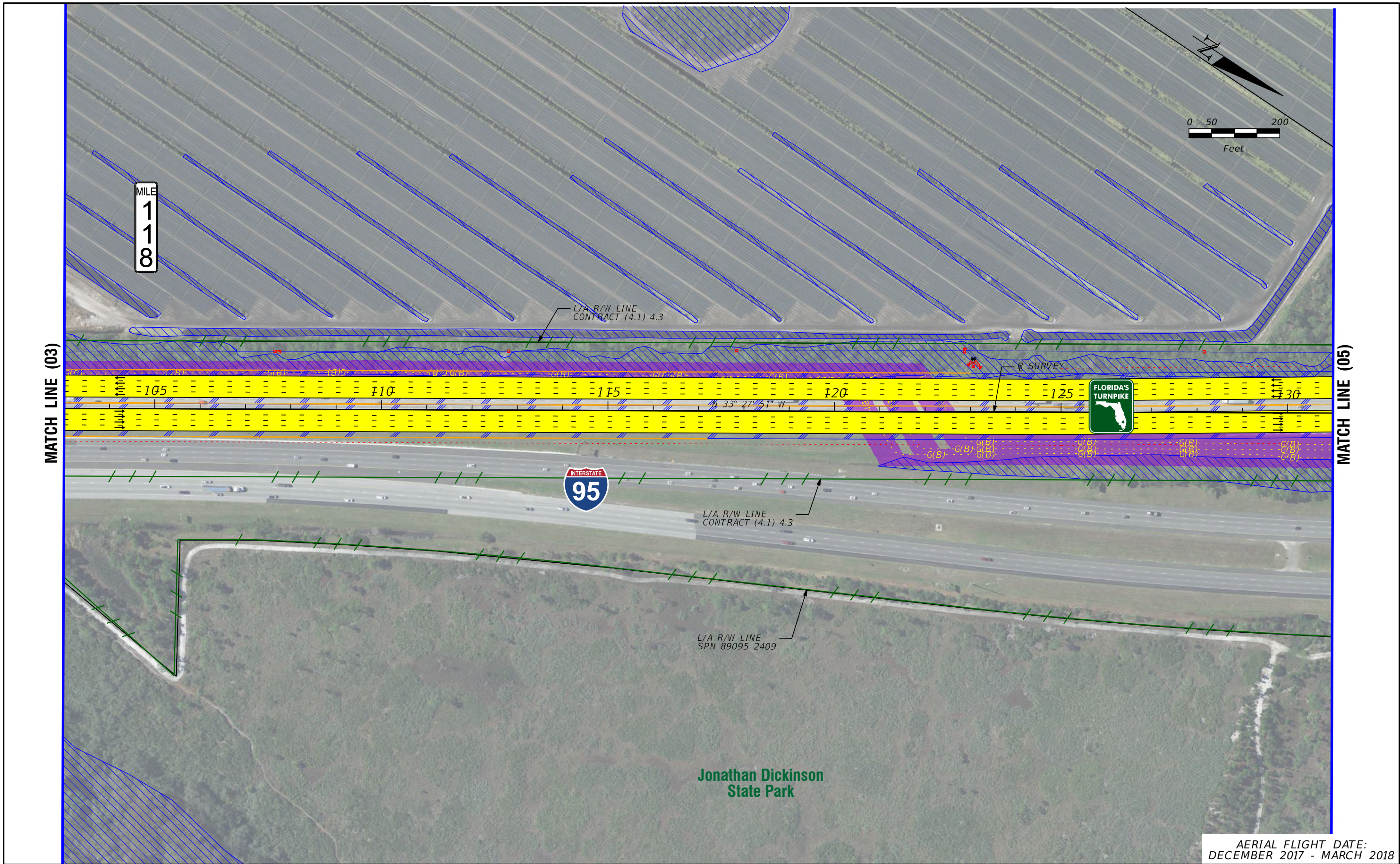
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—	EXISTING BRIDGE	—	POTENTIAL ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION		

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CONCEPT PLAN

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AERIAL FLIGHT DATE:
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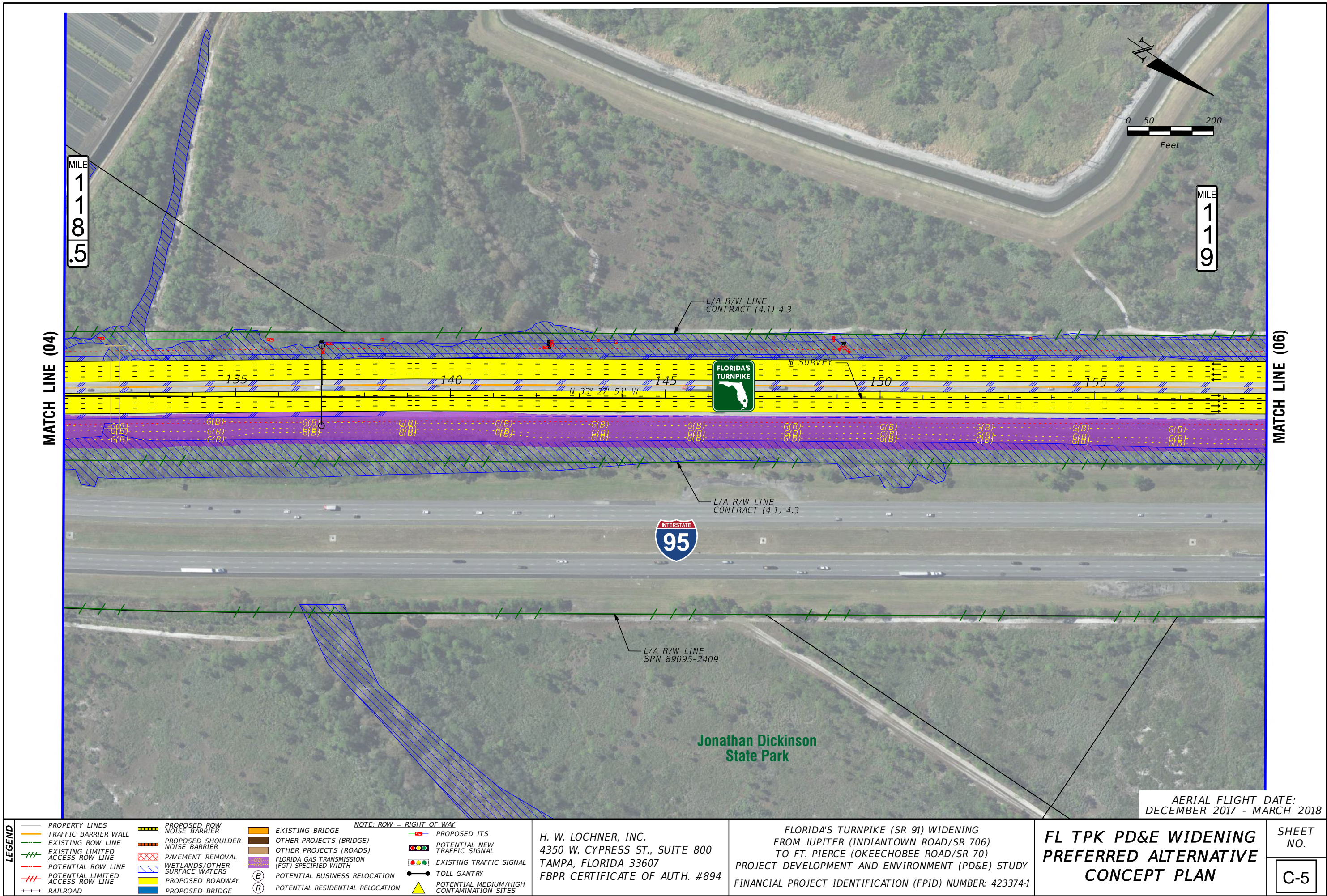
LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	

NOTE: ROW = RIGHT OF WAY			
—	EXISTING BRIDGE	—	PROPOSED ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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AERIAL FLIGHT DATE:
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LEGEND			
—	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
—	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
—	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)
—	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
—	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION
—	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION
—	RAILROAD		

NOTE: ROW = RIGHT OF WAY			
—	POTENTIAL ITS	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ITS	—	EXISTING TRAFFIC SIGNAL
—	TOLL GANTRY	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

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AERIAL FLIGHT DATE:
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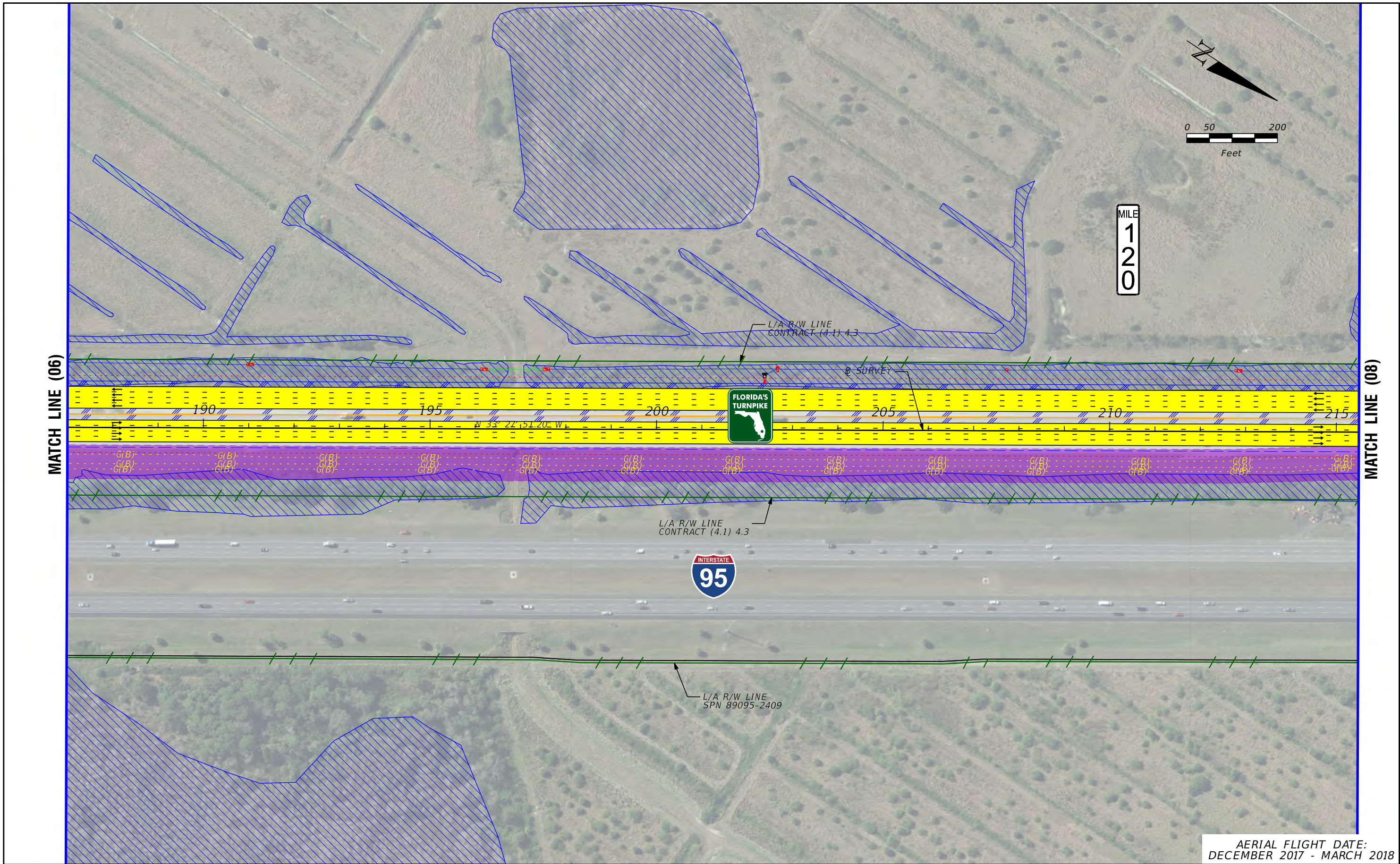
LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL ITS	POTENTIAL NEW TRAFFIC SIGNAL
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	EXISTING TRAFFIC SIGNAL	TOLL GANTRY
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	POTENTIAL BUSINESS RELOCATION	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION		
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION		
	RAILROAD				

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AERIAL FLIGHT DATE:
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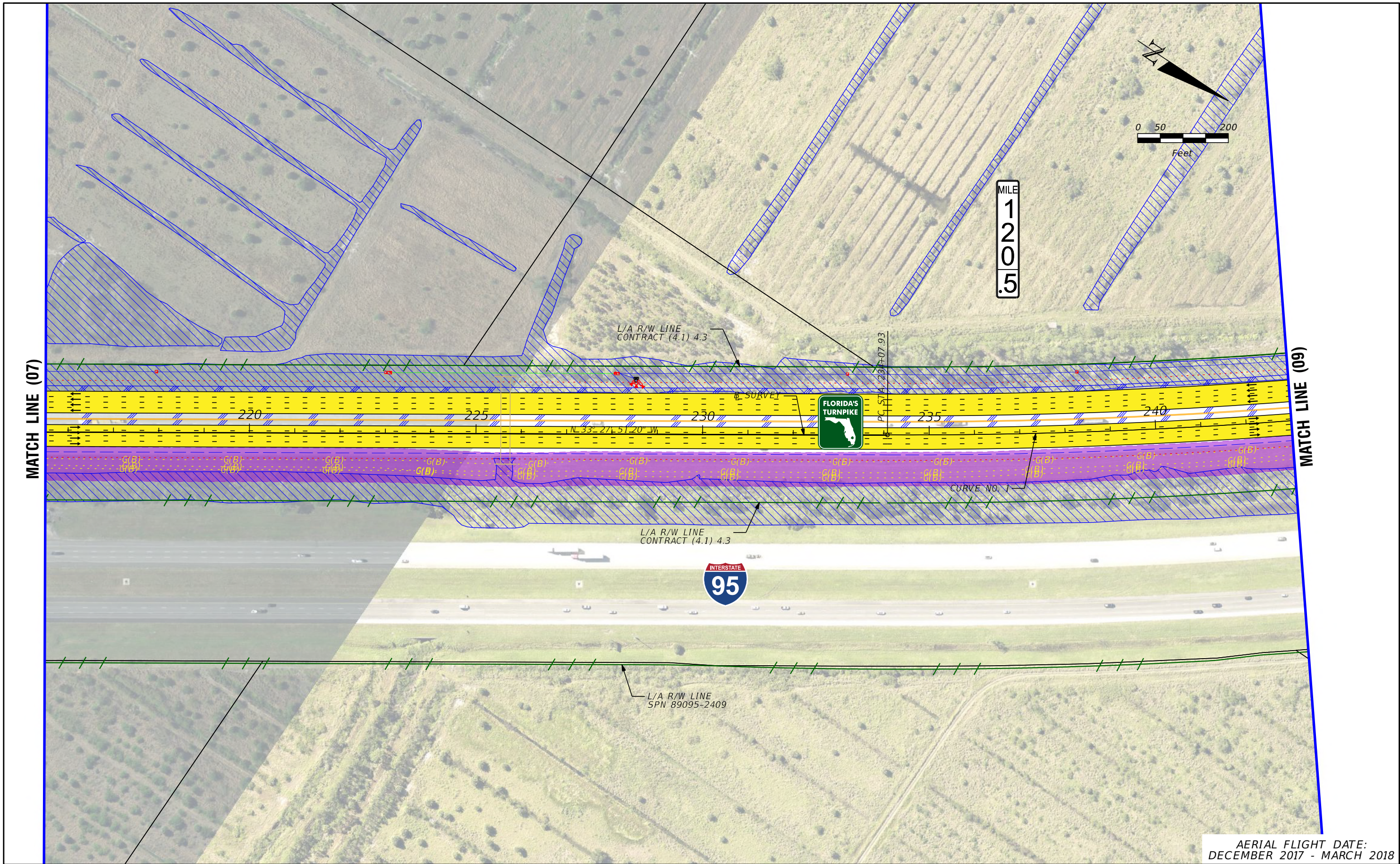
LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL ITS	POTENTIAL NEW TRAFFIC SIGNAL
EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	EXISTING TRAFFIC SIGNAL	TOLL GANTRY
EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	POTENTIAL BUSINESS RELOCATION	POTENTIAL BUSINESS RELOCATION	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES	
POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL RESIDENTIAL RELOCATION			
POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE				
RAILROAD					

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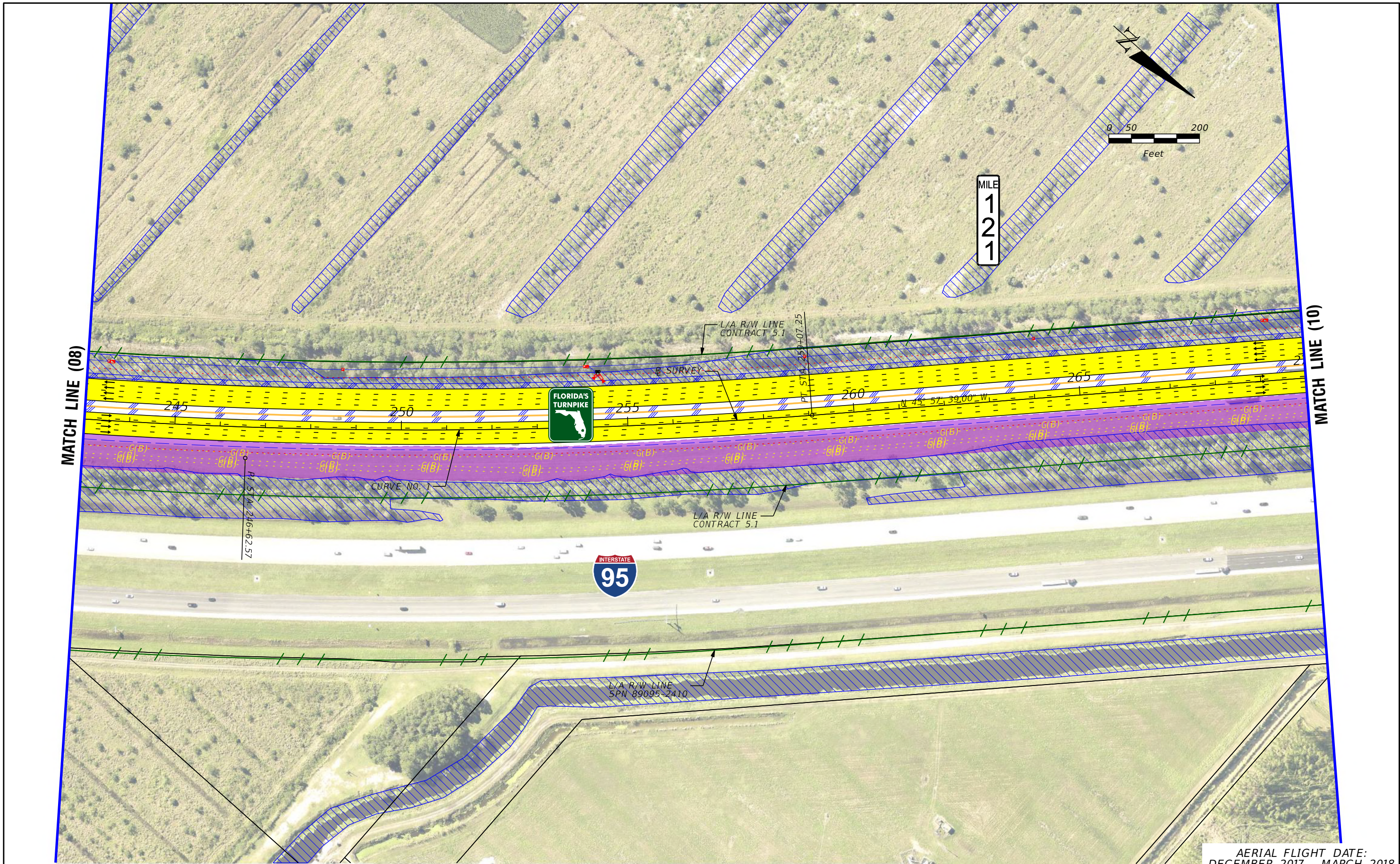
LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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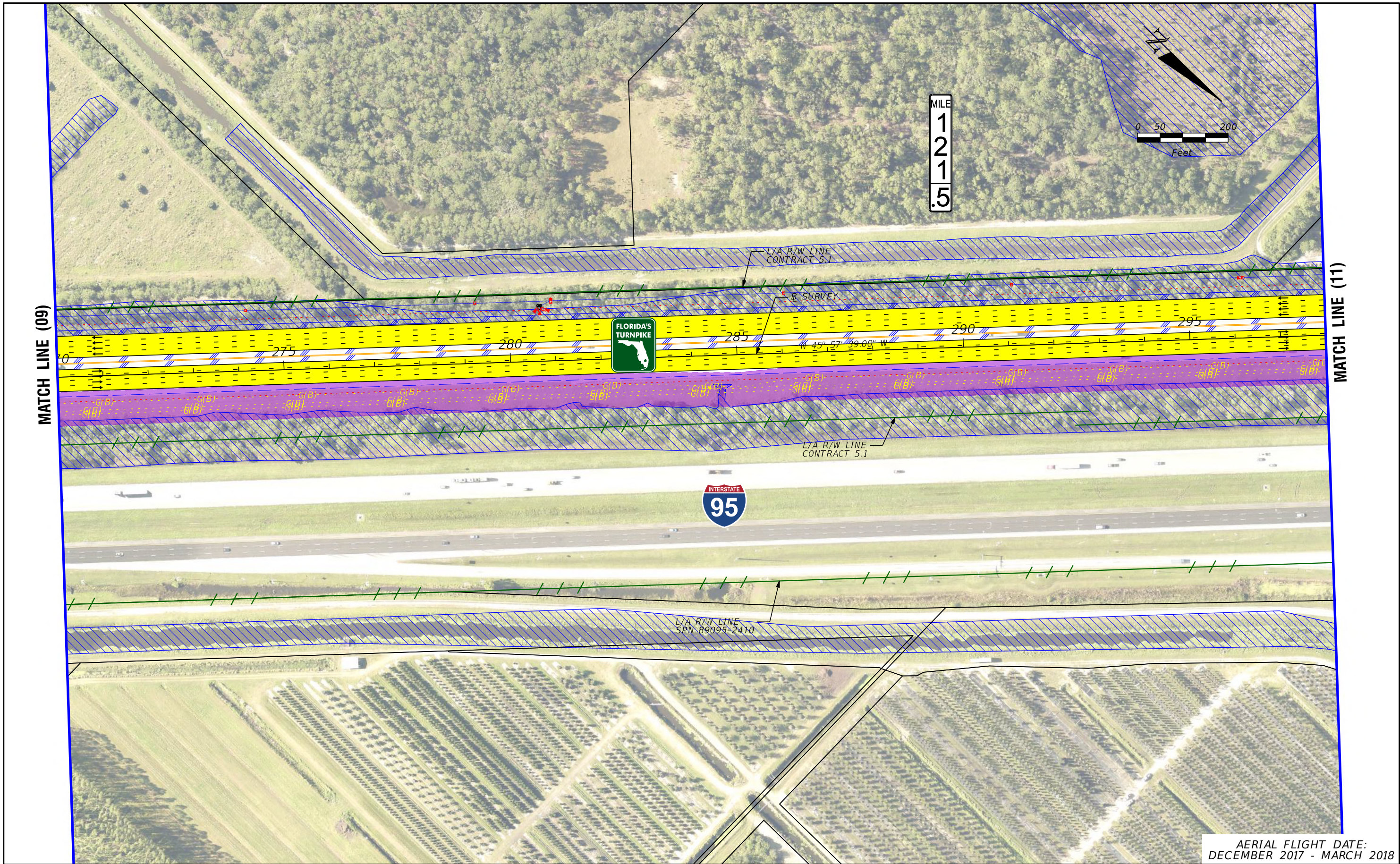
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LEGEND		NOTE: ROW = RIGHT OF WAY		H. W. LOCHNER, INC. 4350 W. CYPRESS ST., SUITE 800 TAMPA, FLORIDA 33607 FBPR CERTIFICATE OF AUTH. #894	FLORIDA'S TURNPIKE (SR 91) WIDENING FROM JUPITER (INDIANTOWN ROAD/SR 706) TO FT. PIERCE (OKEECHOBEE ROAD/SR 70) PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1	FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN	SHEET NO. C-9
— PROPERTY LINES	— RAILROAD	— PROPOSED BRIDGE	— POTENTIAL NEW TRAFFIC SIGNAL				
— EXISTING ROW LINE	— PROPOSED ITS	— EXISTING BRIDGE	— EXISTING TRAFFIC SIGNAL				
— EXISTING LIMITED ACCESS ROW LINE	— WETLANDS/OTHER SURFACE WATERS	— OTHER PROJECTS (BRIDGE)	— FUTURE TOLL GANTRY				
— POTENTIAL ROW LINE	— PAVEMENT REMOVAL	— OTHER PROJECTS (ROADS)	— POTENTIAL MEDIUM/HIGH CONTAMINATION SITES				
— POTENTIAL LIMITED ACCESS ROW LINE	— PROPOSED ROADWAY	— FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH					



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

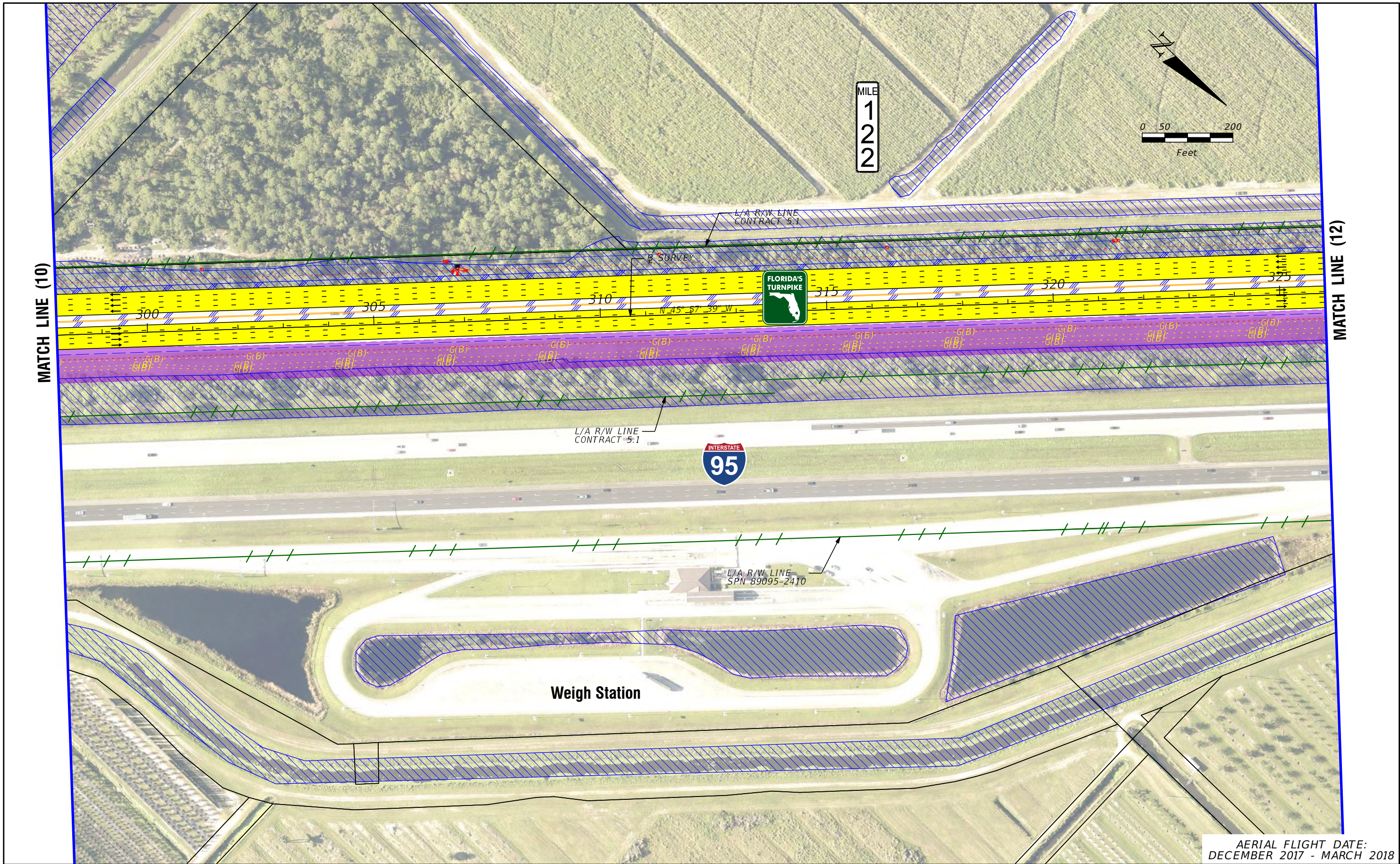
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—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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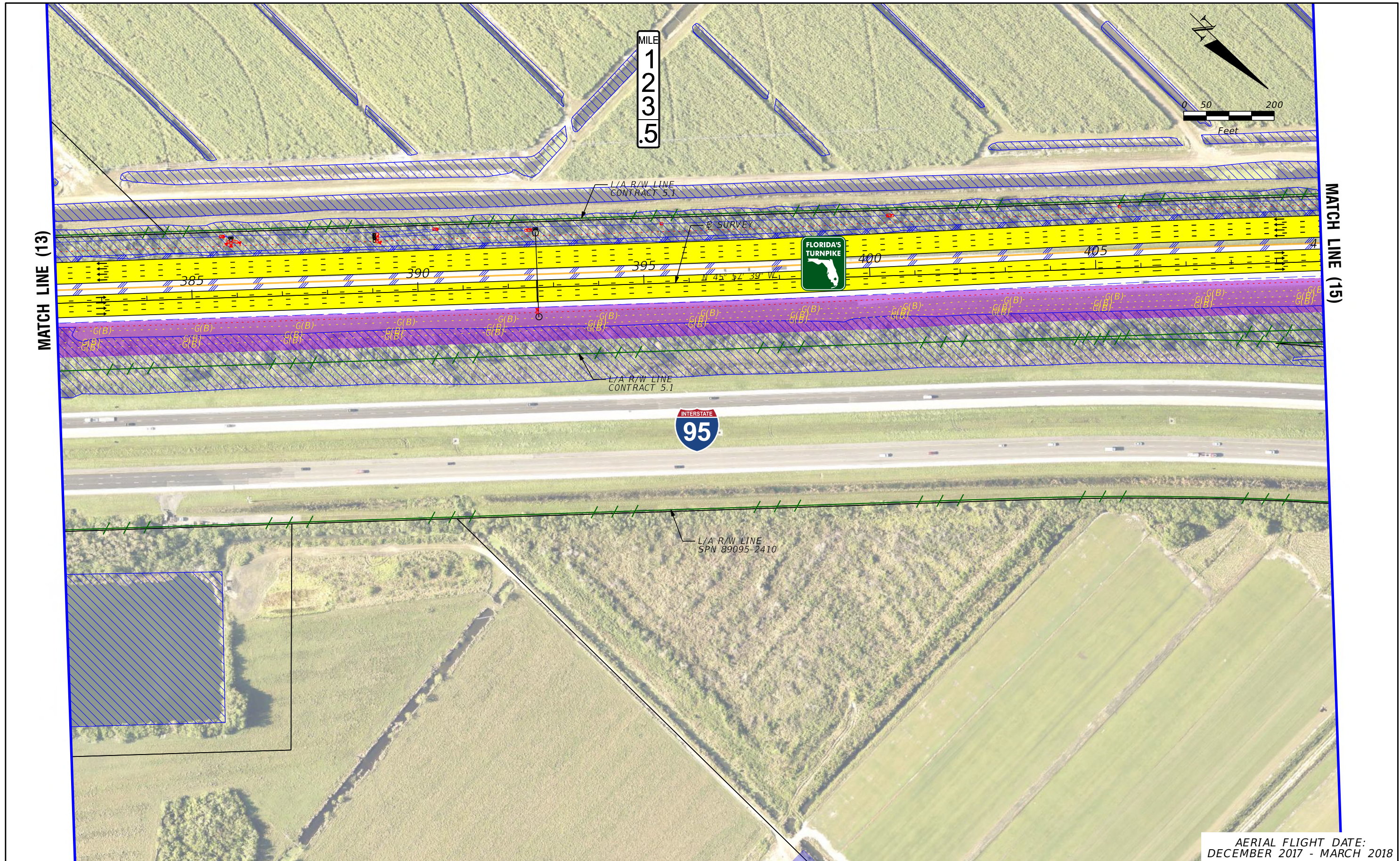
LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
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AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
—	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
—	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)
—	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
—	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION
—	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION
—	RAILROAD		

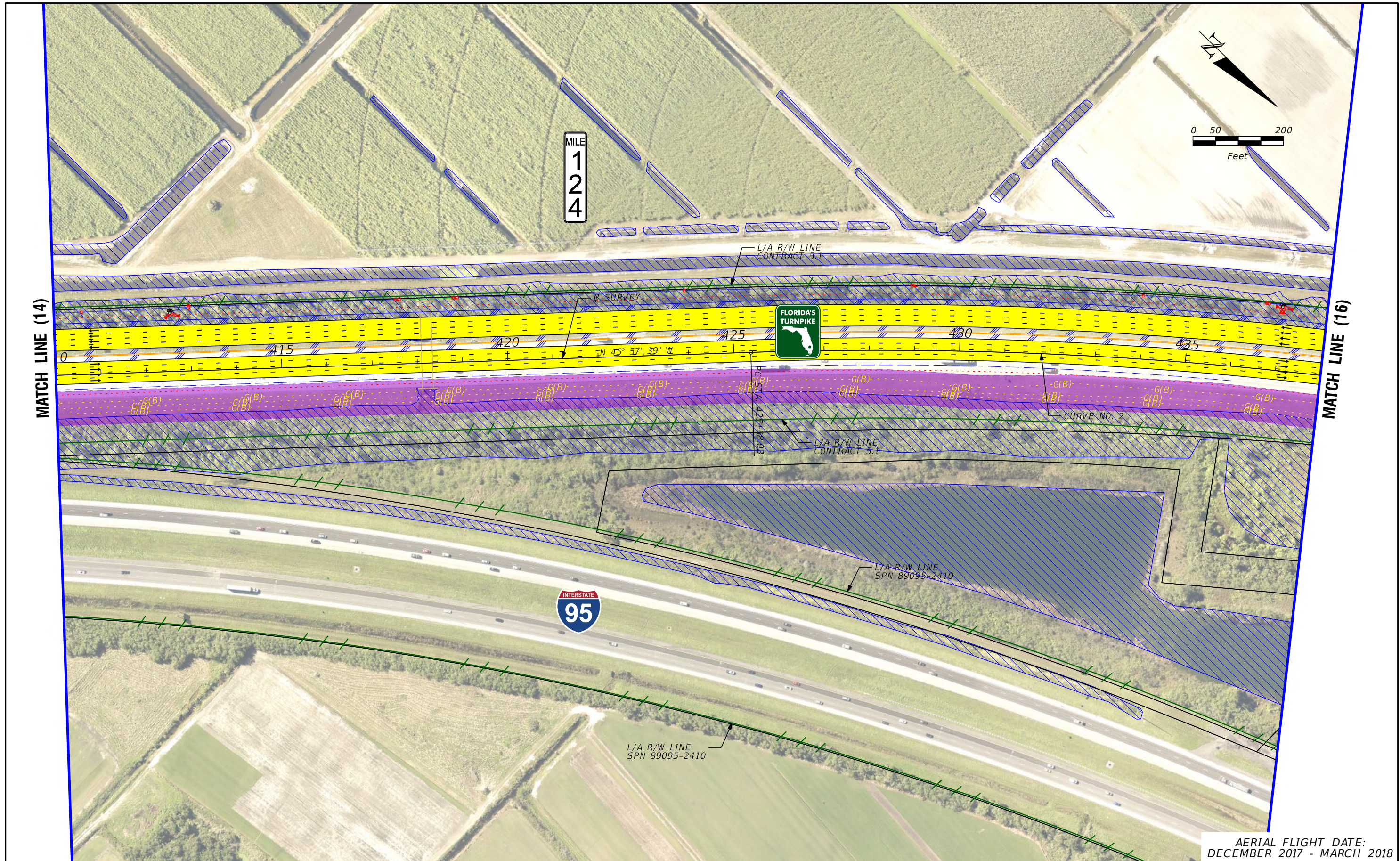
NOTE: ROW = RIGHT OF WAY			
—	POTENTIAL ITS	—	POTENTIAL NEW TRAFFIC SIGNAL
—	POTENTIAL EXISTING TRAFFIC SIGNAL	—	EXISTING TRAFFIC SIGNAL
—	TOLL GANTRY	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

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CONCEPT PLAN

SHEET NO.
C-14



AERIAL FLIGHT DATE:
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LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	

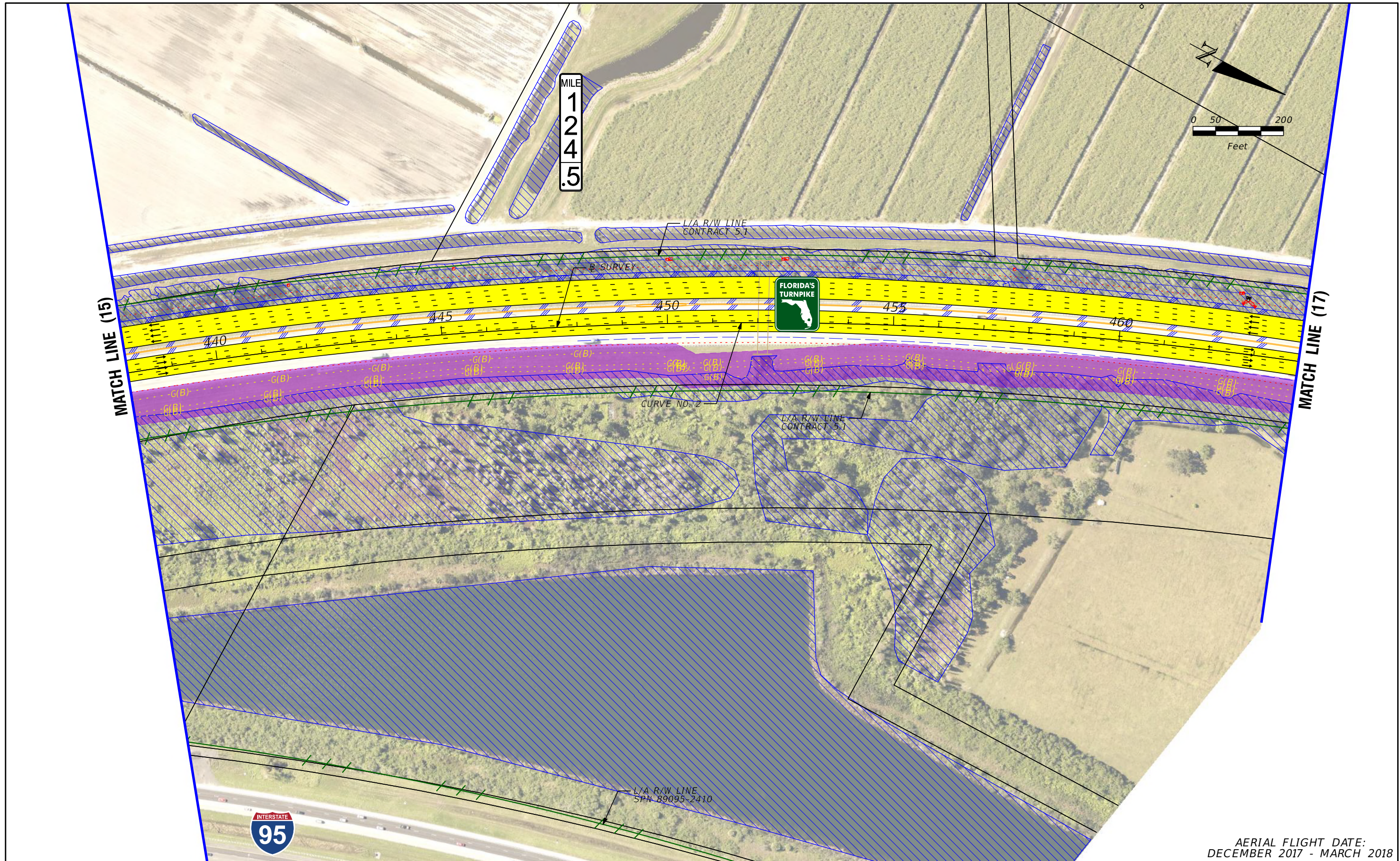
NOTE: ROW = RIGHT OF WAY			
—	EXISTING BRIDGE	—	PROPOSED ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
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DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
—	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
—	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)
—	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
—	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION
—	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION
—	RAILROAD		

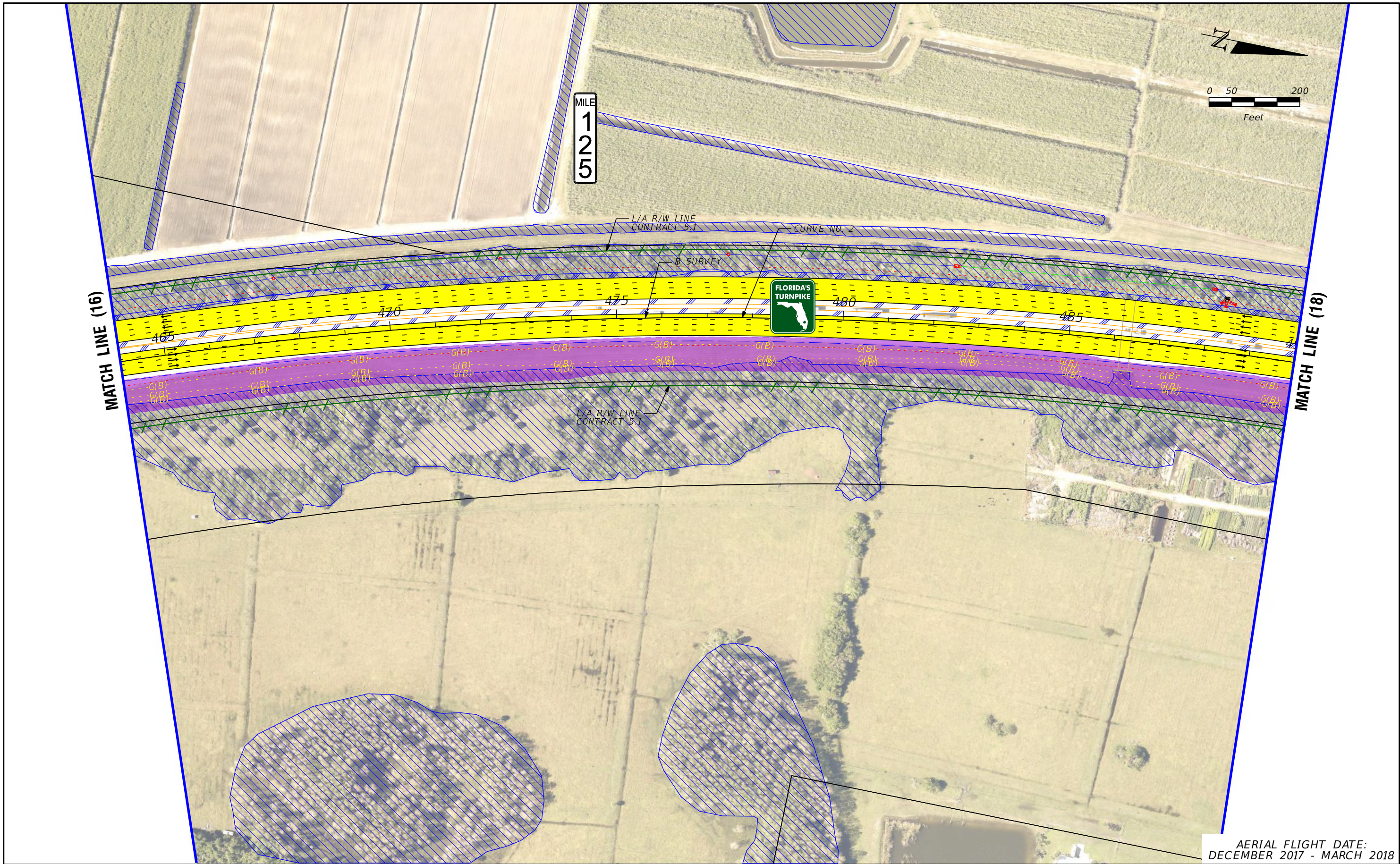
NOTE: ROW = RIGHT OF WAY			
—	POTENTIAL ITS	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING TRAFFIC SIGNAL	—	TOLL GANTRY
—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES		

H. W. LOCHNER, INC.
4350 W. CYPRESS ST., SUITE 800
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTH. #894

FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-16



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	
EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	
POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION	
POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION	
RAILROAD			

NOTE: ROW = RIGHT OF WAY

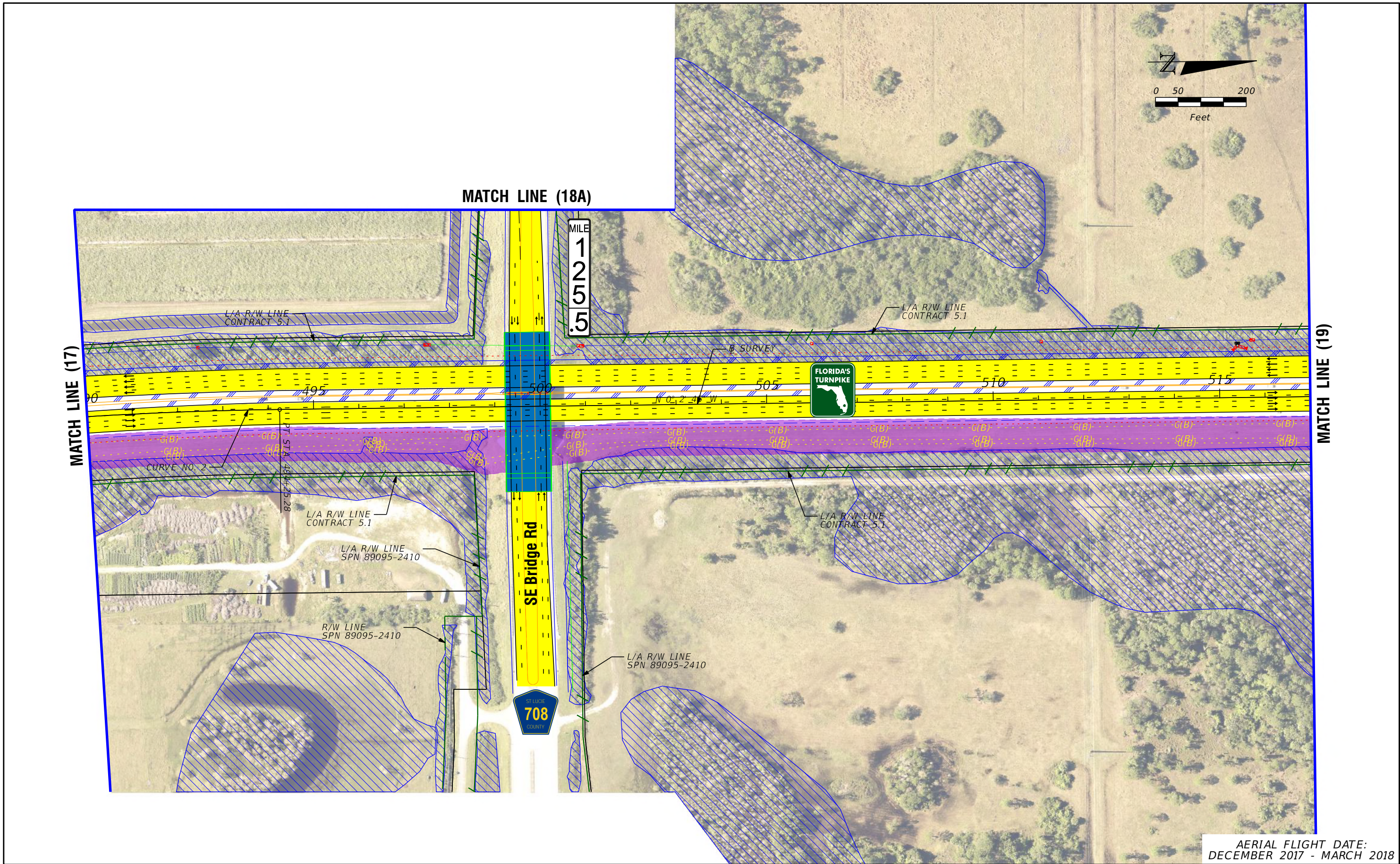
PROPOSED ITS
POTENTIAL NEW TRAFFIC SIGNAL
EXISTING TRAFFIC SIGNAL
TOLL GANTRY
POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

H. W. LOCHNER, INC.
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TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-17



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

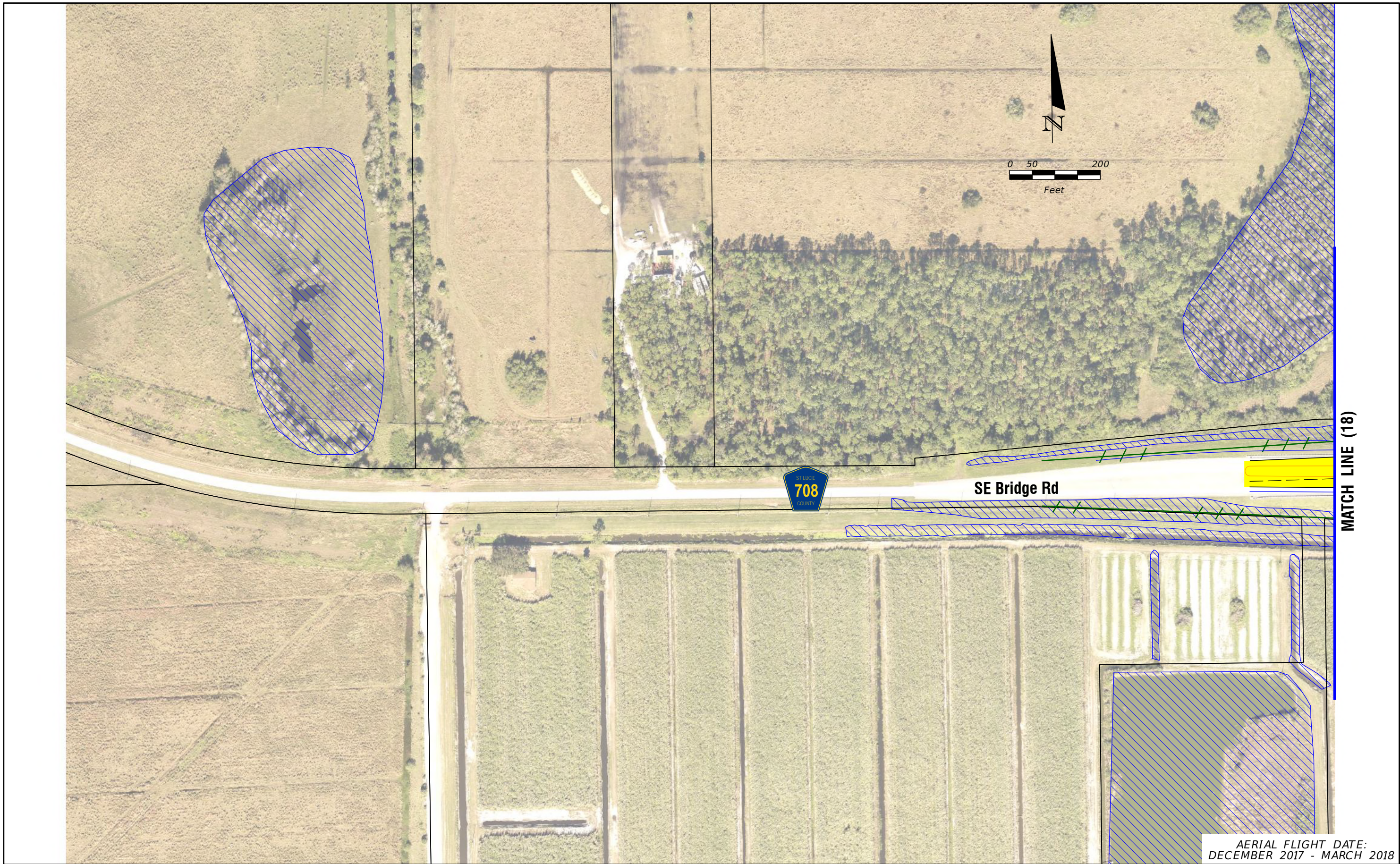
LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL ITS	
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	POTENTIAL NEW TRAFFIC SIGNAL	
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	EXISTING TRAFFIC SIGNAL	
	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION	TOLL GANTRY	
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES	
	RAILROAD				

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PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

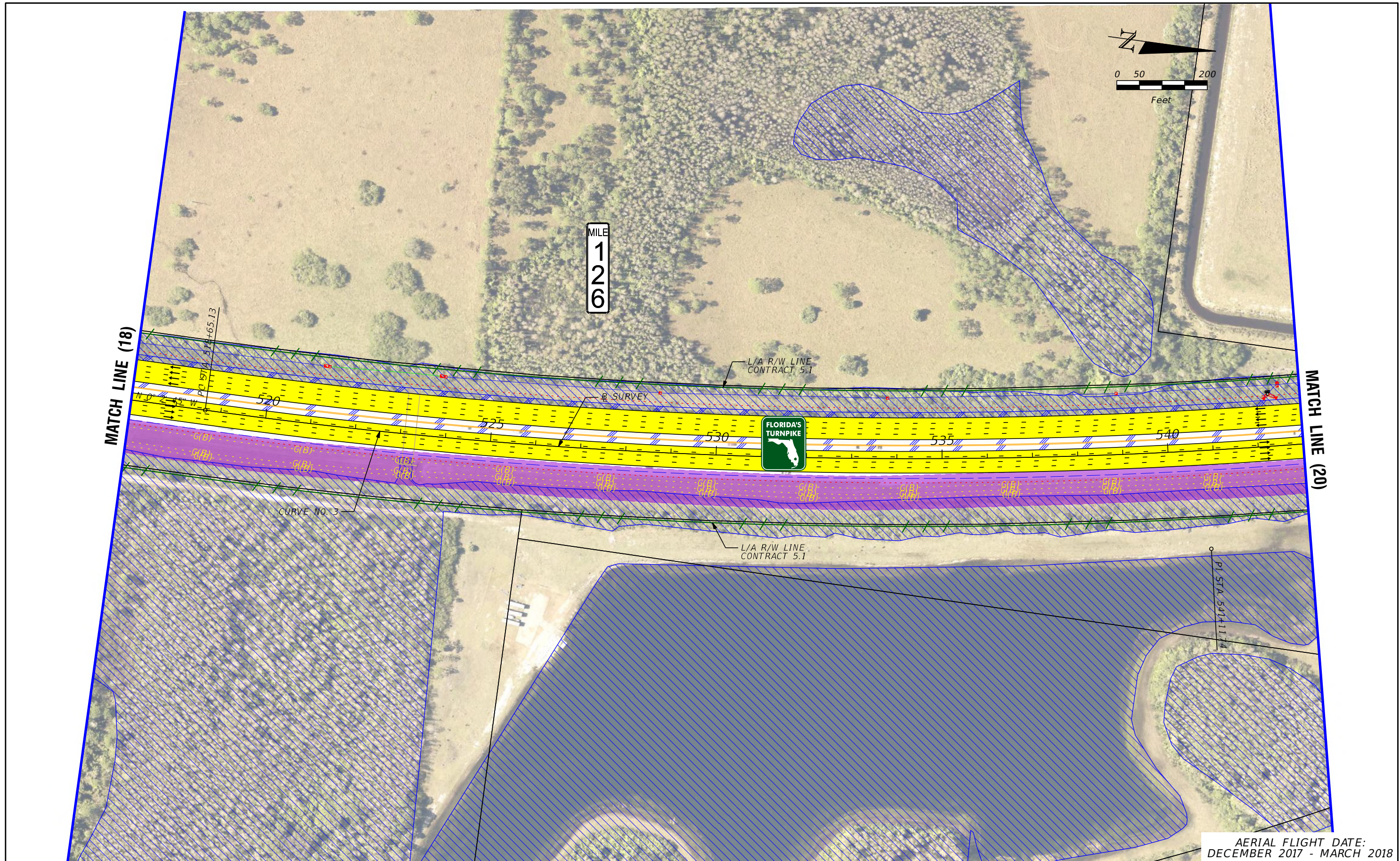
**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

SHEET NO.
C-18



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY		FLORIDA'S TURNPIKE (SR 91) WIDENING FROM JUPITER (INDIANTOWN ROAD/SR 706) TO FT. PIERCE (OKEECHOBEE ROAD/SR 70) PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1	FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN	SHEET NO. C-18
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL ITS	POTENTIAL NEW TRAFFIC SIGNAL			
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	POTENTIAL TRAFFIC SIGNAL	EXISTING TRAFFIC SIGNAL			
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	TOLL GANTRY	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES			
	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION					
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION					
	RAILROAD							



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

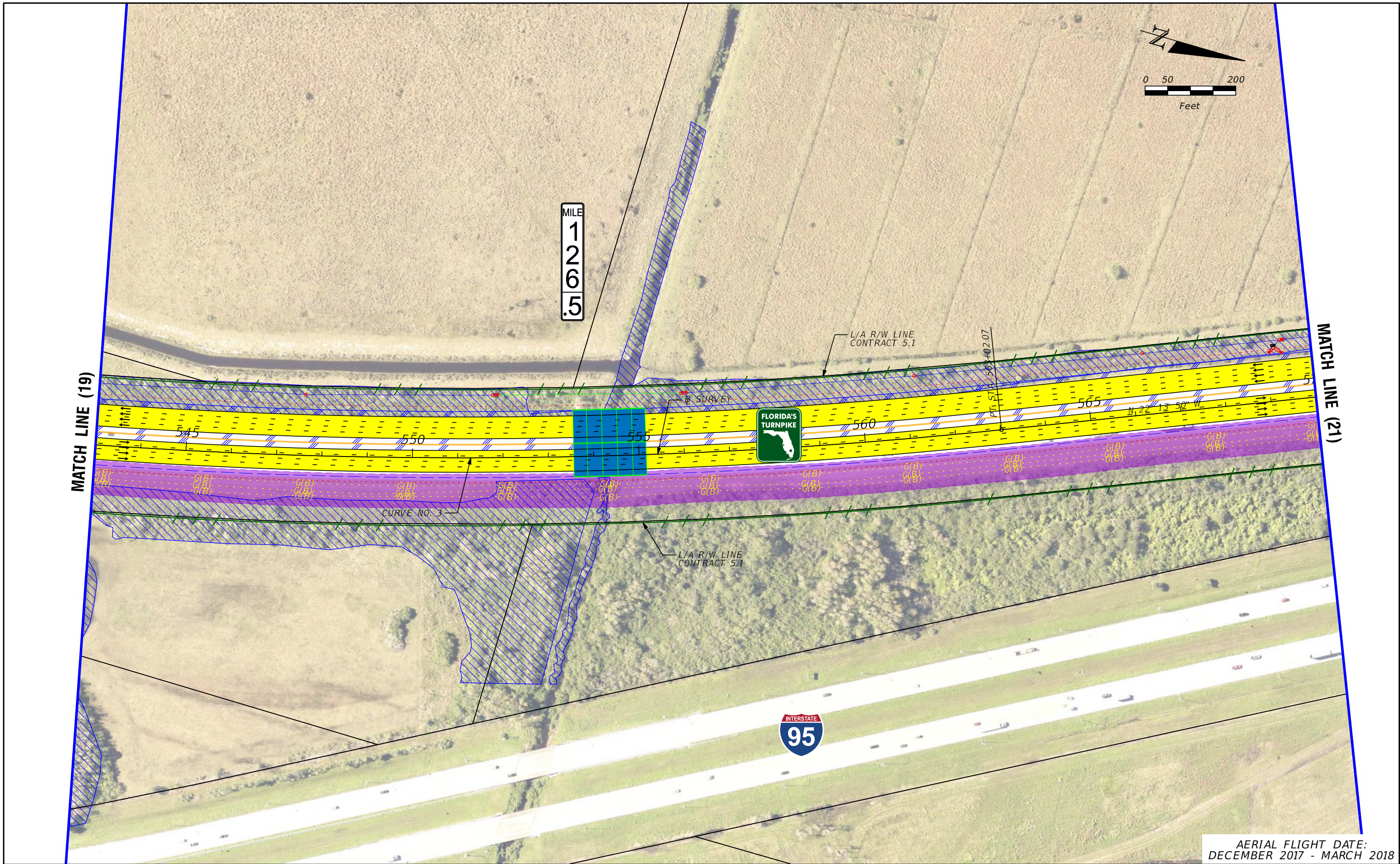
LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

SHEET NO.
C-19



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

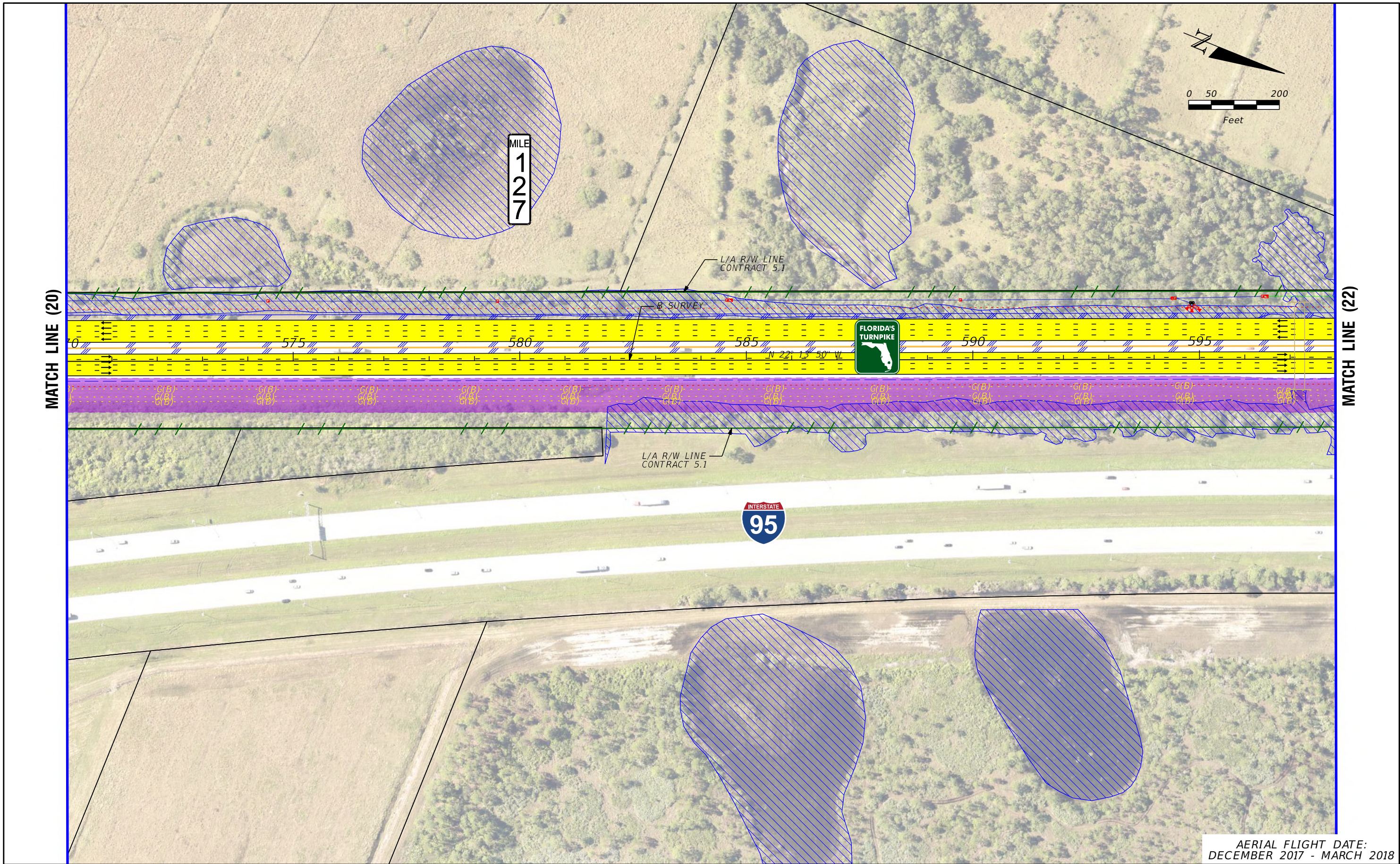
LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	PROPOSED ITS	POTENTIAL NEW TRAFFIC SIGNAL
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	EXISTING TRAFFIC SIGNAL	TOLL GANTRY
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	POTENTIAL BUSINESS RELOCATION	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION		
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION		
	RAILROAD				

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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-20



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

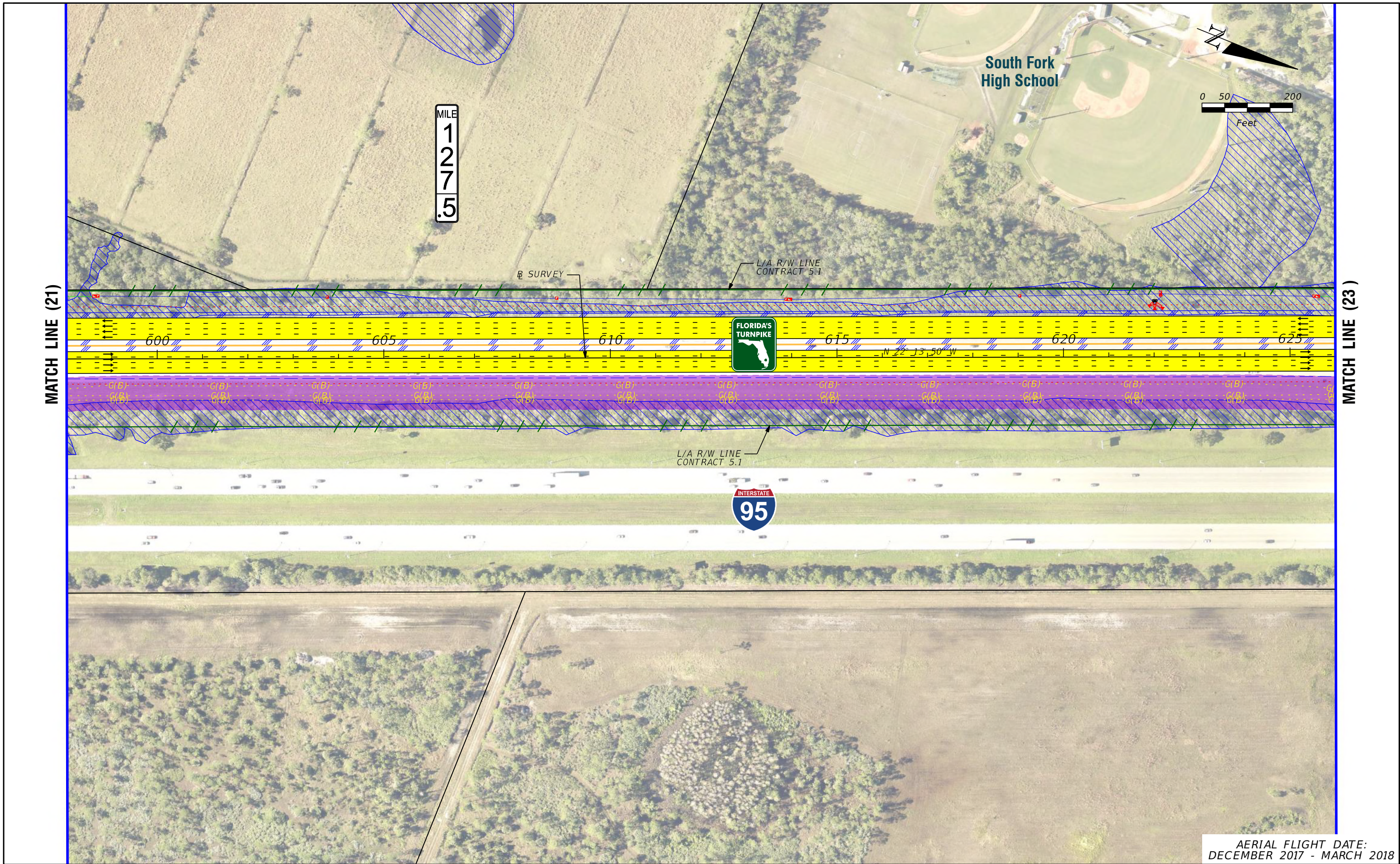
LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL NEW TRAFFIC SIGNAL	POTENTIAL ITS
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	EXISTING TRAFFIC SIGNAL	POTENTIAL NEW TRAFFIC SIGNAL
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	TOLL GANTRY	EXISTING TRAFFIC SIGNAL
	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES	
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION		
	RAILROAD				

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**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

SHEET NO.
C-21



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	

NOTE: ROW = RIGHT OF WAY

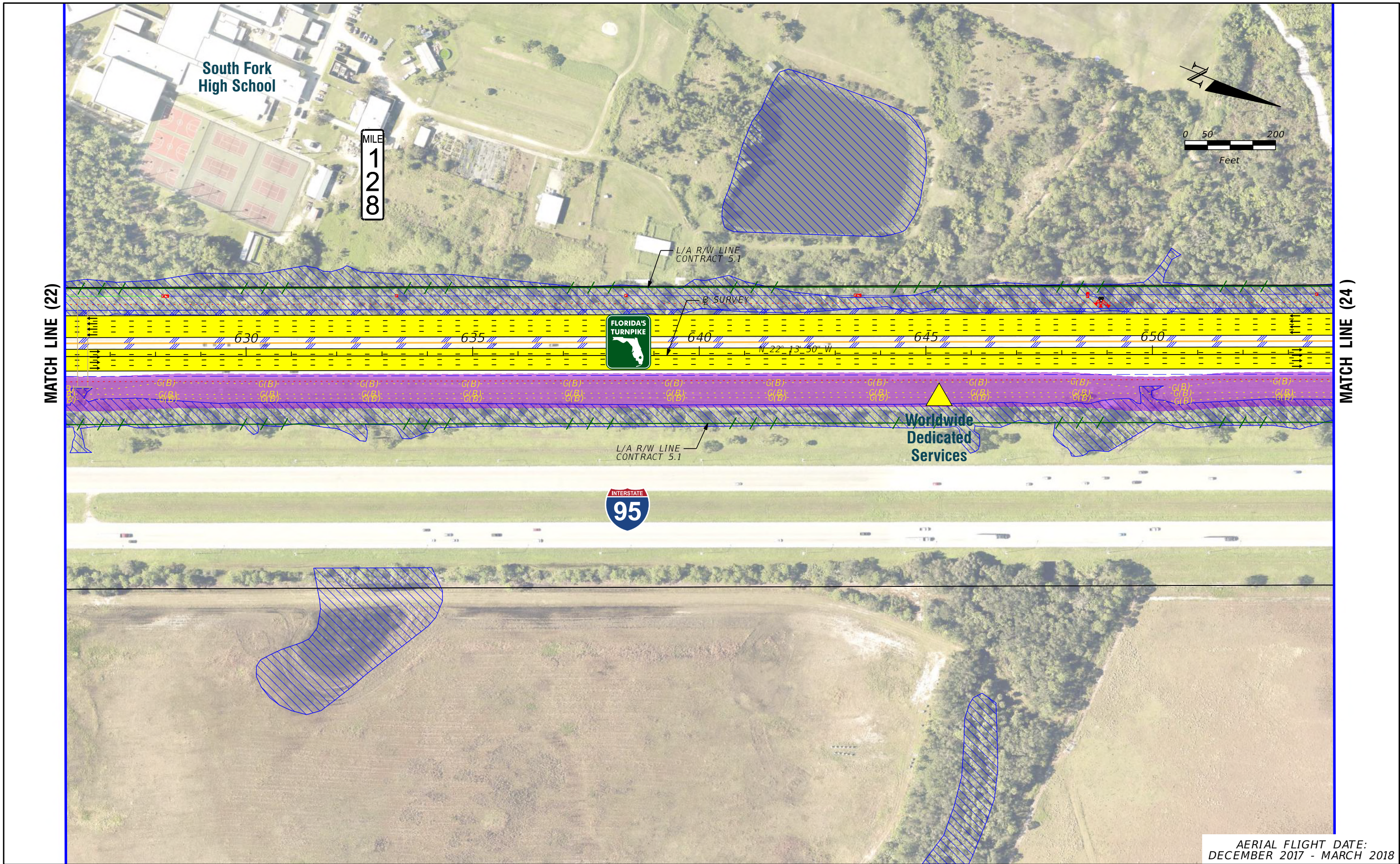
—	EXISTING BRIDGE	—	PROPOSED ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-22



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

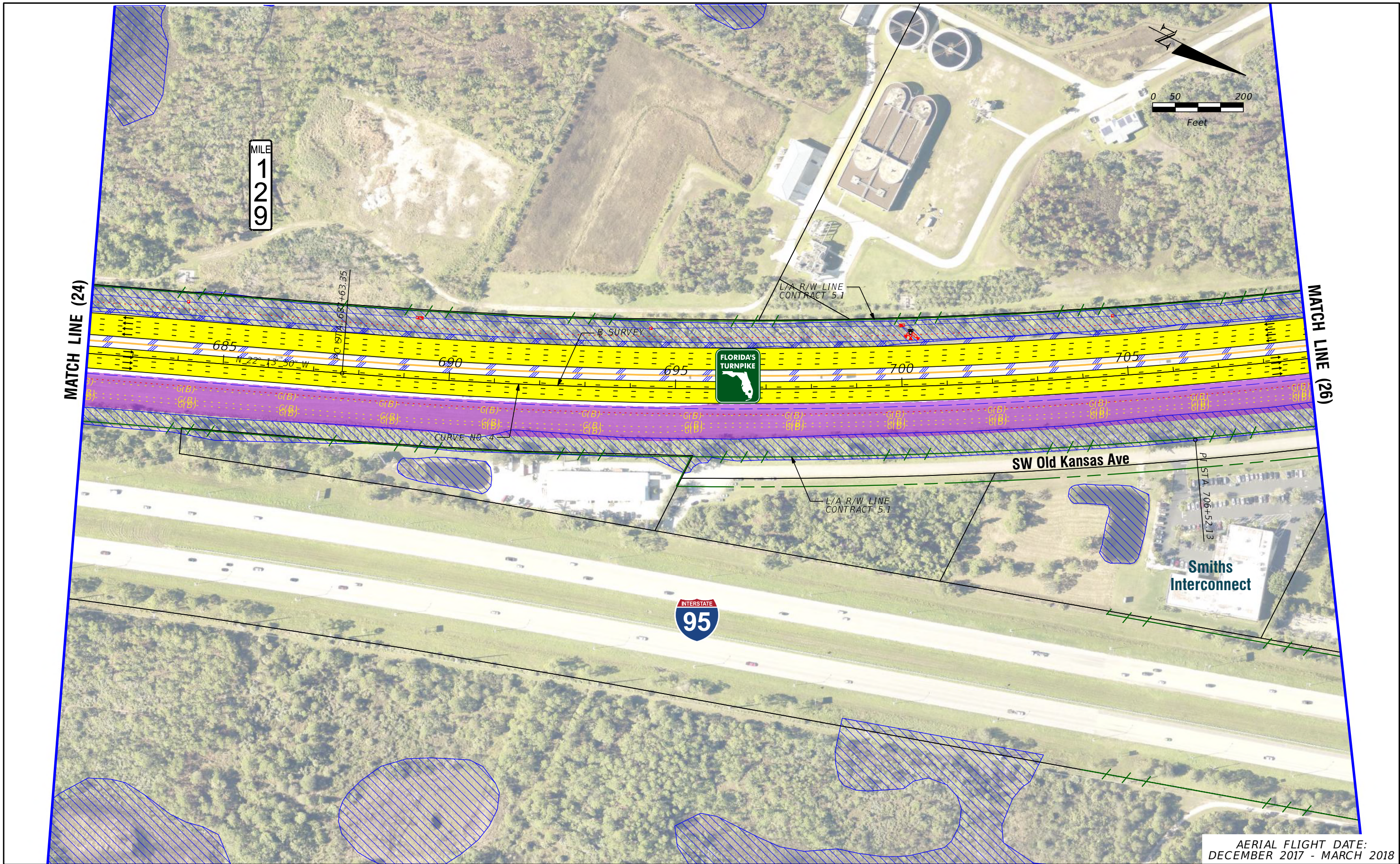
LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	PROPOSED ITS
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL NEW TRAFFIC SIGNAL	EXISTING TRAFFIC SIGNAL
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	TOLL GANTRY
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	POTENTIAL BUSINESS RELOCATION	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES	
	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL RESIDENTIAL RELOCATION		
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE			
	RAILROAD				

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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

SHEET NO.
C-23



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

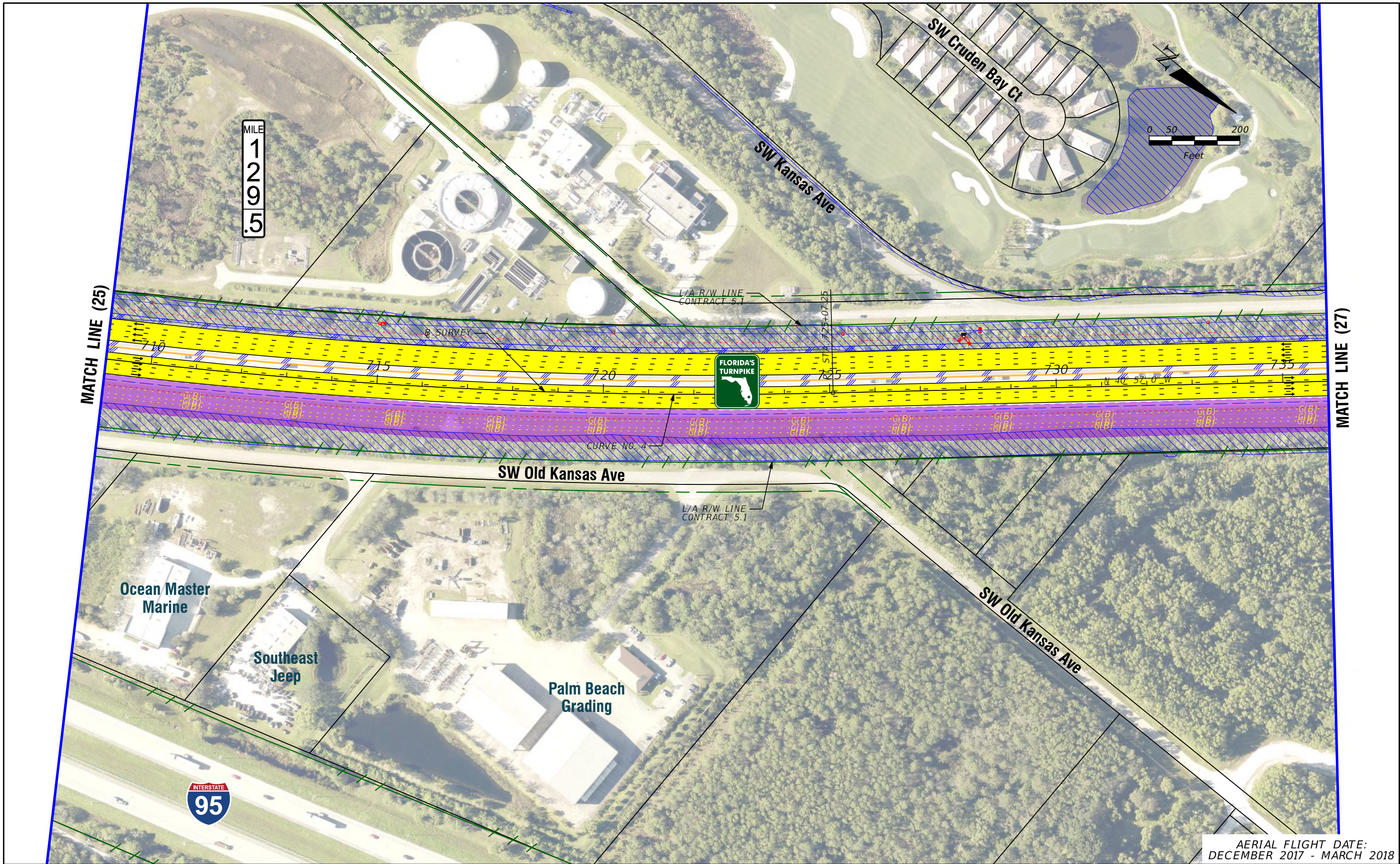
LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-25



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	

NOTE: ROW = RIGHT OF WAY

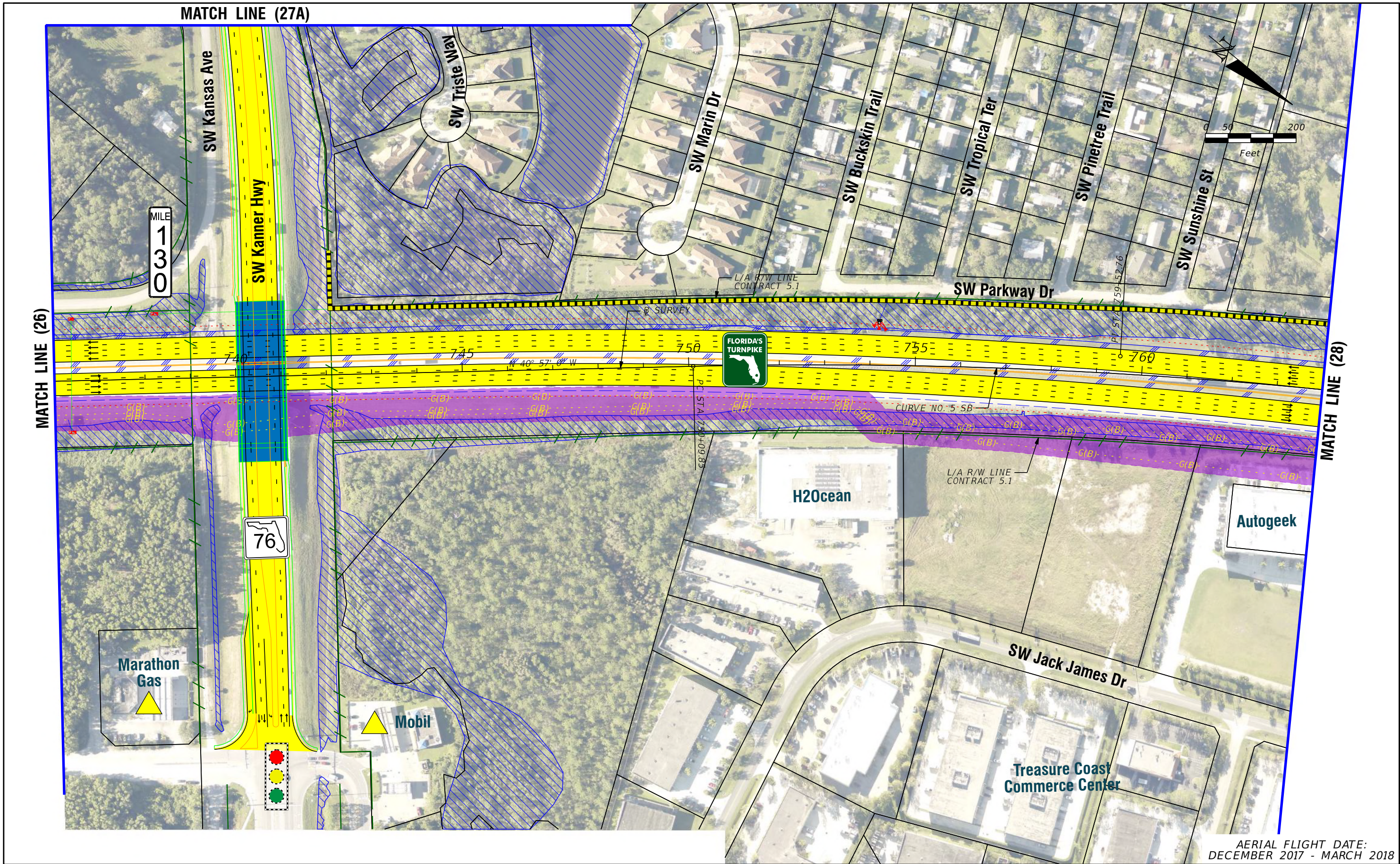
—	EXISTING BRIDGE	—	POTENTIAL ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-26



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

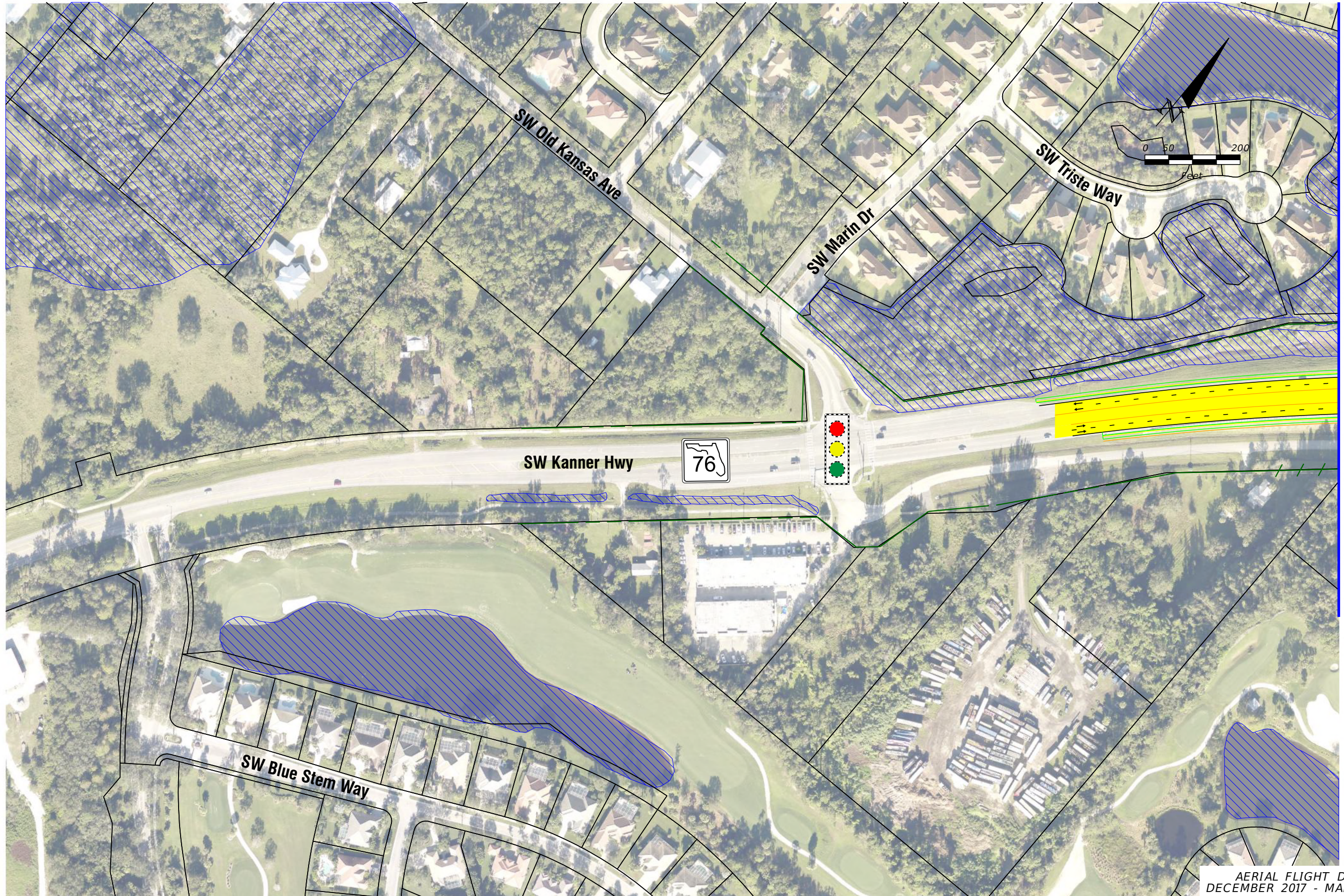
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.

C-27



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

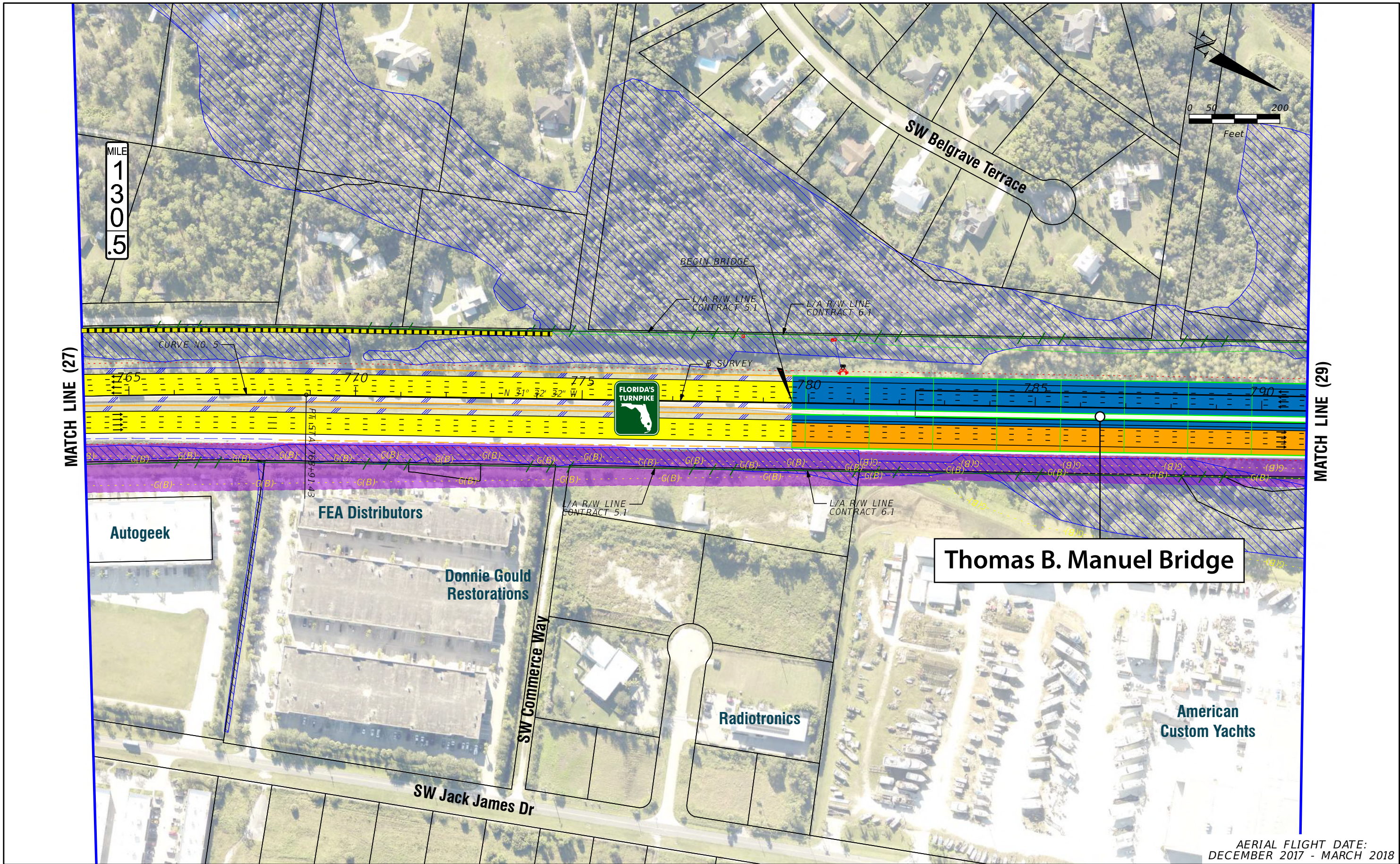
LEGEND	
—	PROPERTY LINES
—	TRAFFIC BARRIER WALL
—	EXISTING ROW LINE
—	EXISTING LIMITED ACCESS ROW LINE
—	POTENTIAL ROW LINE
—	POTENTIAL LIMITED ACCESS ROW LINE
—	RAILROAD
—	PROPOSED ROW NOISE BARRIER
—	PROPOSED SHOULDER NOISE BARRIER
—	PAVEMENT REMOVAL
—	WETLANDS/OTHER SURFACE WATERS
—	PROPOSED ROADWAY
—	PROPOSED BRIDGE
—	EXISTING BRIDGE
—	OTHER PROJECTS (BRIDGE)
—	OTHER PROJECTS (ROADS)
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
—	POTENTIAL BUSINESS RELOCATION
—	POTENTIAL RESIDENTIAL RELOCATION
—	PROPOSED ITS
—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING TRAFFIC SIGNAL
—	TOLL GANTRY
—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-28



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

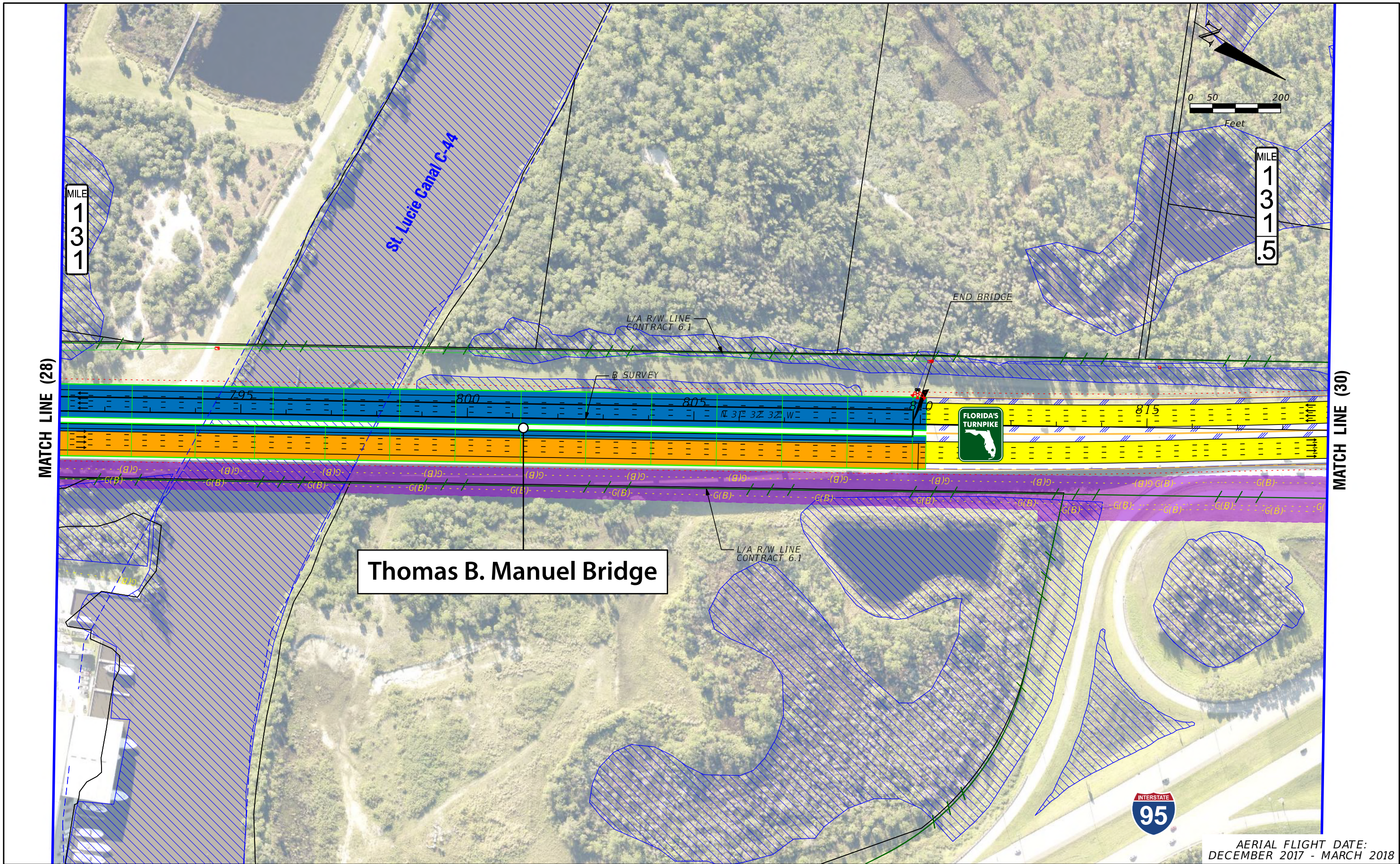
LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL ITS	POTENTIAL NEW TRAFFIC SIGNAL
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	EXISTING TRAFFIC SIGNAL	EXISTING TRAFFIC SIGNAL
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	TOLL GANTRY	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION		
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION		
	RAILROAD				

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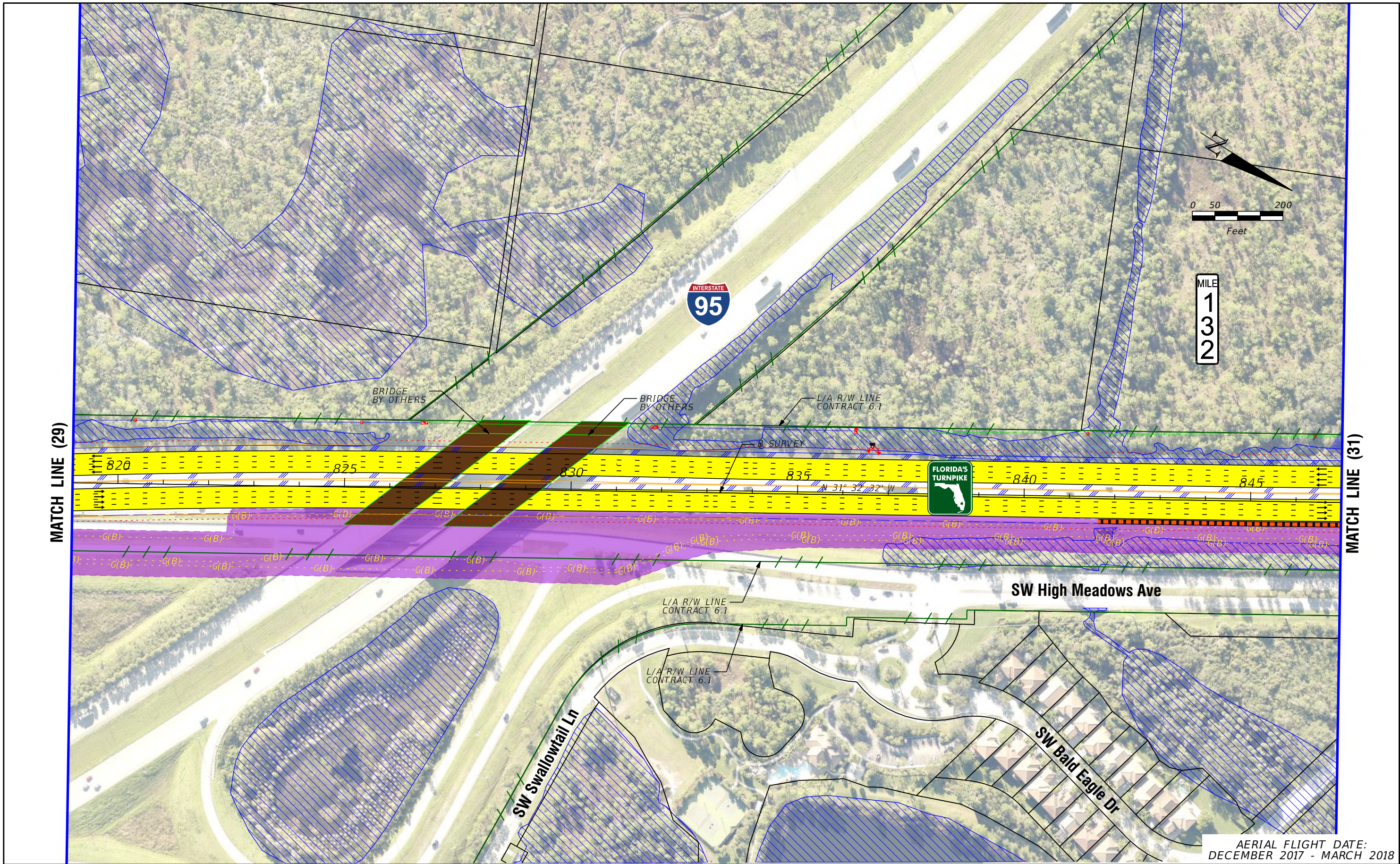
**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

SHEET NO.
C-29



LEGEND		NOTE: ROW = RIGHT OF WAY		H. W. LOCHNER, INC. 4350 W. CYPRESS ST., SUITE 800 TAMPA, FLORIDA 33607 FBPR CERTIFICATE OF AUTH. #894	FLORIDA'S TURNPIKE (SR 91) WIDENING FROM JUPITER (INDIANTOWN ROAD/SR 706) TO FT. PIERCE (OKEECHOBEE ROAD/SR 70) PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1	FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN	SHEET NO. C-30
—	PROPERTY LINES	—	PROPOSED ITS				
—	TRAFFIC BARRIER WALL	—	—	—			
—	EXISTING ROW LINE	—	—	—			
—	EXISTING LIMITED ACCESS ROW LINE	—	—	—			
—	POTENTIAL ROW LINE	—	—	—			
—	POTENTIAL LIMITED ACCESS ROW LINE	—	—	—			
—	RAILROAD	—	—	—			
—	PROPOSED ROW NOISE BARRIER	—	—	—			
—	PROPOSED SHOULDER NOISE BARRIER	—	—	—			
—	PAVEMENT REMOVAL	—	—	—			
—	WETLANDS/OTHER SURFACE WATERS	—	—	—			
—	PROPOSED ROADWAY	—	—	—			
—	PROPOSED BRIDGE	—	—	—			
—	EXISTING BRIDGE	—	—	—			
—	OTHER PROJECTS (BRIDGE)	—	—	—			
—	OTHER PROJECTS (ROADS)	—	—	—			
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	—	—			
—	POTENTIAL BUSINESS RELOCATION	—	—	—			
—	POTENTIAL RESIDENTIAL RELOCATION	—	—	—			
—	POTENTIAL NEW TRAFFIC SIGNAL	—	—	—			
—	EXISTING TRAFFIC SIGNAL	—	—	—			
—	TOLL GANTRY	—	—	—			
—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES	—	—	—			

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
—	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
—	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)
—	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
—	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION
—	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION
—	RAILROAD		

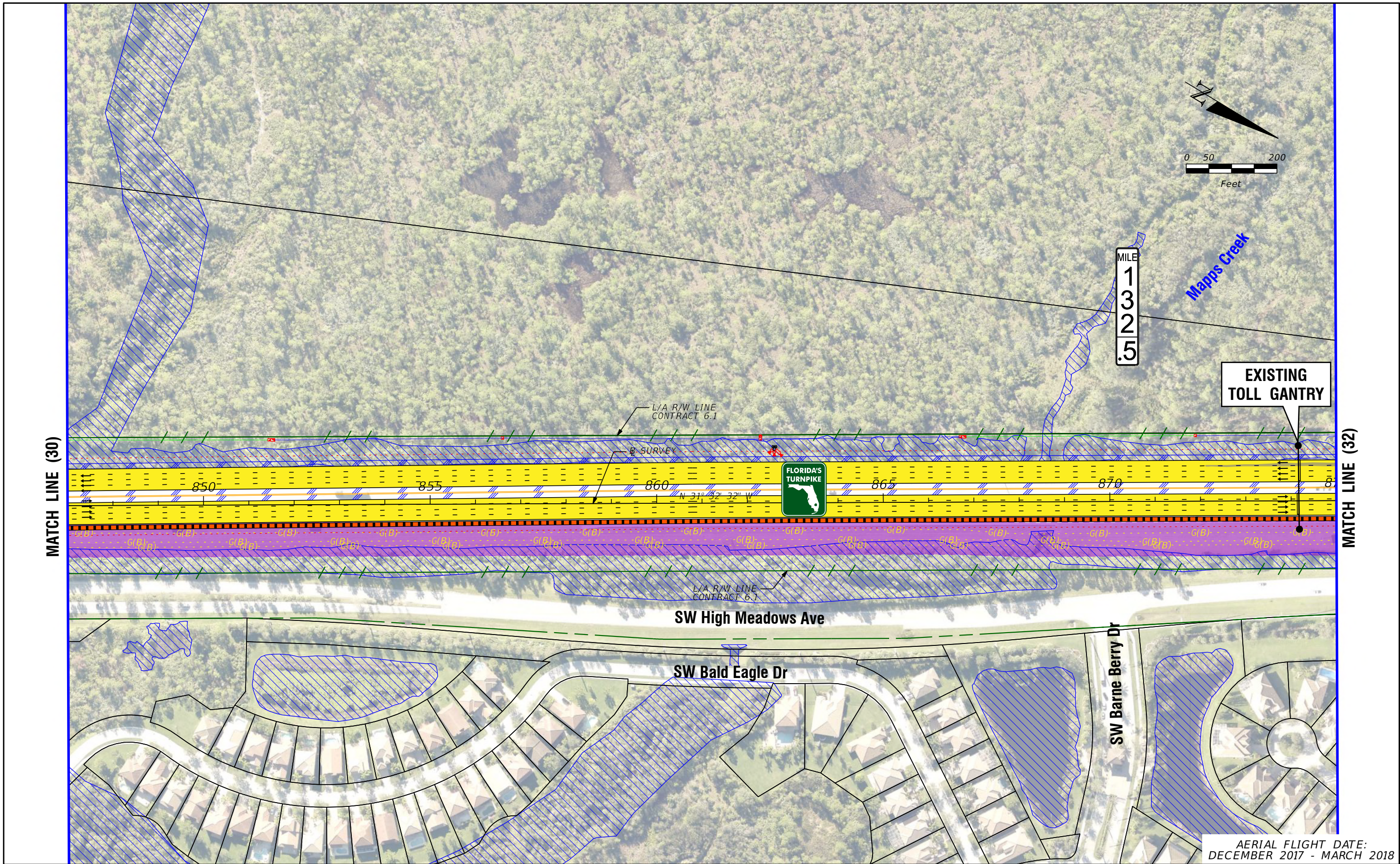
NOTE: ROW = RIGHT OF WAY			
—	POTENTIAL ITS	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING TRAFFIC SIGNAL	—	TOLL GANTRY
—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES		

H. W. LOCHNER, INC.
4350 W. CYPRESS ST., SUITE 800
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTH. #894

FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-31



LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	POTENTIAL ITS
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL NEW TRAFFIC SIGNAL	EXISTING TRAFFIC SIGNAL
EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	TOLL GANTRY	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	POTENTIAL BUSINESS RELOCATION			
POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL RESIDENTIAL RELOCATION			
POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE				
RAILROAD					

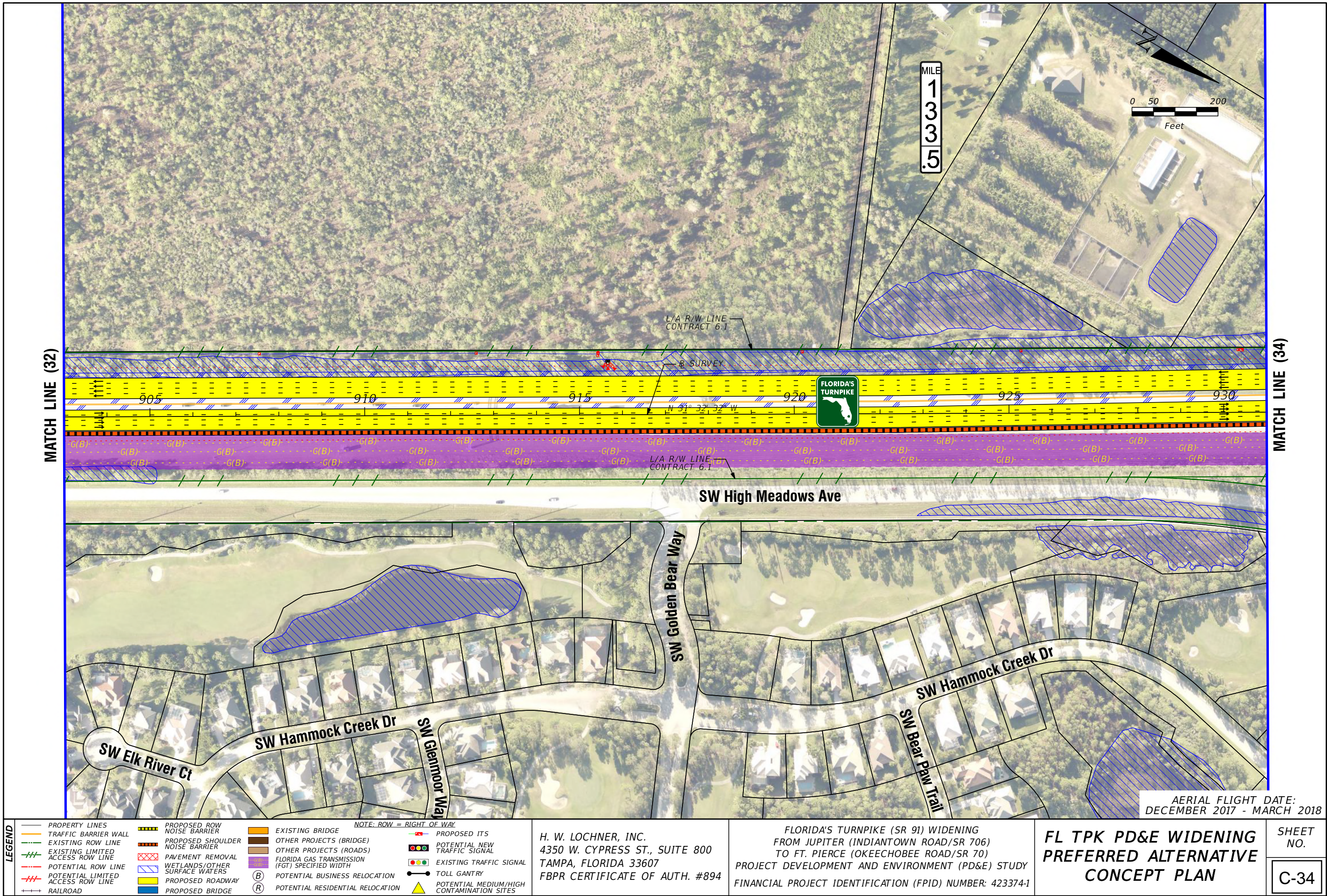
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

SHEET NO.
C-32



LEGEND		NOTE: ROW = RIGHT OF WAY					
	PROPERTY LINES		PROPOSED ROW NOISE BARRIER		EXISTING BRIDGE		PROPOSED ITS
	TRAFFIC BARRIER WALL		PROPOSED SHOULDER NOISE BARRIER		OTHER PROJECTS (BRIDGE)		POTENTIAL NEW TRAFFIC SIGNAL
	EXISTING ROW LINE		PAVEMENT REMOVAL		OTHER PROJECTS (ROADS)		EXISTING TRAFFIC SIGNAL
	EXISTING LIMITED ACCESS ROW LINE		WETLANDS/OTHER SURFACE WATERS		FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH		TOLL GANTRY
	POTENTIAL ROW LINE		PROPOSED ROADWAY		POTENTIAL BUSINESS RELOCATION		POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
	POTENTIAL LIMITED ACCESS ROW LINE		PROPOSED BRIDGE		POTENTIAL RESIDENTIAL RELOCATION		
	RAILROAD						

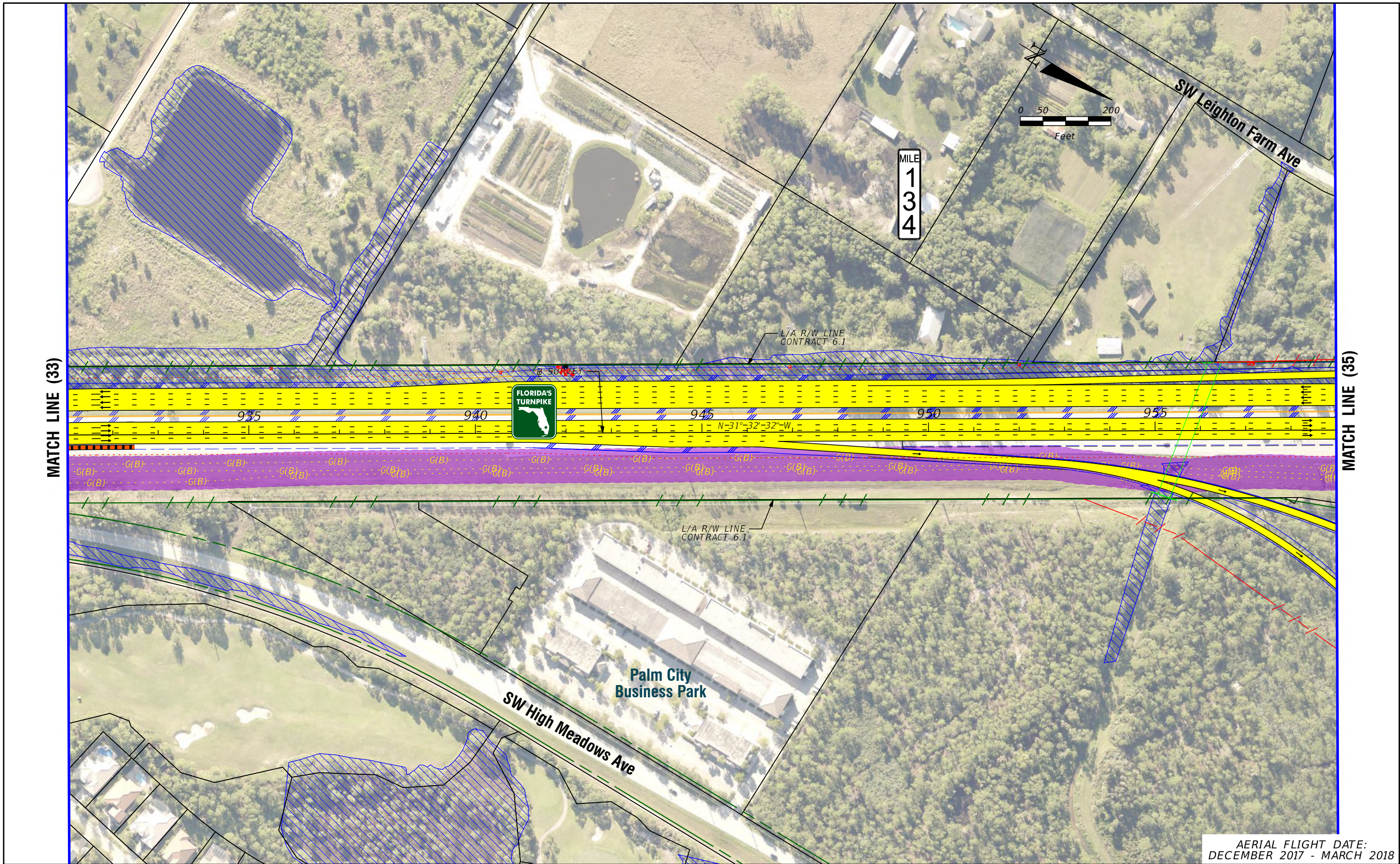
H. W. LOCHNER, INC.
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-34

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	

NOTE: ROW = RIGHT OF WAY

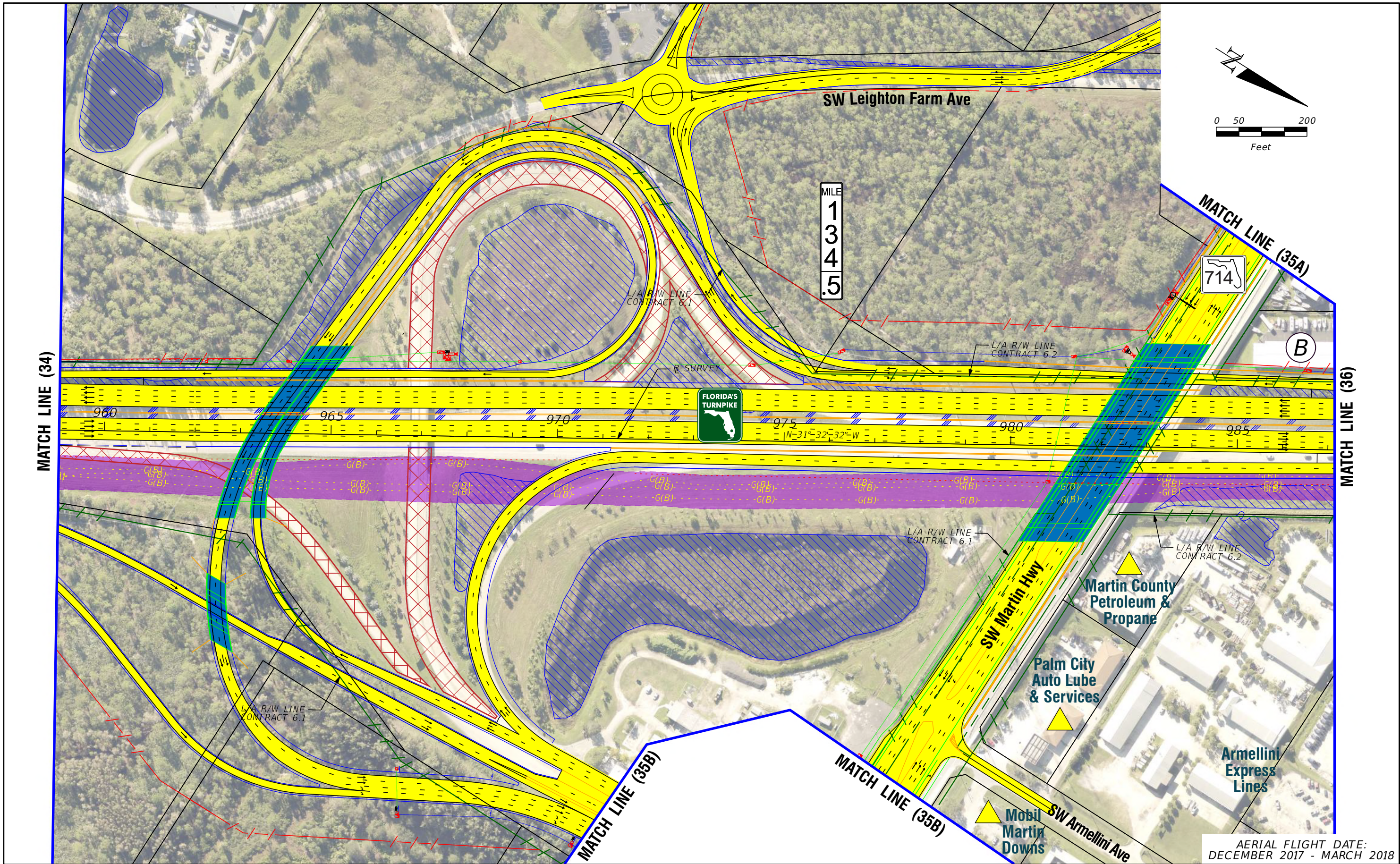
—	EXISTING BRIDGE	—	PROPOSED ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION	—	

H. W. LOCHNER, INC.
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-35



LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

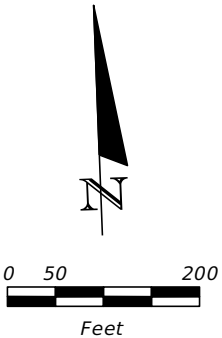
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-36

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
—	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
—	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)
—	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
—	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION
—	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION
—	RAILROAD		

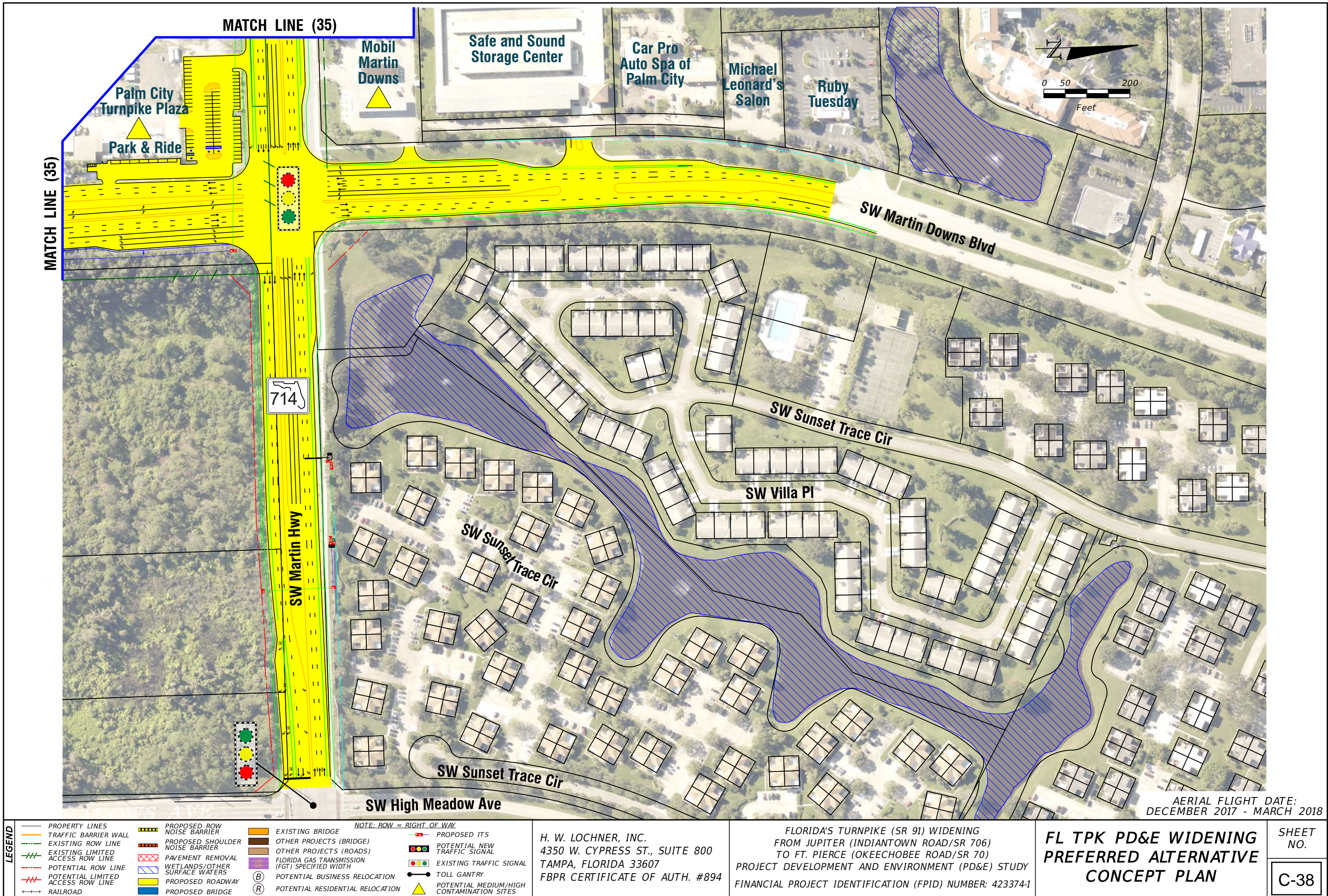
NOTE: ROW = RIGHT OF WAY

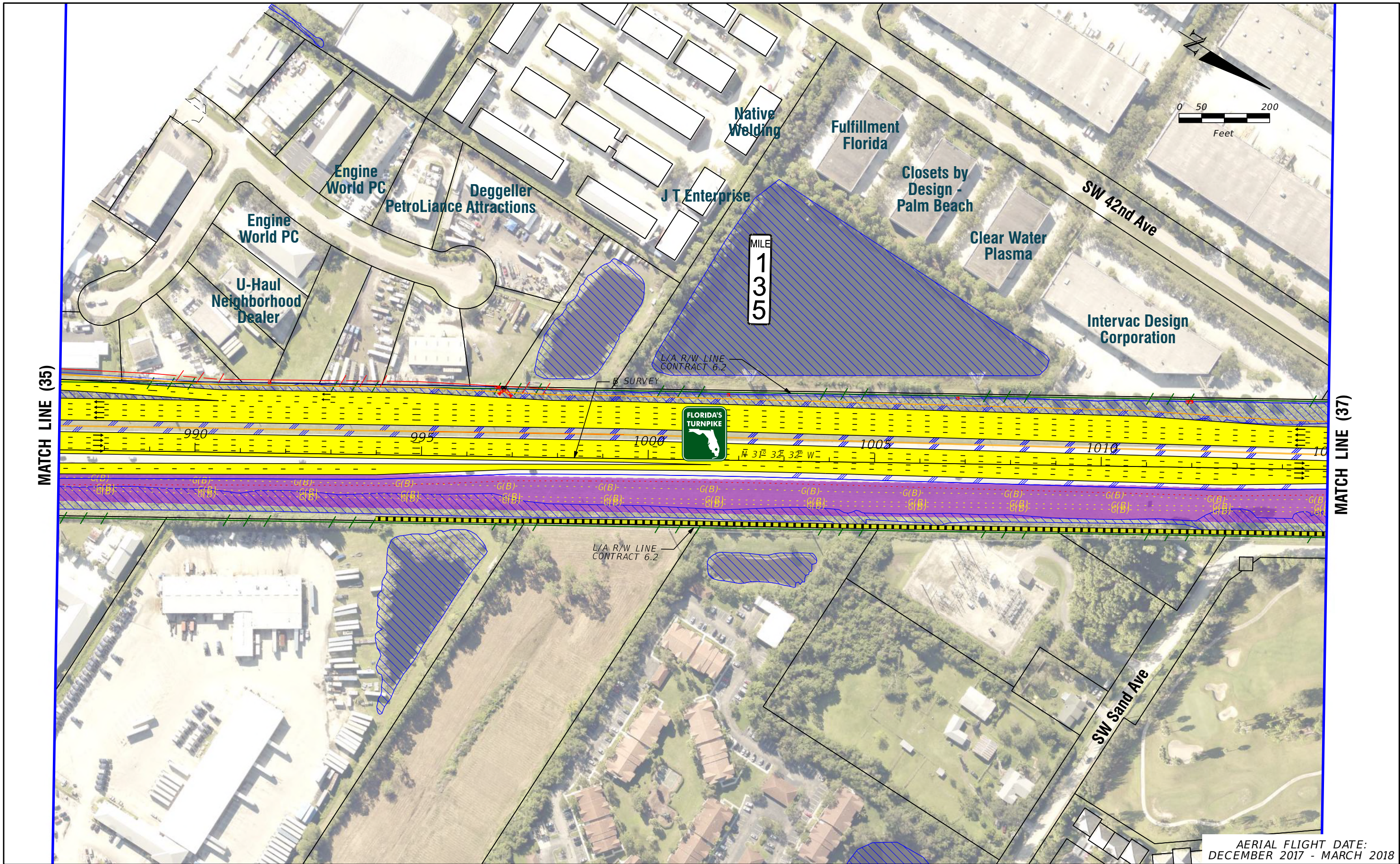
H. W. LOCHNER, INC.
4350 W. CYPRESS ST., SUITE 800
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FLORIDA'S TURNPIKE (SR 91) WIDENING
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-37





LEGEND

—

 PROPERTY LINES

—

 TRAFFIC BARRIER WALL

—

 EXISTING ROW LINE

—

 EXISTING LIMITED ACCESS ROW LINE

—

 POTENTIAL ROW LINE

—

 POTENTIAL LIMITED ACCESS ROW LINE

—

 RAILROAD

—

 PROPOSED ROW NOISE BARRIER

—

 PROPOSED SHOULDER NOISE BARRIER

—

 PAVEMENT REMOVAL

—

 WETLANDS/OTHER SURFACE WATERS

—

 PROPOSED ROADWAY

—

 PROPOSED BRIDGE

—

 EXISTING BRIDGE

—

 OTHER PROJECTS (BRIDGE)

—

 OTHER PROJECTS (ROADS)

—

 FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH

—

 POTENTIAL BUSINESS RELOCATION

—

 POTENTIAL RESIDENTIAL RELOCATION

—

 NOTE: ROW = RIGHT OF WAY

—

 PROPOSED ITS

—

 POTENTIAL NEW TRAFFIC SIGNAL

—

 EXISTING TRAFFIC SIGNAL

—

 TOLL GANTRY

—

 POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

H. W. LOCHNER, INC.

4350 W. CYPRESS ST., SUITE 800

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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING

PREFERRED ALTERNATIVE

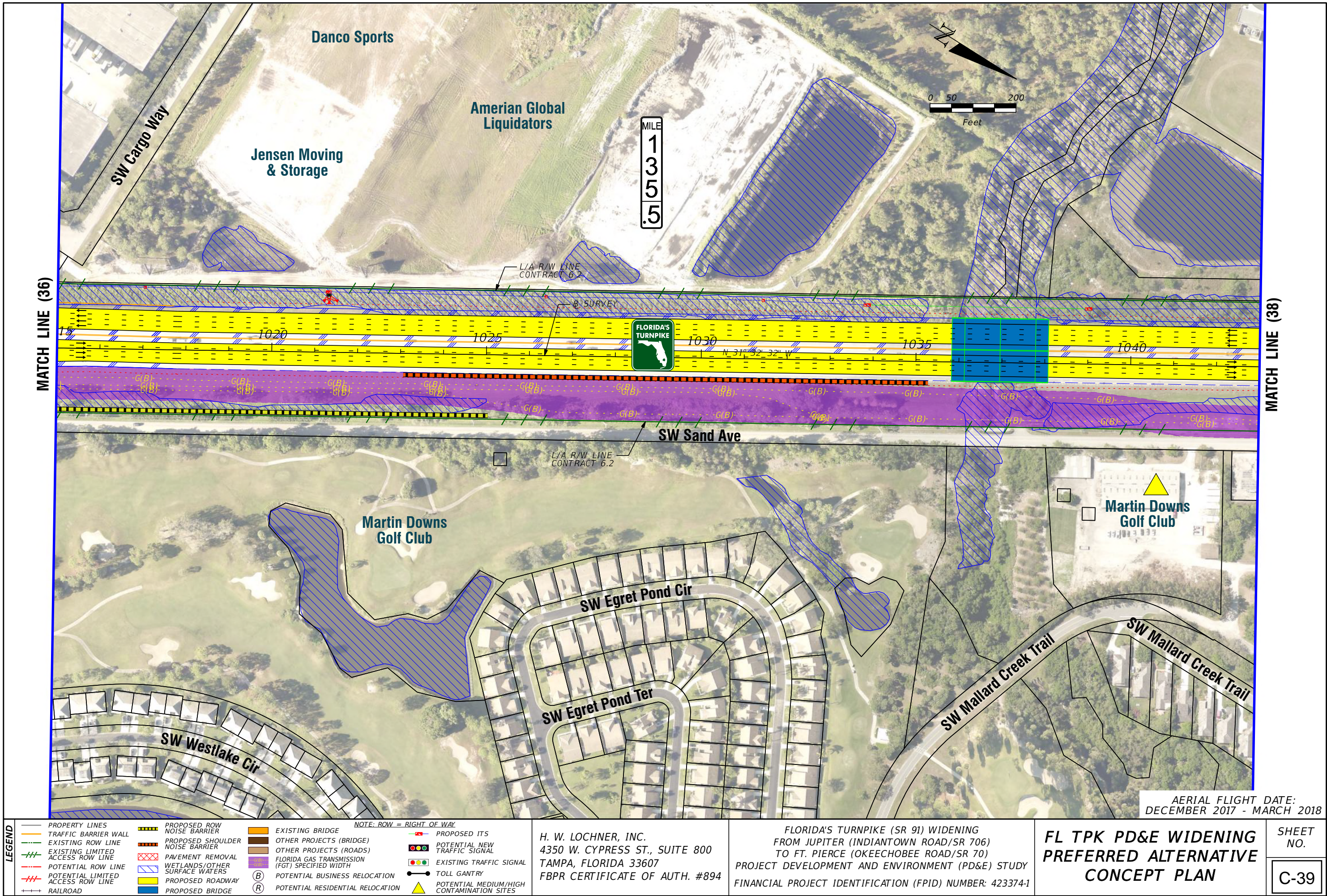
CONCEPT PLAN

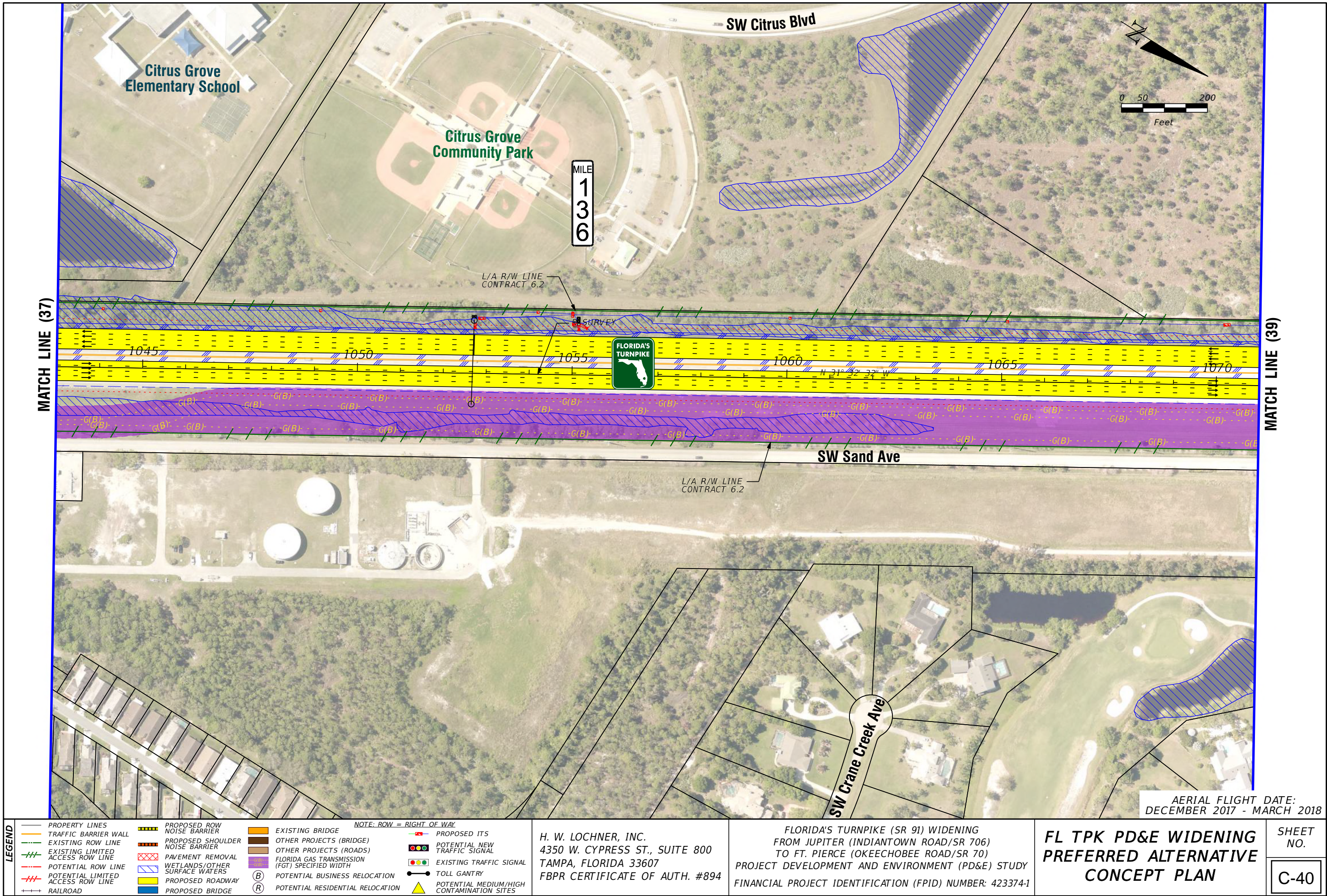
SHEET NO.

C-39

AERIAL FLIGHT DATE:

DECEMBER 2017 - MARCH 2018





LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

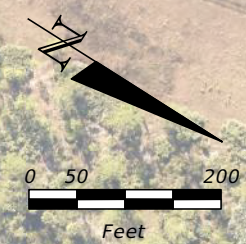
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-40

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



MILE
1
3
6
.5

MATCH LINE (38)

MATCH LINE (40)



SW Sand Ave

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND	—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER	—	EXISTING BRIDGE	—	PROPOSED ITS
	—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER	—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
	—	EXISTING ROW LINE	—	PAVEMENT REMOVAL	—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
	—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS	—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
	—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY	—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
	—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE	—	POTENTIAL RESIDENTIAL RELOCATION	—	
	—	RAILROAD						

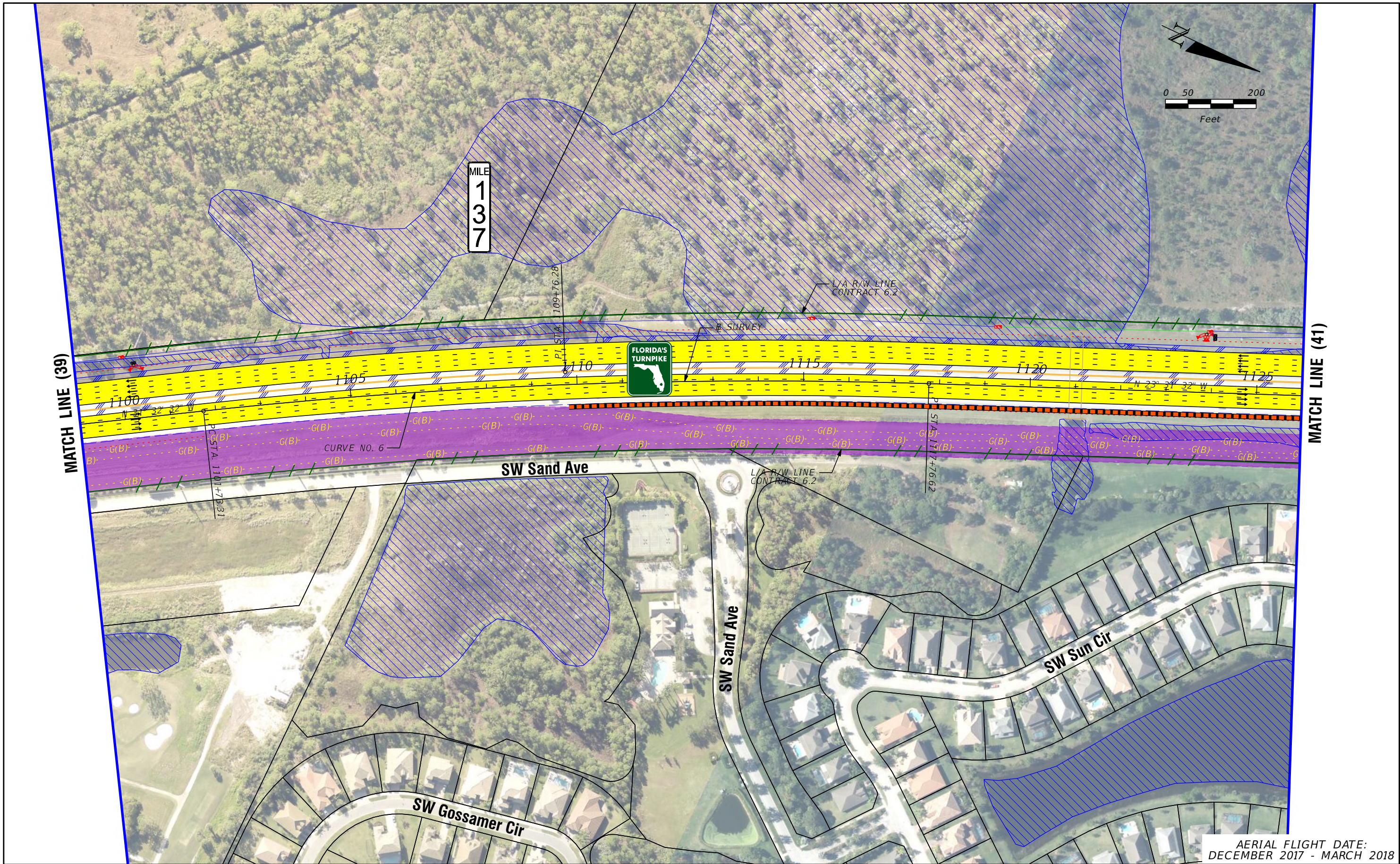
NOTE: ROW = RIGHT OF WAY

H. W. LOCHNER, INC.
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.
C-41



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD		

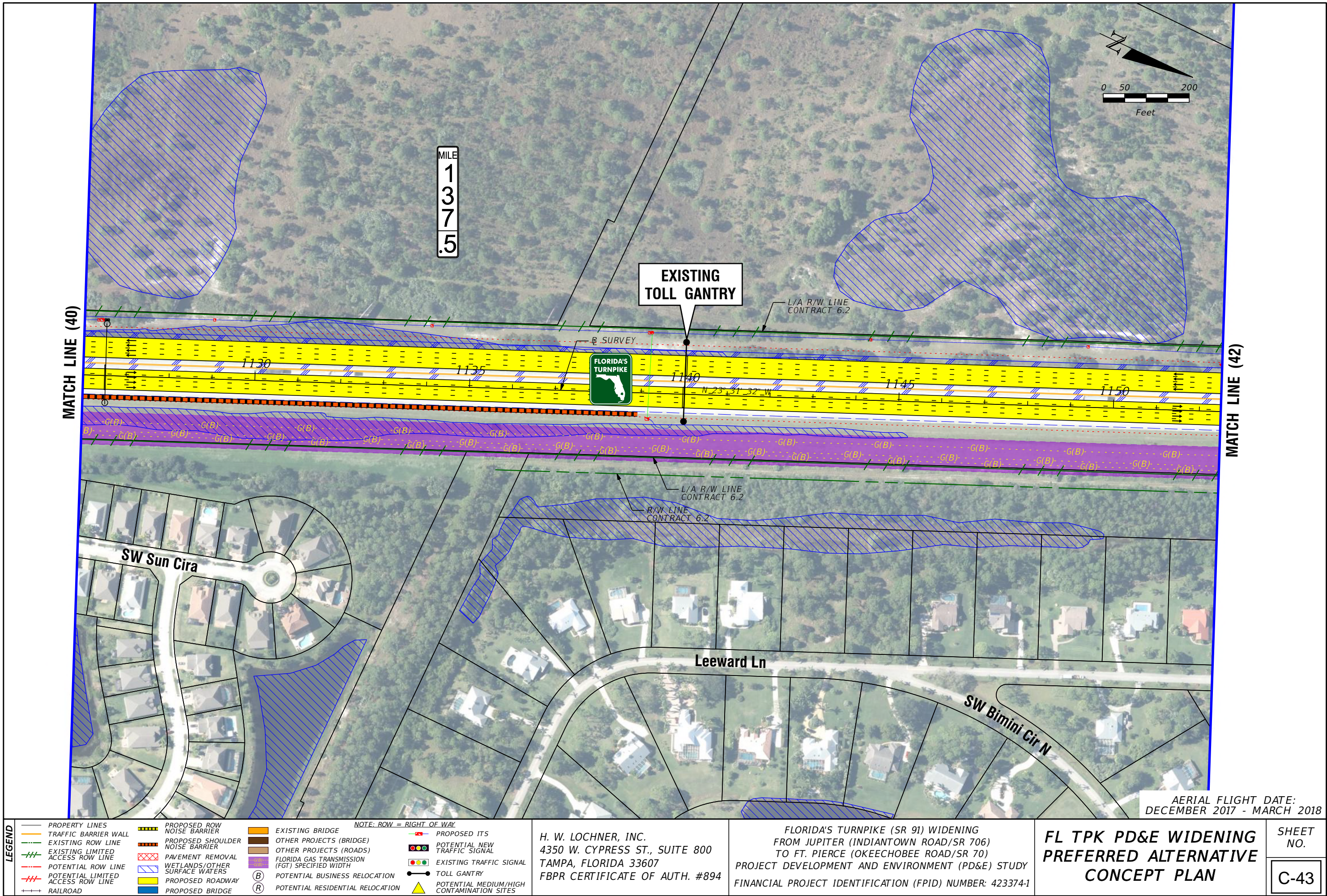
NOTE: ROW = RIGHT OF WAY			
—	EXISTING BRIDGE	—	POTENTIAL ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION		

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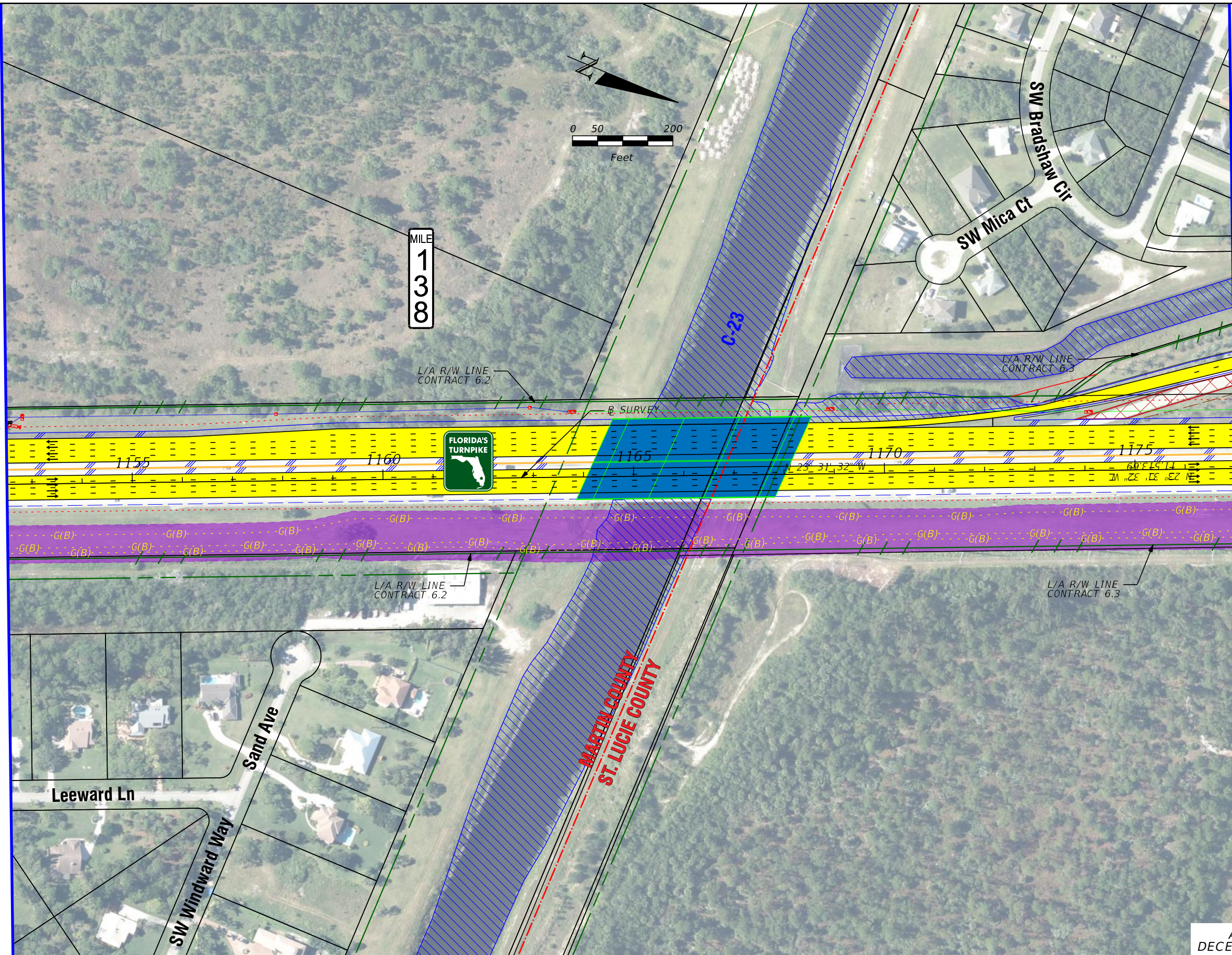
FLORIDA'S TURNPIKE (SR 91) WIDENING
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-42



MATCH LINE (41)



MATCH LINE (43)

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

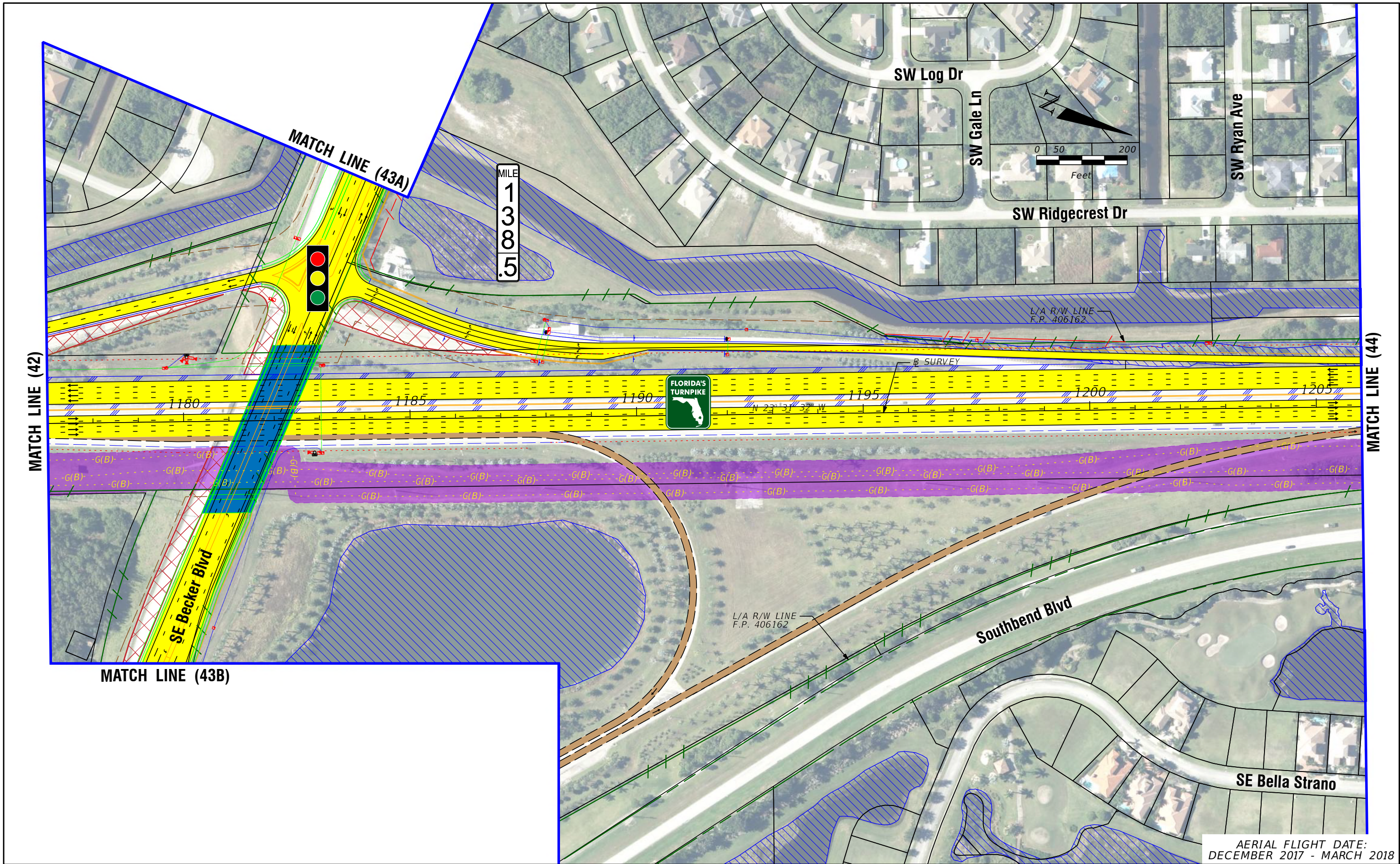
- | | | | | |
|-------------------------------------|---------------------------------|--|--------------------------|---|
| — PROPERTY LINES | PROPOSED ROW NOISE BARRIER | EXISTING BRIDGE | NOTE: ROW = RIGHT OF WAY | PROPOSED ITS |
| — TRAFFIC BARRIER WALL | PROPOSED SHOULDER NOISE BARRIER | OTHER PROJECTS (BRIDGE) | | POTENTIAL NEW TRAFFIC SIGNAL |
| — EXISTING ROW LINE | PAVEMENT REMOVAL | OTHER PROJECTS (ROADS) | | EXISTING TRAFFIC SIGNAL |
| — EXISTING LIMITED ACCESS ROW LINE | WETLANDS/OTHER SURFACE WATERS | FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH | | TOLL GANTRY |
| — POTENTIAL ROW LINE | PROPOSED ROADWAY | POTENTIAL BUSINESS RELOCATION | | POTENTIAL MEDIUM/HIGH CONTAMINATION SITES |
| — POTENTIAL LIMITED ACCESS ROW LINE | PROPOSED BRIDGE | POTENTIAL RESIDENTIAL RELOCATION | | |
| — RAILROAD | | | | |

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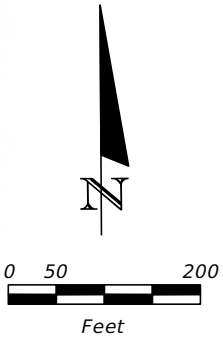
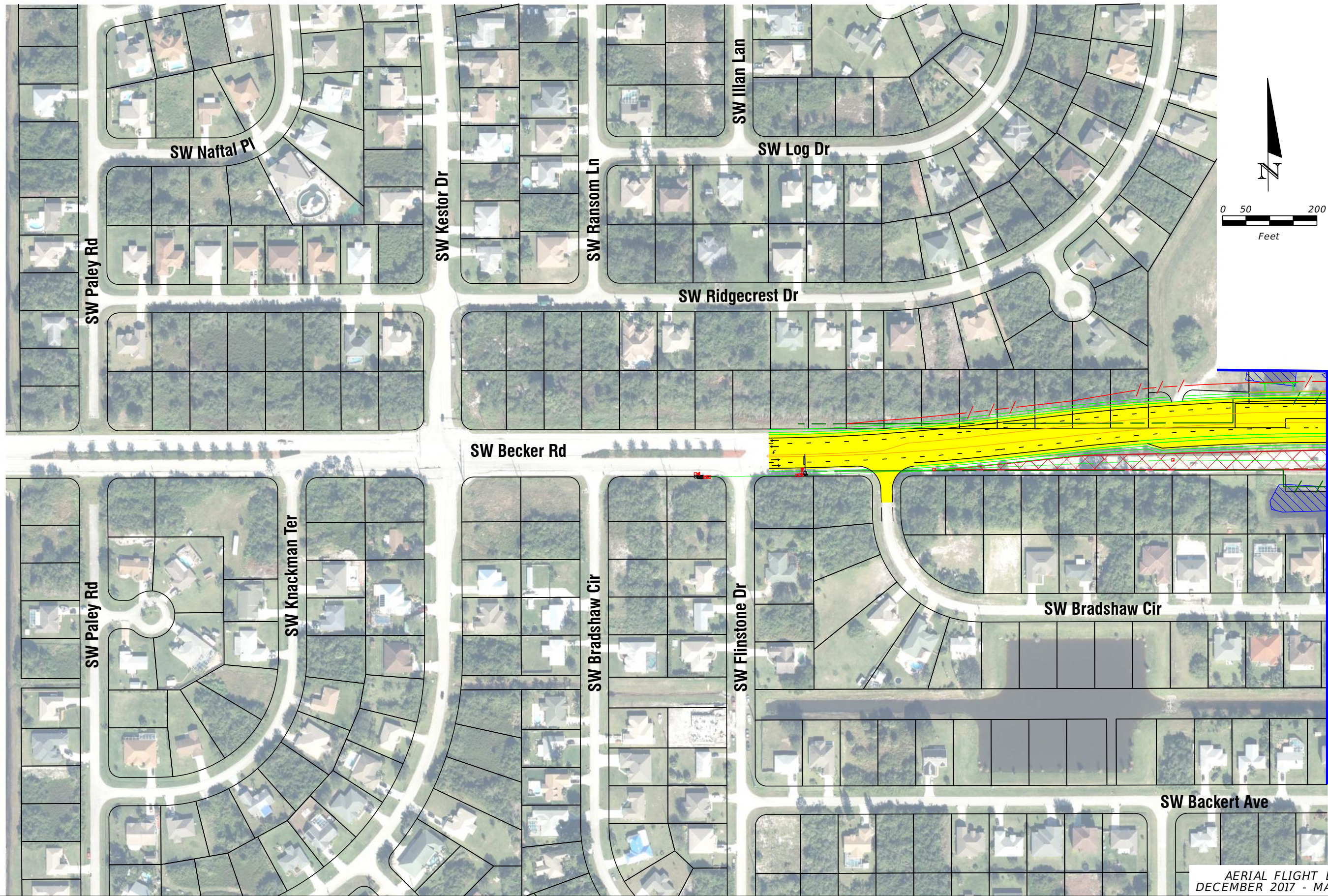
FLORIDA'S TURNPIKE (SR 91) WIDENING
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-44



<div><div>LEGEND</div><div><div><div><div>—</div><div>PROPERTY LINES</div></div><div><div>—</div><div>TRAFFIC BARRIER WALL</div></div><div><div>—</div><div>EXISTING ROW LINE</div></div><div><div>—</div><div>EXISTING LIMITED ACCESS ROW LINE</div></div><div><div>—</div><div>POTENTIAL ROW LINE</div></div><div><div>—</div><div>POTENTIAL LIMITED ACCESS ROW LINE</div></div><div><div>—</div><div>RAILROAD</div></div></div><div><div><div><div><div></div><div>PROPOSED ROW NOISE BARRIER</div></div><div><div></div><div>PROPOSED SHOULDER NOISE BARRIER</div></div><div><div></div><div>PAVEMENT REMOVAL</div></div><div><div></div><div>WETLANDS/OTHER SURFACE WATERS</div></div><div><div></div><div>PROPOSED ROADWAY</div></div><div><div></div><div>PROPOSED BRIDGE</div></div></div><div><div><div><div></div><div>EXISTING BRIDGE</div></div><div><div></div><div>OTHER PROJECTS (BRIDGE)</div></div><div><div></div><div>OTHER PROJECTS (ROADS)</div></div><div><div></div><div>FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH</div></div><div><div></div><div>POTENTIAL BUSINESS RELOCATION</div></div><div><div></div><div>POTENTIAL RESIDENTIAL RELOCATION</div></div></div></div></div><div><div><div><div></div><div>NOTE: ROW = RIGHT OF WAY</div></div><div><div><div><div></div><div>PROPOSED ITS</div></div><div><div></div><div>POTENTIAL NEW TRAFFIC SIGNAL</div></div><div><div></div><div>EXISTING TRAFFIC SIGNAL</div></div><div><div></div><div>TOLL GANTRY</div></div><div><div></div><div>POTENTIAL MEDIUM/HIGH CONTAMINATION SITES</div></div></div></div></div></div><div><div>H. W. LOCHNER, INC. 4350 W. CYPRESS ST., SUITE 800 TAMPA, FLORIDA 33607 FBPR CERTIFICATE OF AUTH. #894</div><div>FLORIDA'S TURNPIKE (SR 91) WIDENING FROM JUPITER (INDIANTOWN ROAD/SR 706) TO FT. PIERCE (OKEECHOBEE ROAD/SR 70) PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1</div><div>FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN</div><div><div>SHEET NO.</div><div>C-45</div></div></div><div><div>AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018</div></div></div></div></div>
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MATCH LINE (43)

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND	—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER	—	EXISTING BRIDGE	—	POTENTIAL ITS
	—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER	—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
	—	EXISTING ROW LINE	—	PAVEMENT REMOVAL	—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
	—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS	—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
	—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY	—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
	—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE	—	POTENTIAL RESIDENTIAL RELOCATION	—	
	—	RAILROAD						

NOTE: ROW = RIGHT OF WAY

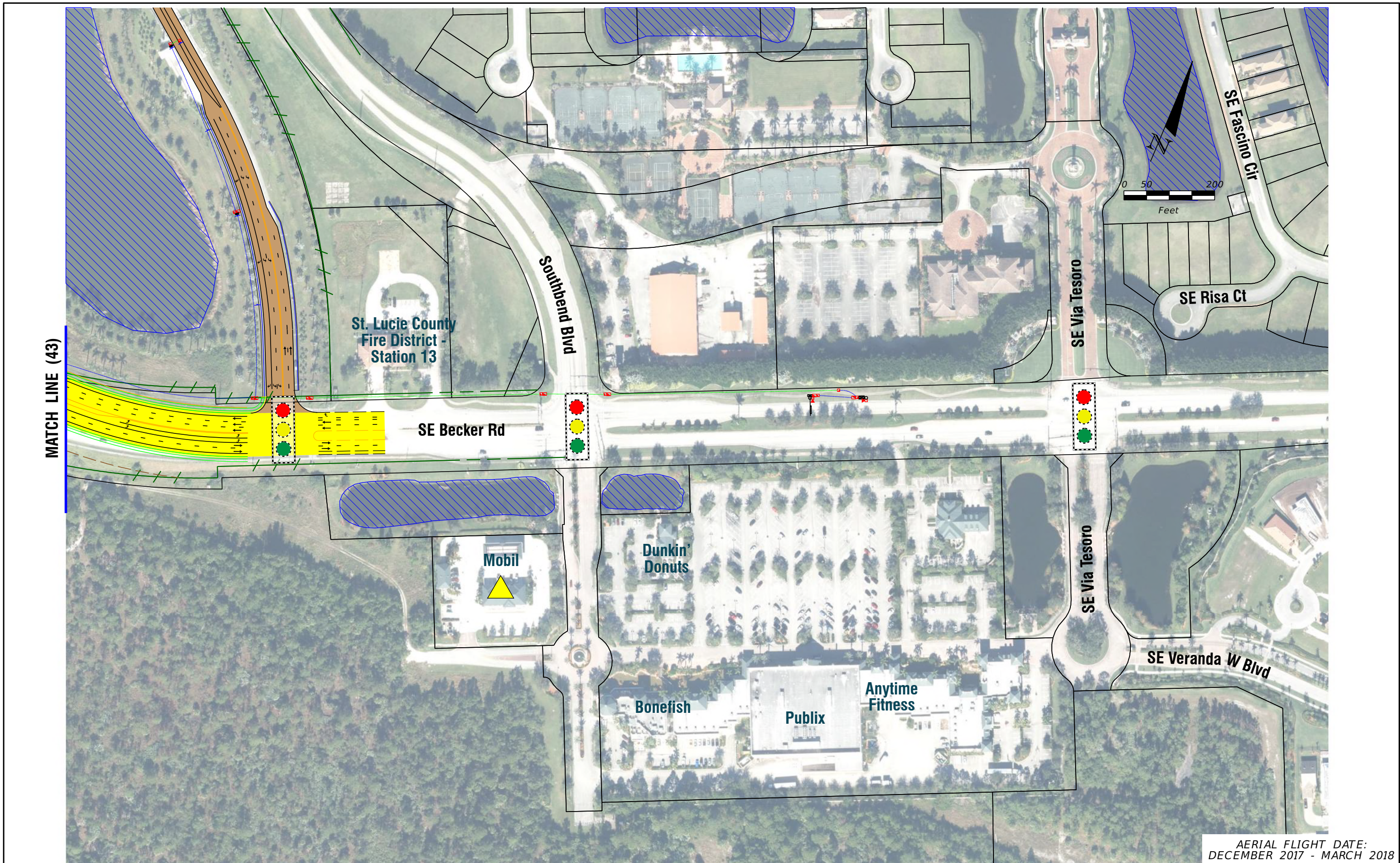
H. W. LOCHNER, INC.
4350 W. CYPRESS ST., SUITE 800
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTH. #894

FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

SHEET
NO.

C-46



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	

NOTE: ROW = RIGHT OF WAY

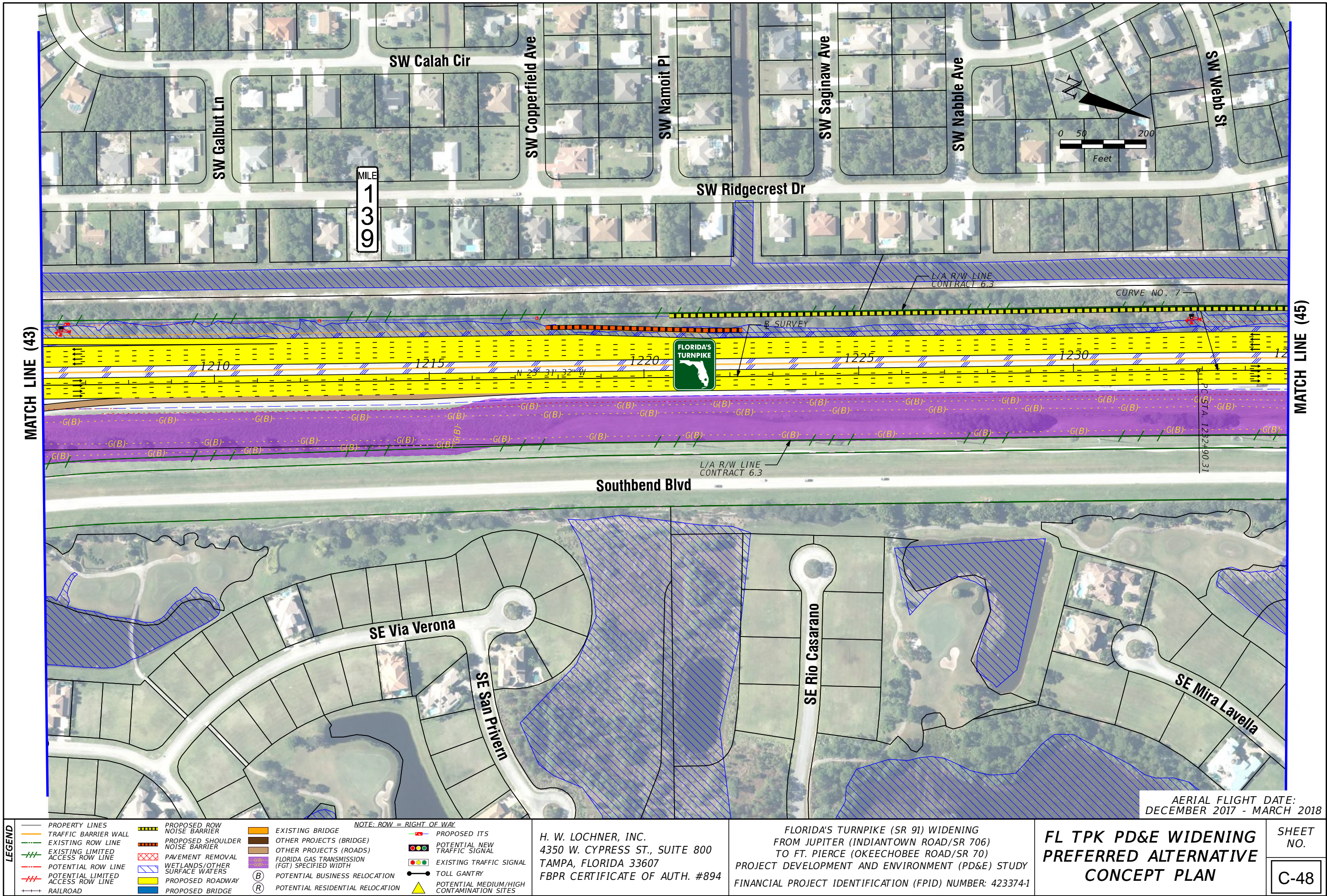
—	EXISTING BRIDGE	—	PROPOSED ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION		

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TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.
C-47



LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	

NOTE: ROW = RIGHT OF WAY

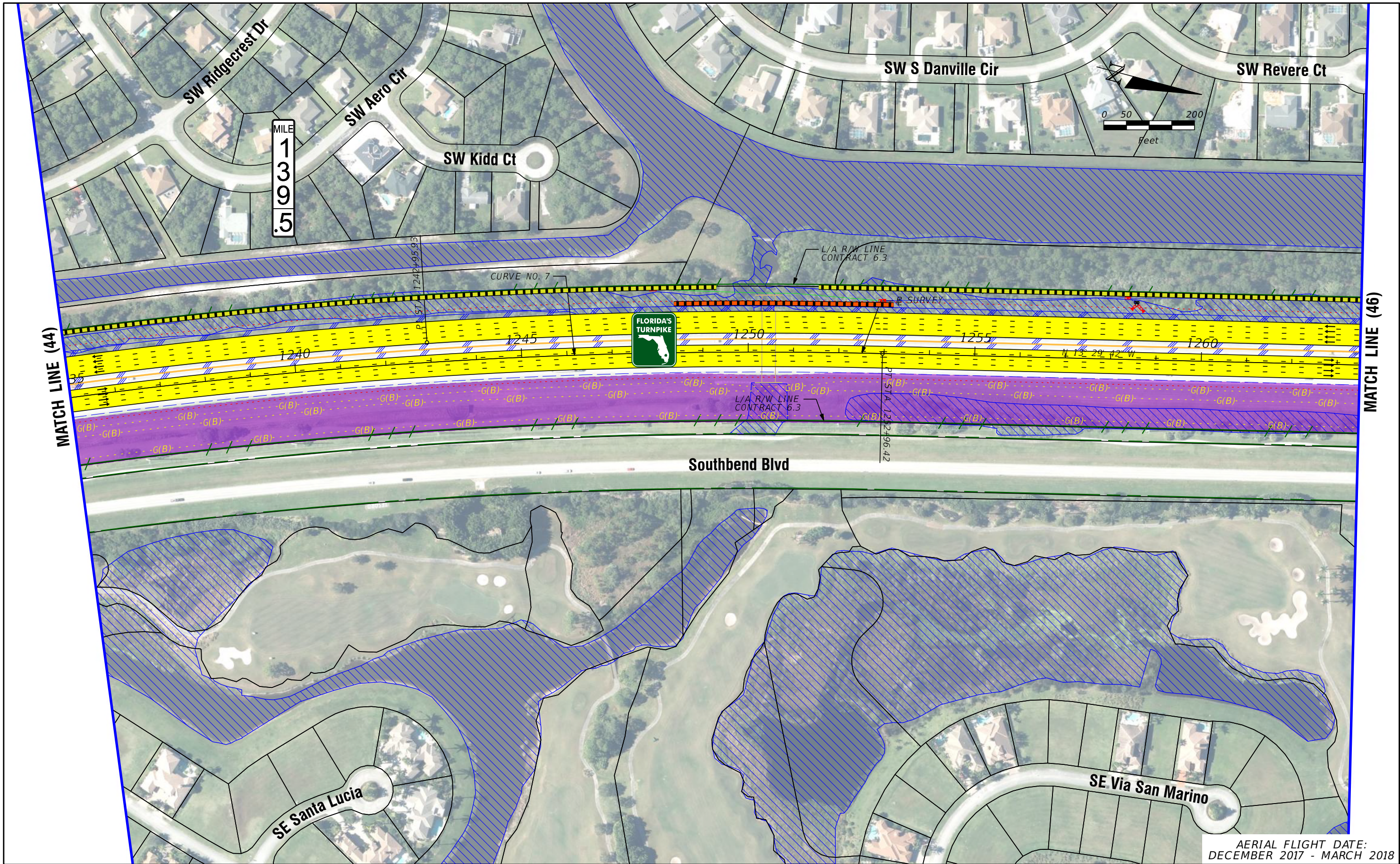
—	EXISTING BRIDGE	—	PROPOSED ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION		

FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

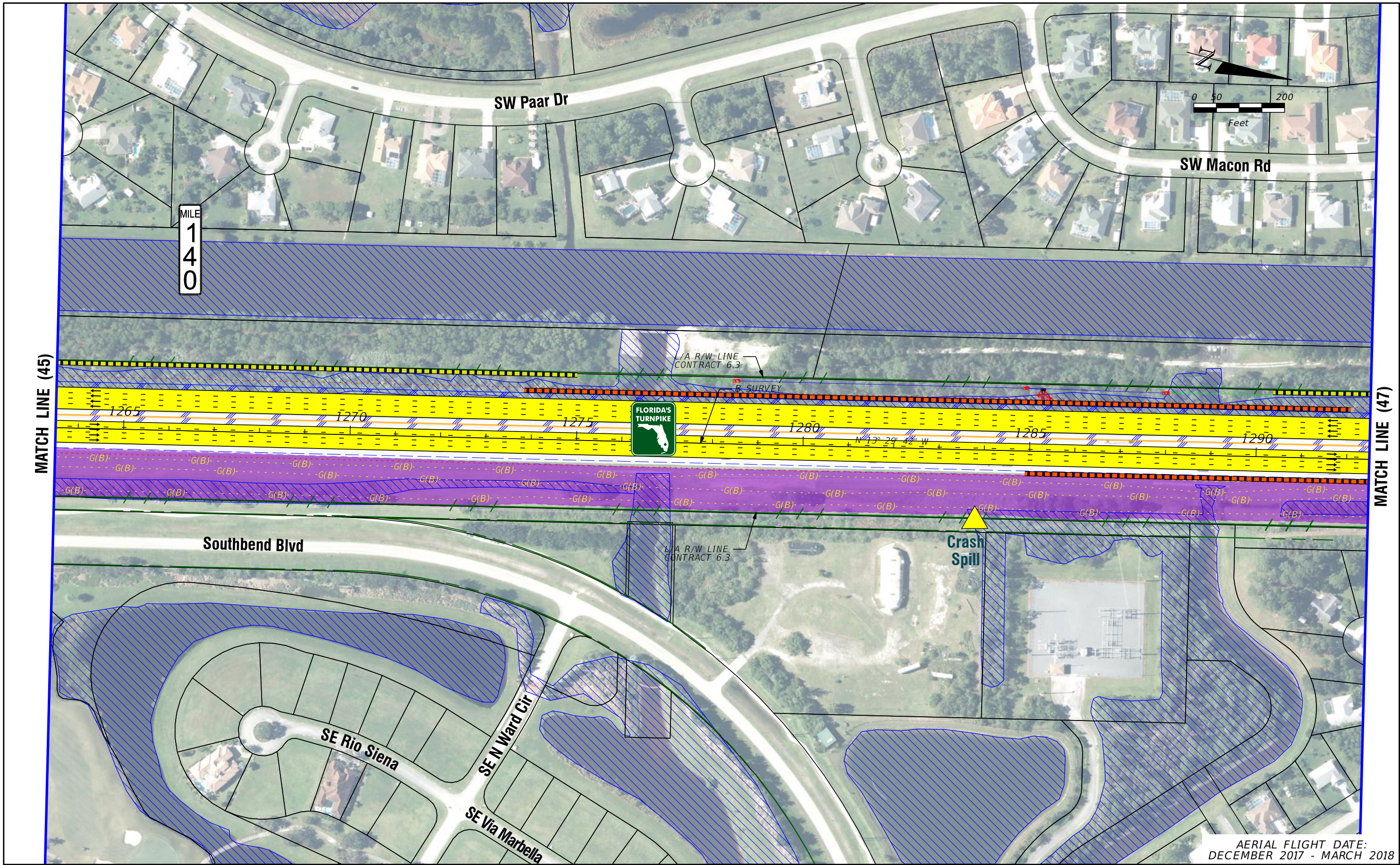
SHEET NO.
C-48

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



LEGEND	<ul style="list-style-type: none">PROPERTY LINESTRAFFIC BARRIER WALLEXISTING ROW LINEEXISTING LIMITED ACCESS ROW LINEPOTENTIAL ROW LINEPOTENTIAL LIMITED ACCESS ROW LINERAILROAD	<ul style="list-style-type: none">PROPOSED ROW NOISE BARRIERPROPOSED SHOULDER NOISE BARRIERPAVEMENT REMOVALWETLANDS/OTHER SURFACE WATERSPROPOSED ROADWAYPROPOSED BRIDGE	<ul style="list-style-type: none">EXISTING BRIDGEOTHER PROJECTS (BRIDGE)OTHER PROJECTS (ROADS)FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTHPOTENTIAL BUSINESS RELOCATIONPOTENTIAL RESIDENTIAL RELOCATION	<ul style="list-style-type: none">NOTE: ROW = RIGHT OF WAYPROPOSED ITSPOTENTIAL NEW TRAFFIC SIGNALEXISTING TRAFFIC SIGNALTOLL GANTRYPOTENTIAL MEDIUM/HIGH CONTAMINATION SITES	<p>H. W. LOCHNER, INC. 4350 W. CYPRESS ST., SUITE 800 TAMPA, FLORIDA 33607 FBPR CERTIFICATE OF AUTH. #894</p>	<p>FLORIDA'S TURNPIKE (SR 91) WIDENING FROM JUPITER (INDIANTOWN ROAD/SR 706) TO FT. PIERCE (OKEECHOBEE ROAD/SR 70) PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1</p>	<p>FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN</p>	<p>SHEET NO. C-49</p>
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AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



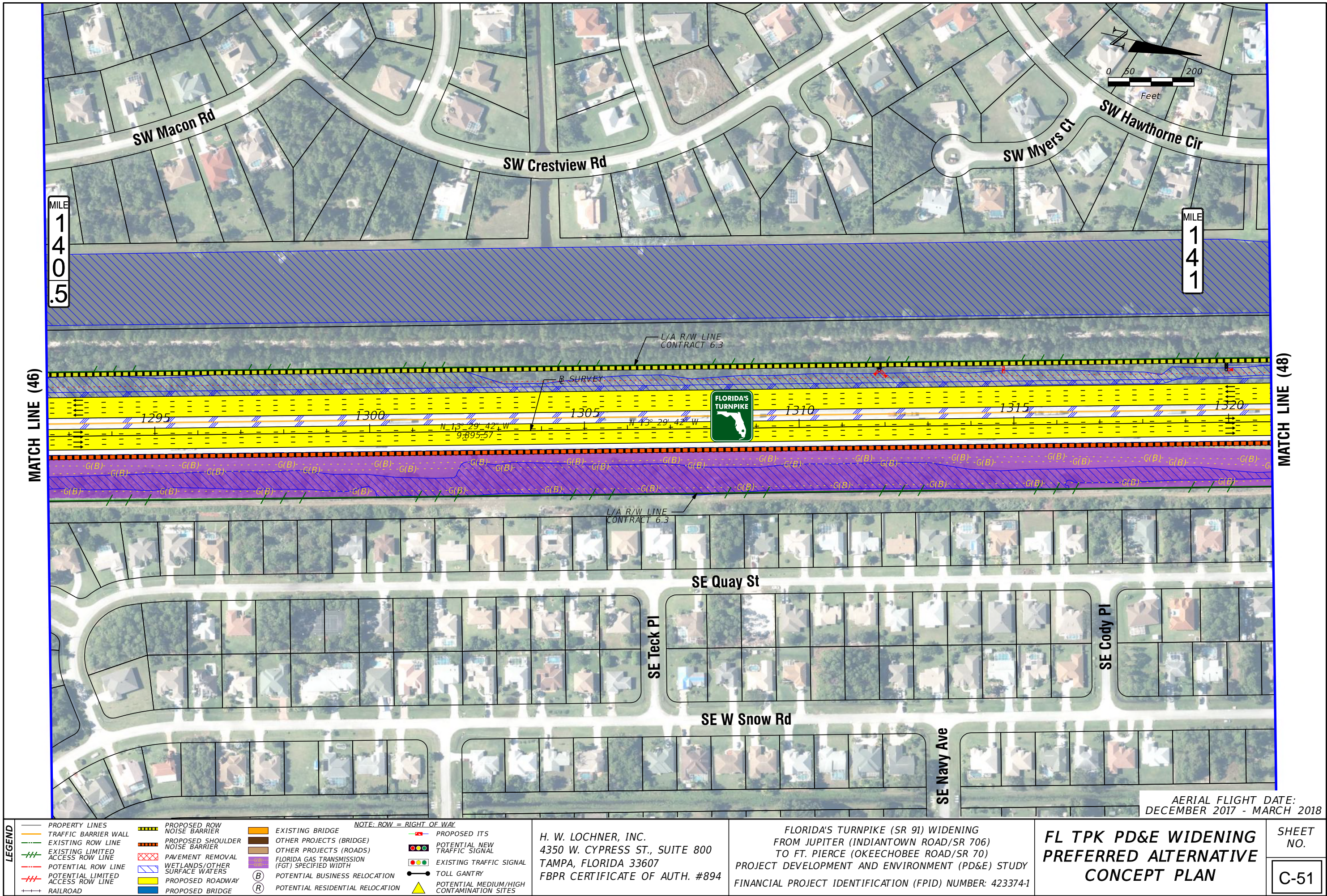
LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	PROPOSED ITS
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL NEW TRAFFIC SIGNAL	EXISTING TRAFFIC SIGNAL
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	TOLL GANTRY
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	POTENTIAL BUSINESS RELOCATION	POTENTIAL RESIDENTIAL RELOCATION	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
	POTENTIAL ROW LINE	PROPOSED ROADWAY			
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE			
	RAILROAD				

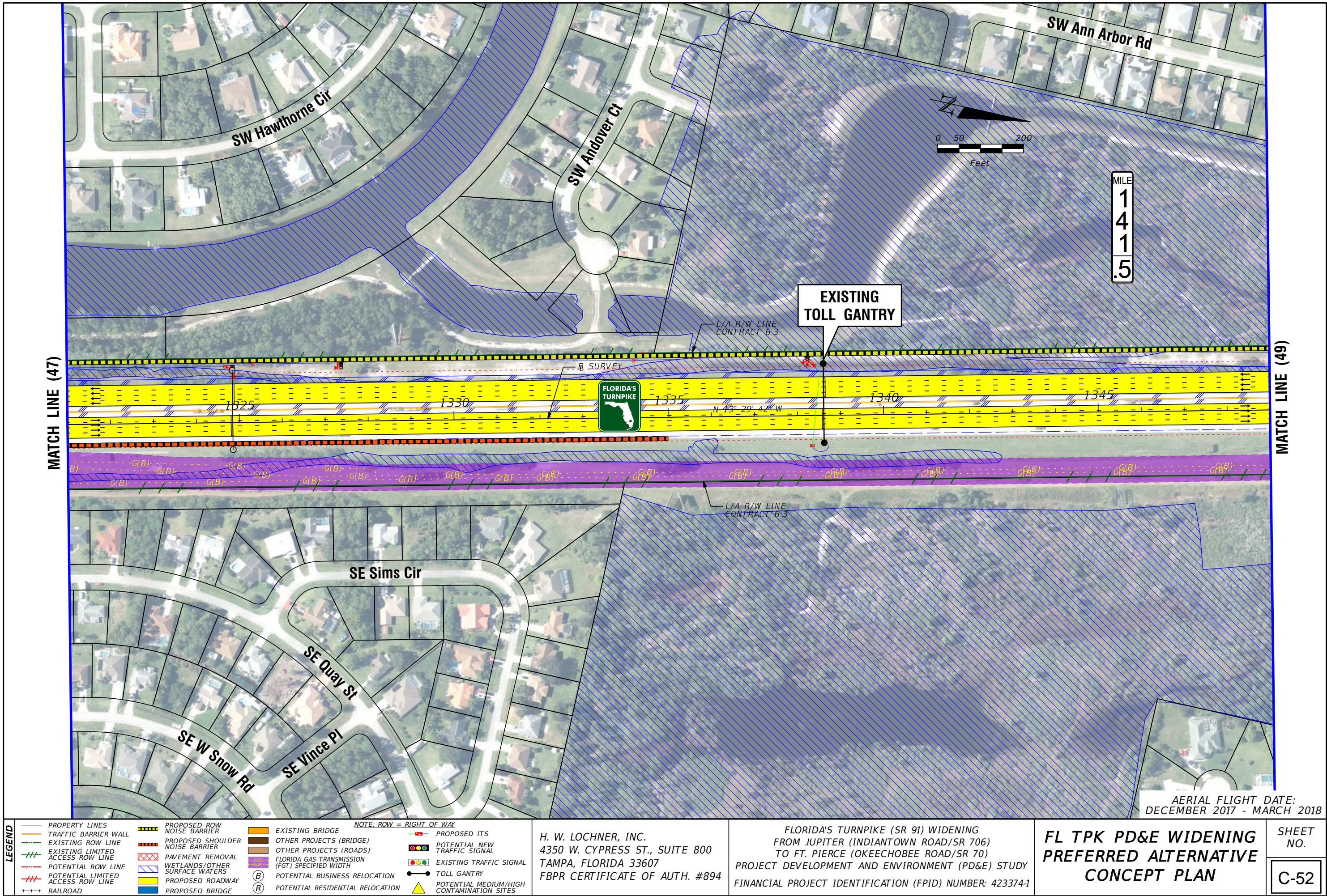
H. W. LOCHNER, INC.
4350 W. CYPRESS ST., SUITE 800
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTH. #894

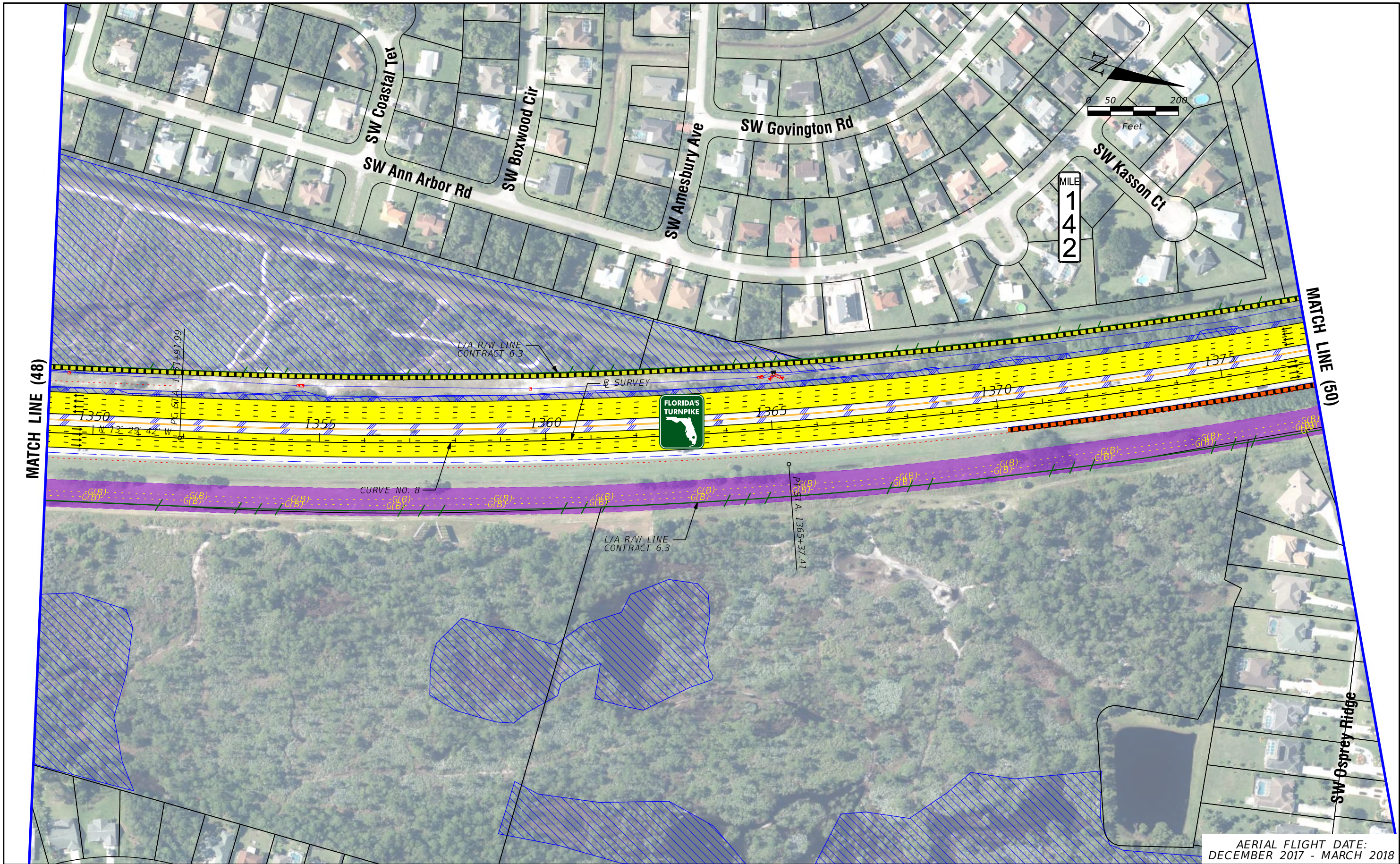
FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

SHEET NO.
C-50

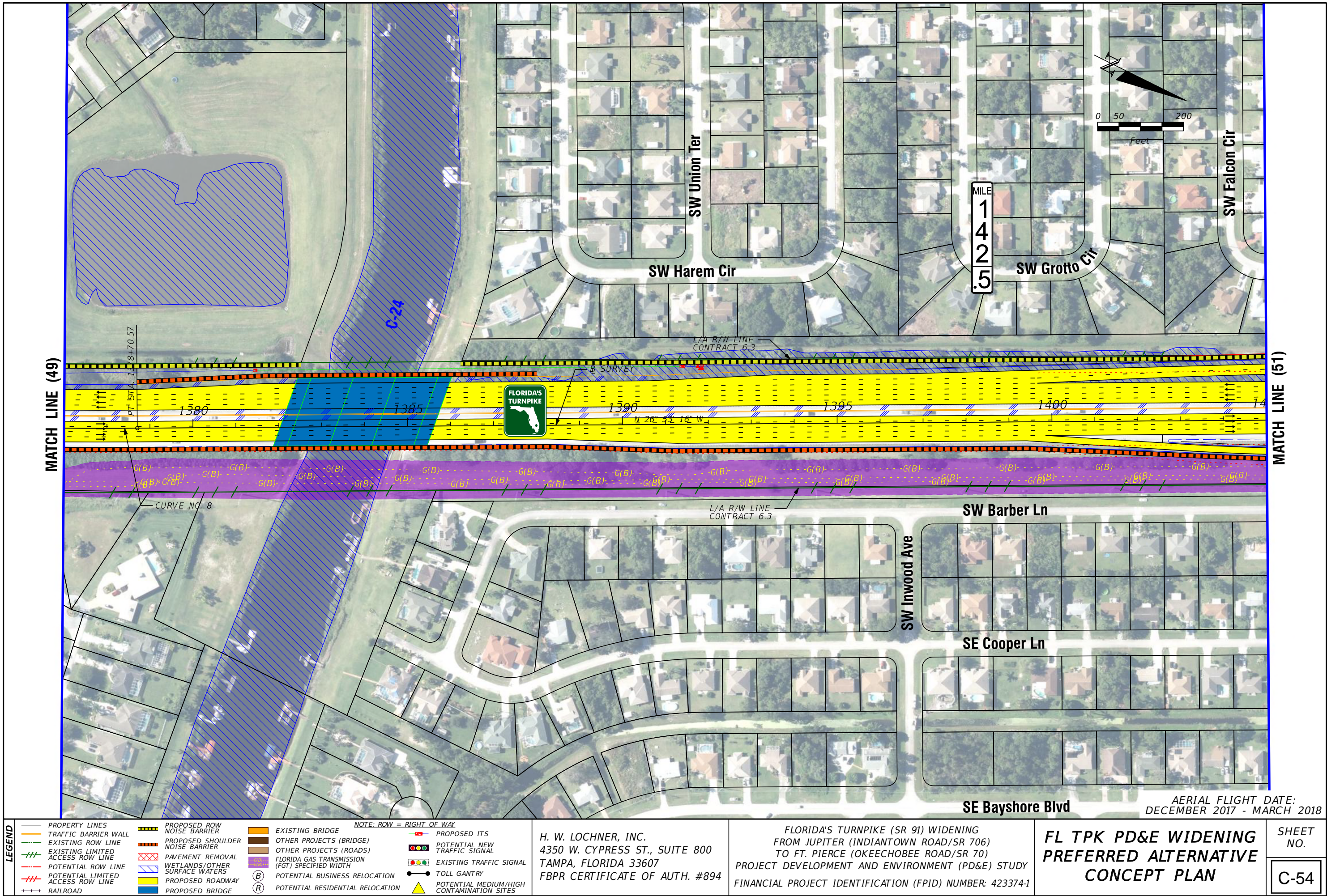






AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND — PROPERTY LINES — TRAFFIC BARRIER WALL — EXISTING ROW LINE — EXISTING LIMITED ACCESS ROW LINE - - - POTENTIAL ROW LINE - - - POTENTIAL LIMITED ACCESS ROW LINE + + + RAILROAD	PROPOSED ROW NOISE BARRIER — PROPOSED SHOULDER NOISE BARRIER — PAVEMENT REMOVAL — WETLANDS/OTHER SURFACE WATERS — PROPOSED ROADWAY — PROPOSED BRIDGE	EXISTING BRIDGE — OTHER PROJECTS (BRIDGE) — OTHER PROJECTS (ROADS) — FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH — POTENTIAL BUSINESS RELOCATION — POTENTIAL RESIDENTIAL RELOCATION	NOTE: ROW = RIGHT OF WAY — PROPOSED ITS — POTENTIAL NEW TRAFFIC SIGNAL — EXISTING TRAFFIC SIGNAL — TOLL GANTRY — POTENTIAL MEDIUM/HIGH CONTAMINATION SITES	H. W. LOCHNER, INC. 4350 W. CYPRESS ST., SUITE 800 TAMPA, FLORIDA 33607 FBPR CERTIFICATE OF AUTH. #894	FLORIDA'S TURNPIKE (SR 91) WIDENING FROM JUPITER (INDIANTOWN ROAD/SR 706) TO FT. PIERCE (OKEECHOBEE ROAD/SR 70) PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1	FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN	SHEET NO. C-53
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LEGEND

- | | | | | | | | |
|---|-----------------------------------|---|---------------------------------|---|--|---|---|
| — | PROPERTY LINES | — | PROPOSED ROW NOISE BARRIER | — | EXISTING BRIDGE | — | PROPOSED ITS |
| — | TRAFFIC BARRIER WALL | — | PROPOSED SHOULDER NOISE BARRIER | — | OTHER PROJECTS (BRIDGE) | — | POTENTIAL NEW TRAFFIC SIGNAL |
| — | EXISTING ROW LINE | — | PAVEMENT REMOVAL | — | OTHER PROJECTS (ROADS) | — | EXISTING TRAFFIC SIGNAL |
| — | EXISTING LIMITED ACCESS ROW LINE | — | WETLANDS/OTHER SURFACE WATERS | — | FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH | — | TOLL GANTRY |
| — | POTENTIAL ROW LINE | — | PROPOSED ROADWAY | — | POTENTIAL BUSINESS RELOCATION | — | POTENTIAL MEDIUM/HIGH CONTAMINATION SITES |
| — | POTENTIAL LIMITED ACCESS ROW LINE | — | PROPOSED BRIDGE | — | POTENTIAL RESIDENTIAL RELOCATION | — | |
| — | RAILROAD | — | | — | | — | |

NOTE: ROW = RIGHT OF WAY

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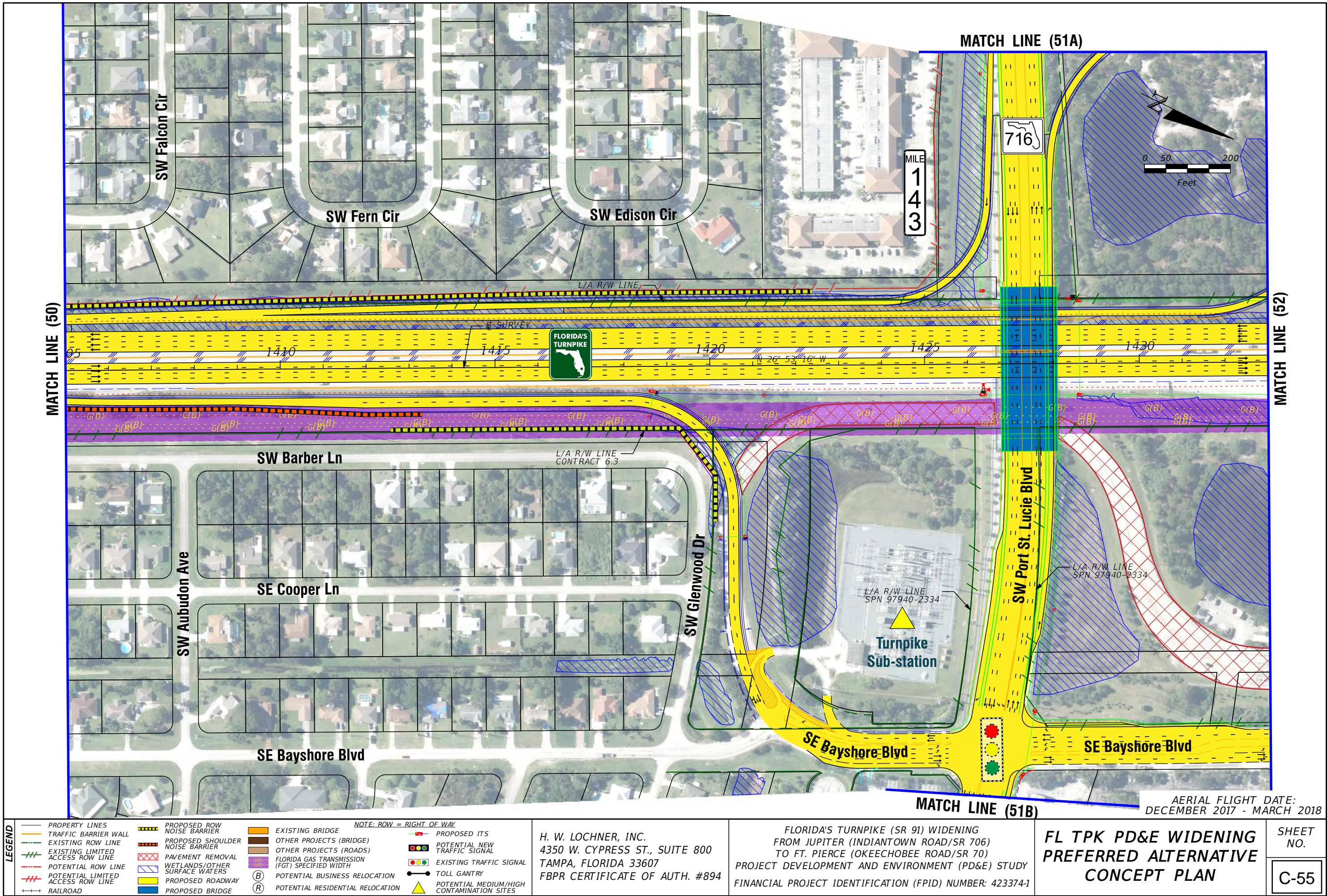
FLORIDA'S TURNPIKE (SR 91) WIDENING
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PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.

C-54

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	

NOTE: ROW = RIGHT OF WAY			
—	EXISTING BRIDGE	—	PROPOSED ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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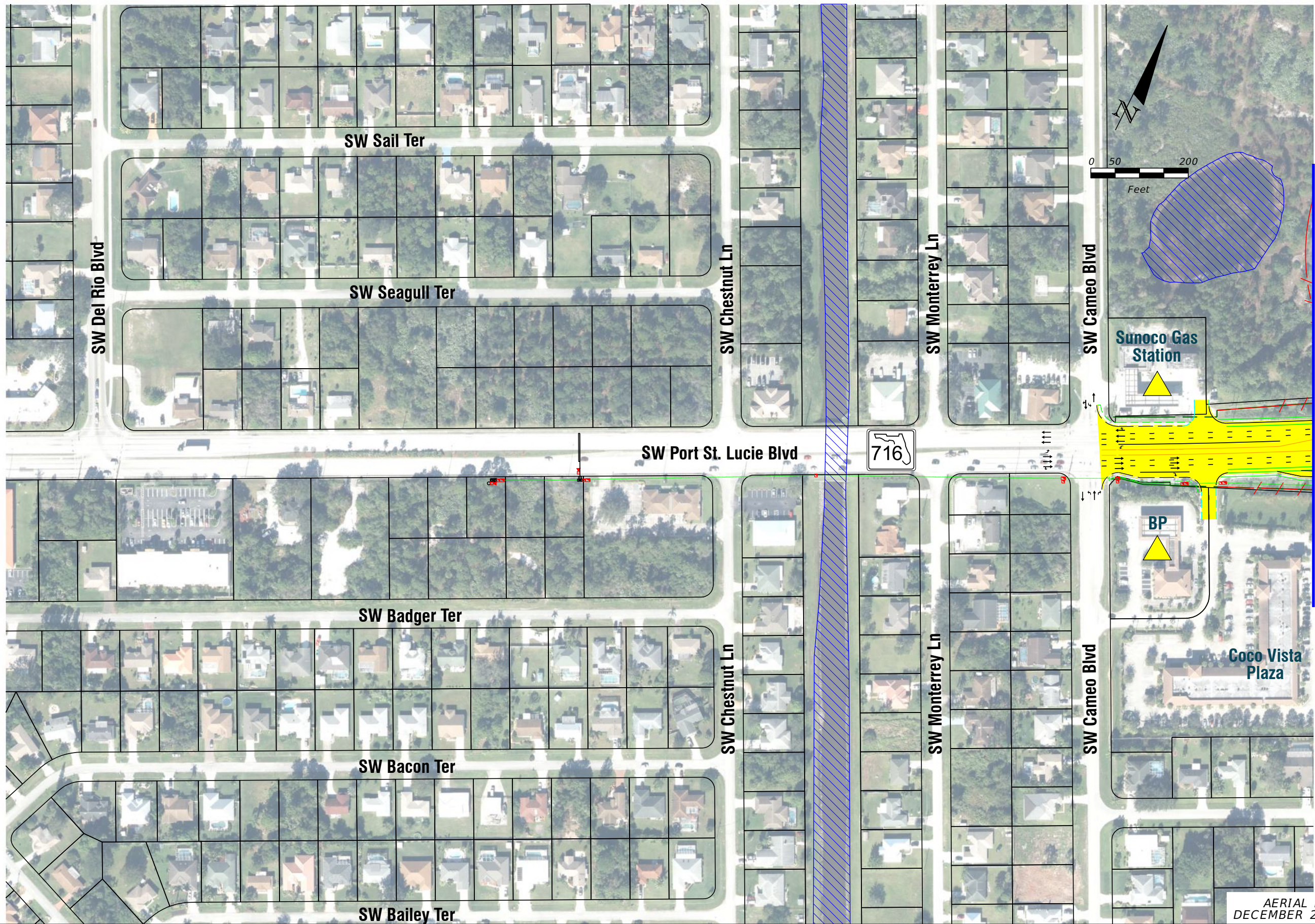
FLORIDA'S TURNPIKE (SR 91) WIDENING
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TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.

C-55

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

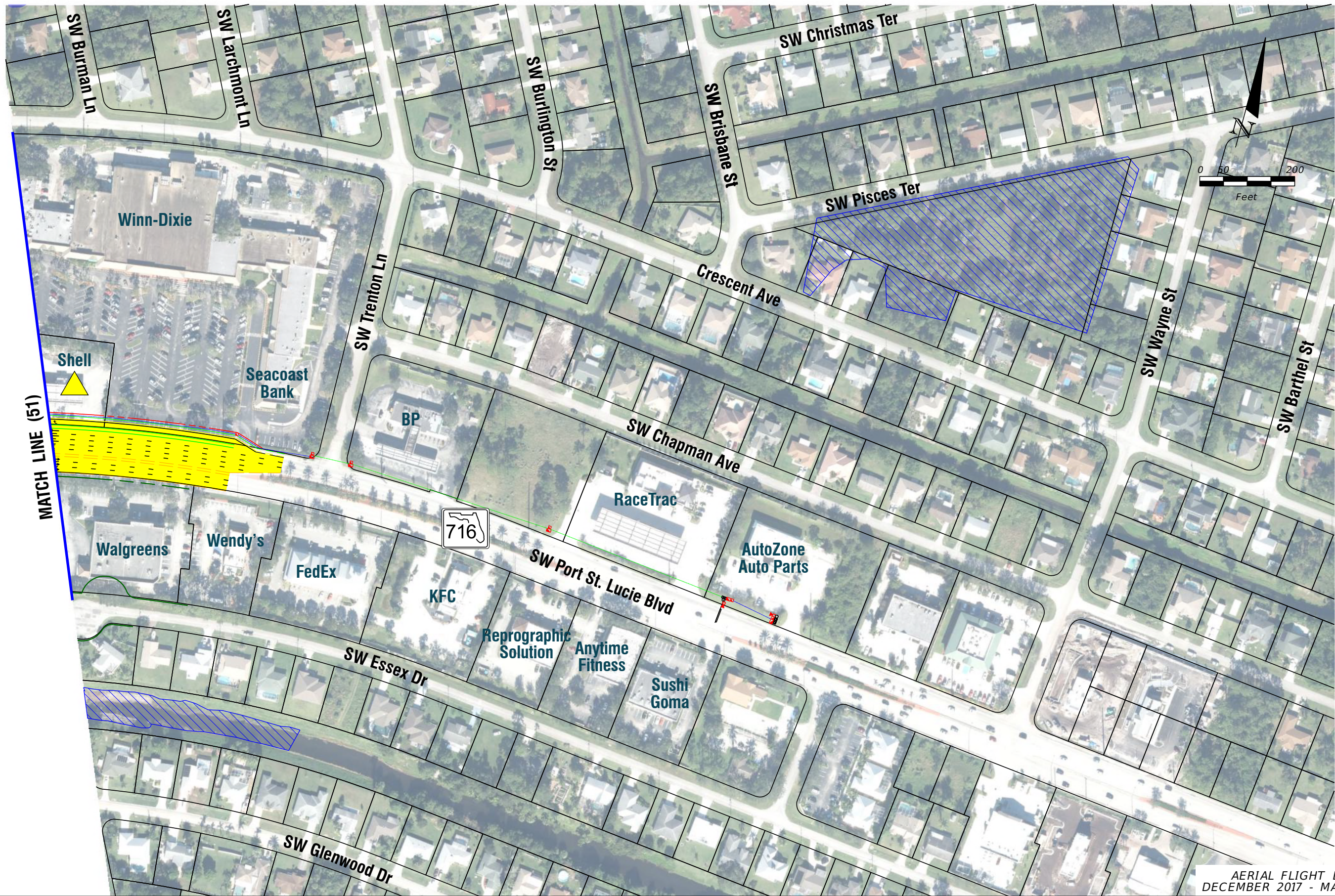
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.

C-56



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

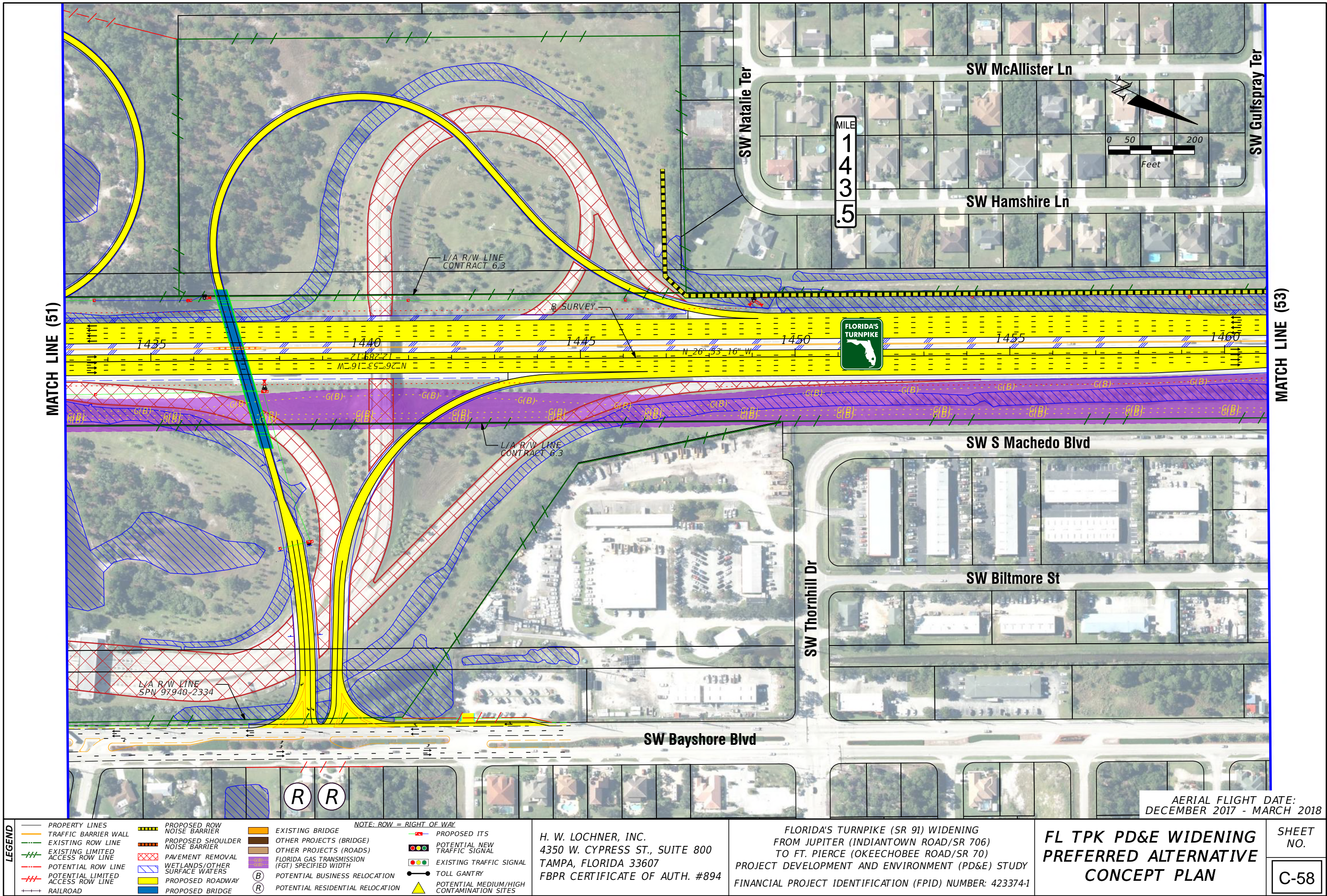
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.

C-57



LEGEND

- | | | | | |
|-------------------------------------|---------------------------------|--|--------------------------|---|
| — PROPERTY LINES | PROPOSED ROW NOISE BARRIER | EXISTING BRIDGE | NOTE: ROW = RIGHT OF WAY | PROPOSED ITS |
| — TRAFFIC BARRIER WALL | PROPOSED SHOULDER NOISE BARRIER | OTHER PROJECTS (BRIDGE) | | POTENTIAL NEW TRAFFIC SIGNAL |
| — EXISTING ROW LINE | PAVEMENT REMOVAL | OTHER PROJECTS (ROADS) | | EXISTING TRAFFIC SIGNAL |
| — EXISTING LIMITED ACCESS ROW LINE | WETLANDS/OTHER SURFACE WATERS | FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH | | TOLL GANTRY |
| — POTENTIAL ROW LINE | PROPOSED ROADWAY | POTENTIAL BUSINESS RELOCATION | | POTENTIAL MEDIUM/HIGH CONTAMINATION SITES |
| — POTENTIAL LIMITED ACCESS ROW LINE | PROPOSED BRIDGE | POTENTIAL RESIDENTIAL RELOCATION | | |
| — RAILROAD | | | | |

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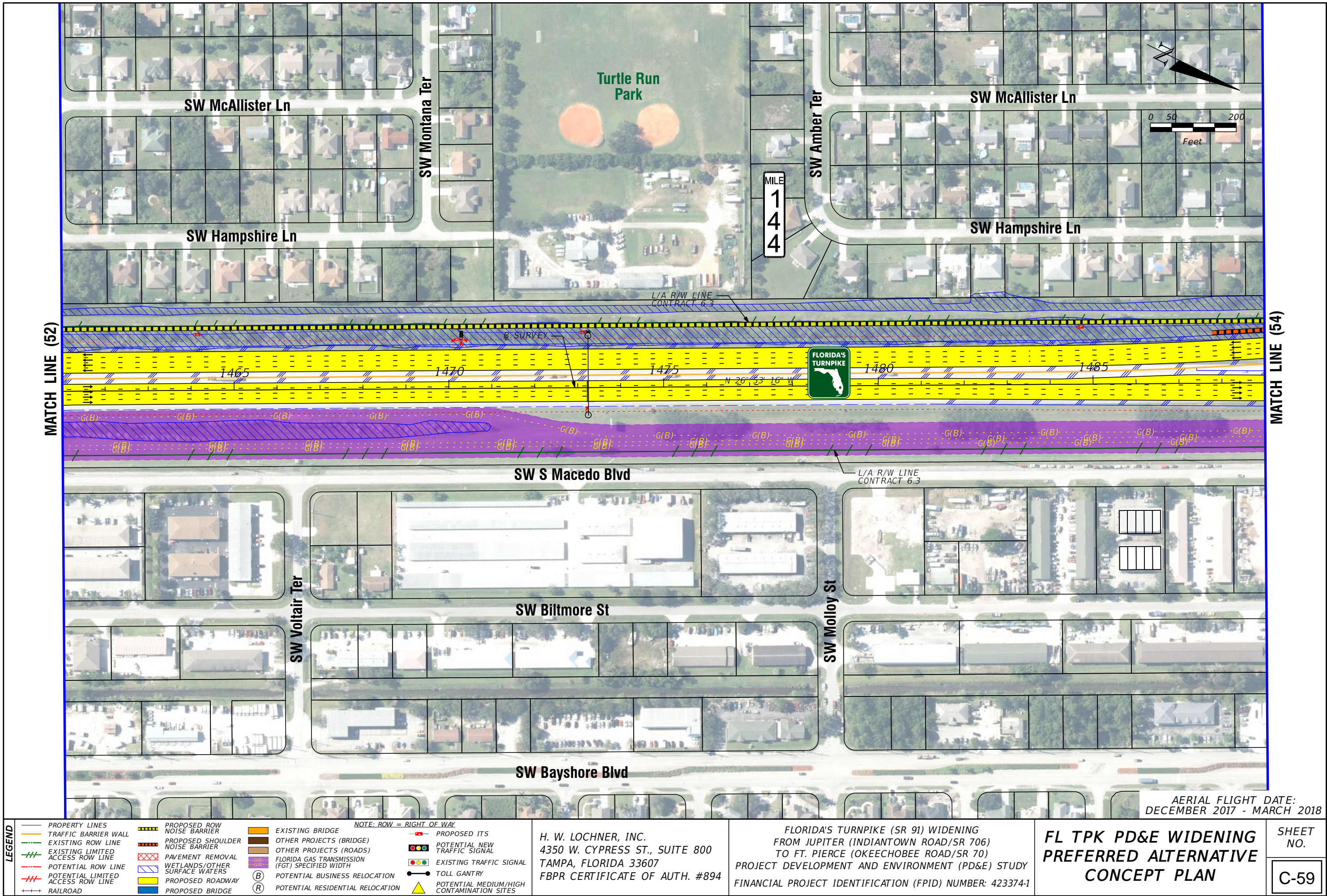
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.

C-58

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



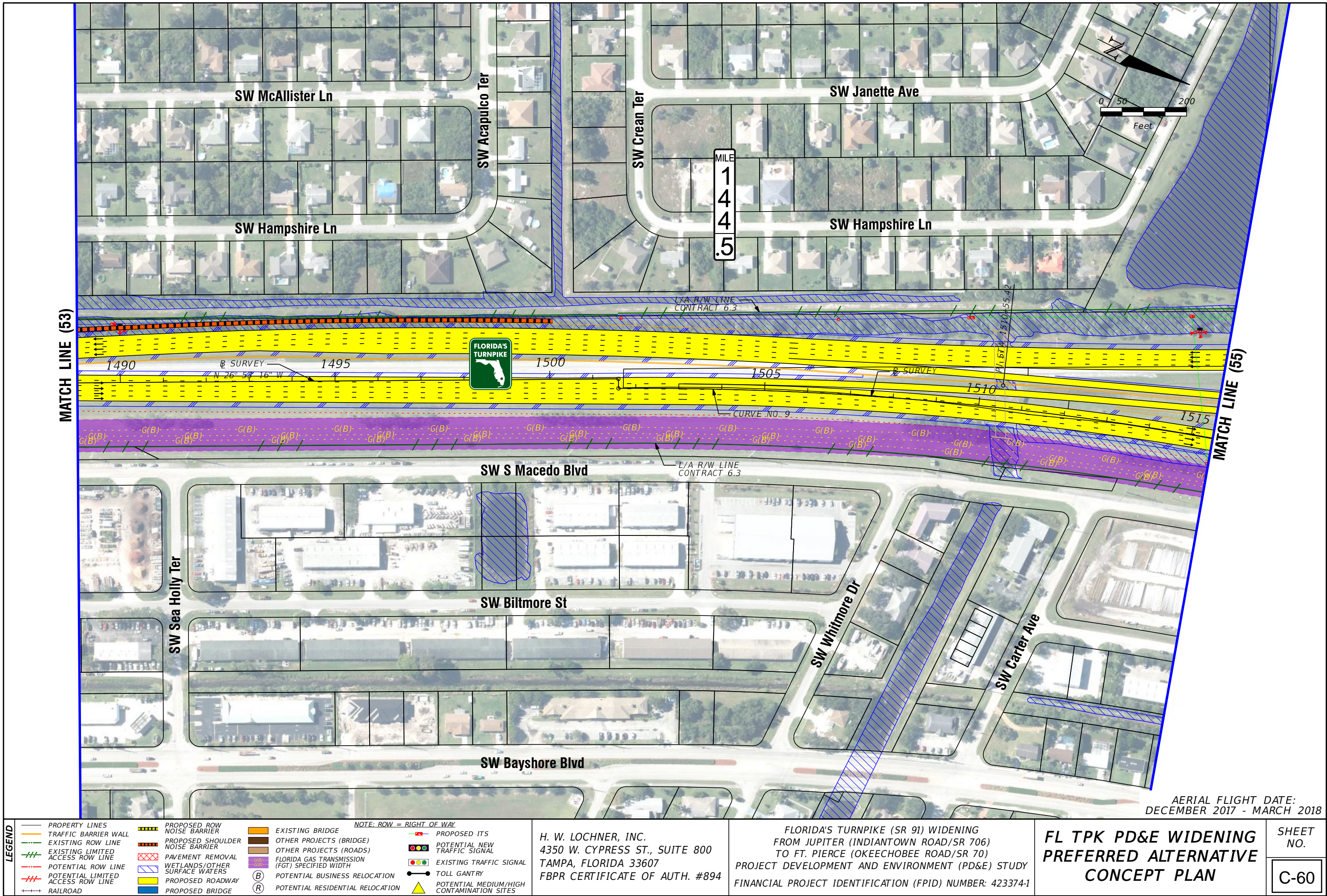
LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	
NOTE: ROW = RIGHT OF WAY			
—	EXISTING BRIDGE	—	PROPOSED ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION	—	

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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-59

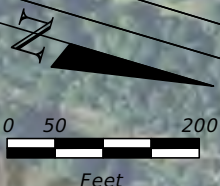


MATCH LINE (55A)

MILE
1
4
5

FUTURE MULTI-USE TRAIL

L/A R/W LINE
CONTRACT 6.3



MATCH LINE (54)

MATCH LINE (56)

PROPOSED
TOLL GANTRY

Ft. Pierce
Service
Plaza

Ft. Pierce
Service
Plaza

CURVE NO. 9
1520

1525

1530

1535

1540

SW S Macedo Blvd

SW Biltmore St

SW Grove Ave

SW Eyerly Ave

Crosstown Pkwy

PT STA. 1519+43.02

SURVEY

N 13° 21' 52" W

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION
	RAILROAD		

NOTE: ROW = RIGHT OF WAY

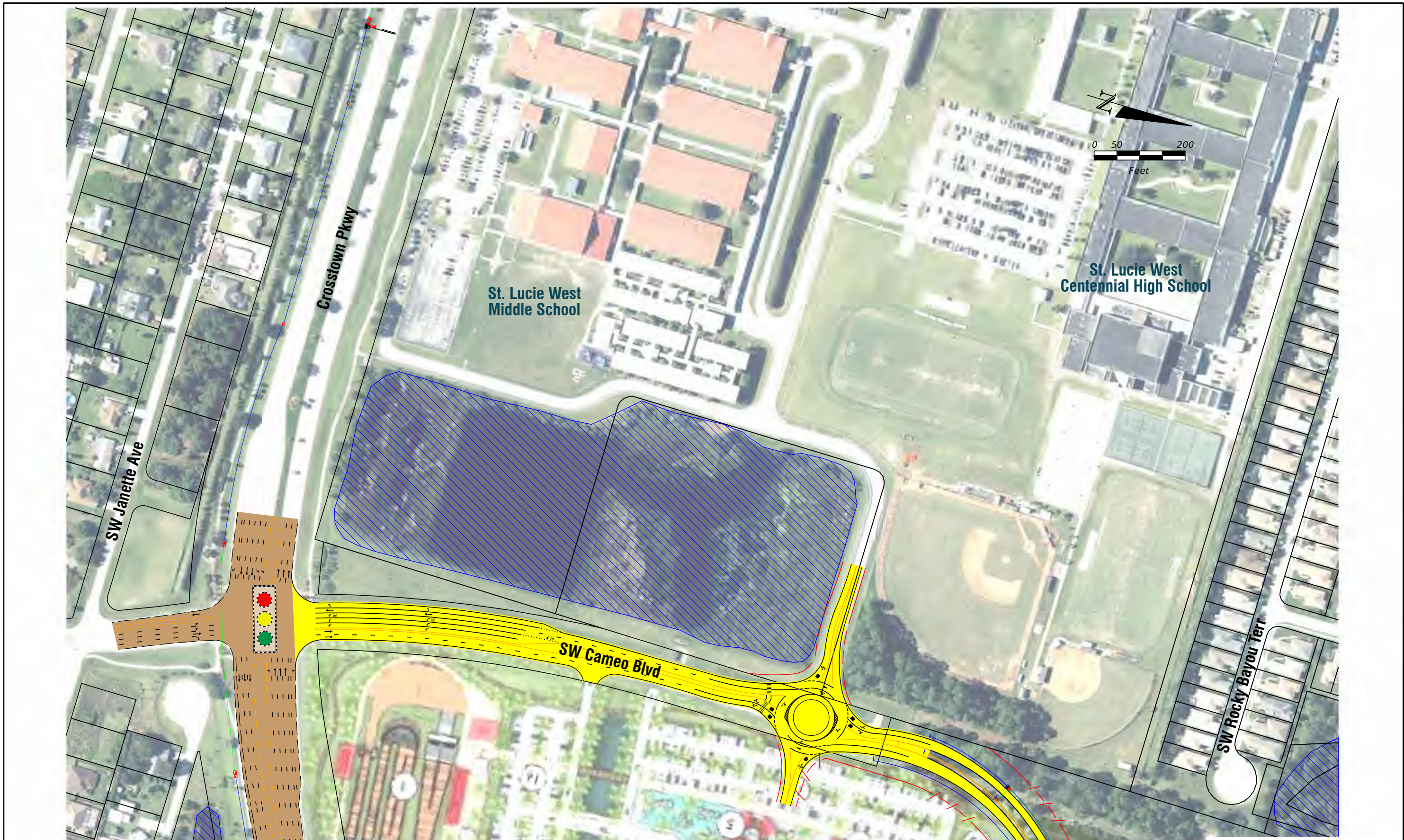
H. W. LOCHNER, INC.
4350 W. CYPRESS ST., SUITE 800
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTH. #894

FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.

C-61



St. Lucie West
Centennial High School

St. Lucie West
Middle School

Crosstown Pkwy

SW Janette Ave

SW Cameo Blvd

SW Rocky Bayou Terr

MATCH LINE (55)

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND	—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER	—	EXISTING BRIDGE
	—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER	—	OTHER PROJECTS (BRIDGE)
	—	EXISTING ROW LINE	—	PAVEMENT REMOVAL	—	OTHER PROJECTS (ROADS)
	—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS	—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
	—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY	—	POTENTIAL BUSINESS RELOCATION
	—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE	—	POTENTIAL RESIDENTIAL RELOCATION
	—	RAILROAD				

NOTE: ROW = RIGHT OF WAY

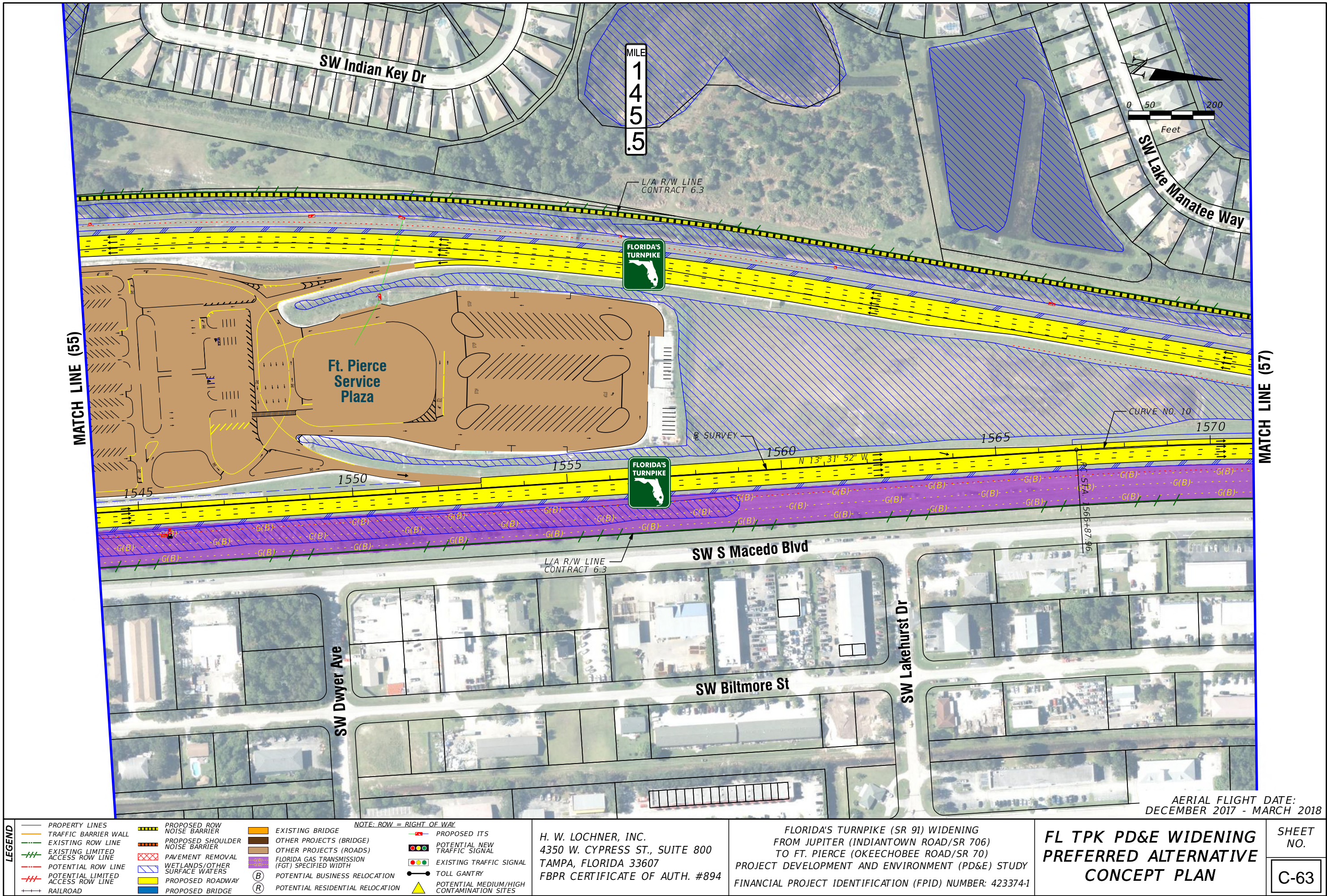
—	POTENTIAL ITS
—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING TRAFFIC SIGNAL
—	TOLL GANTRY
—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

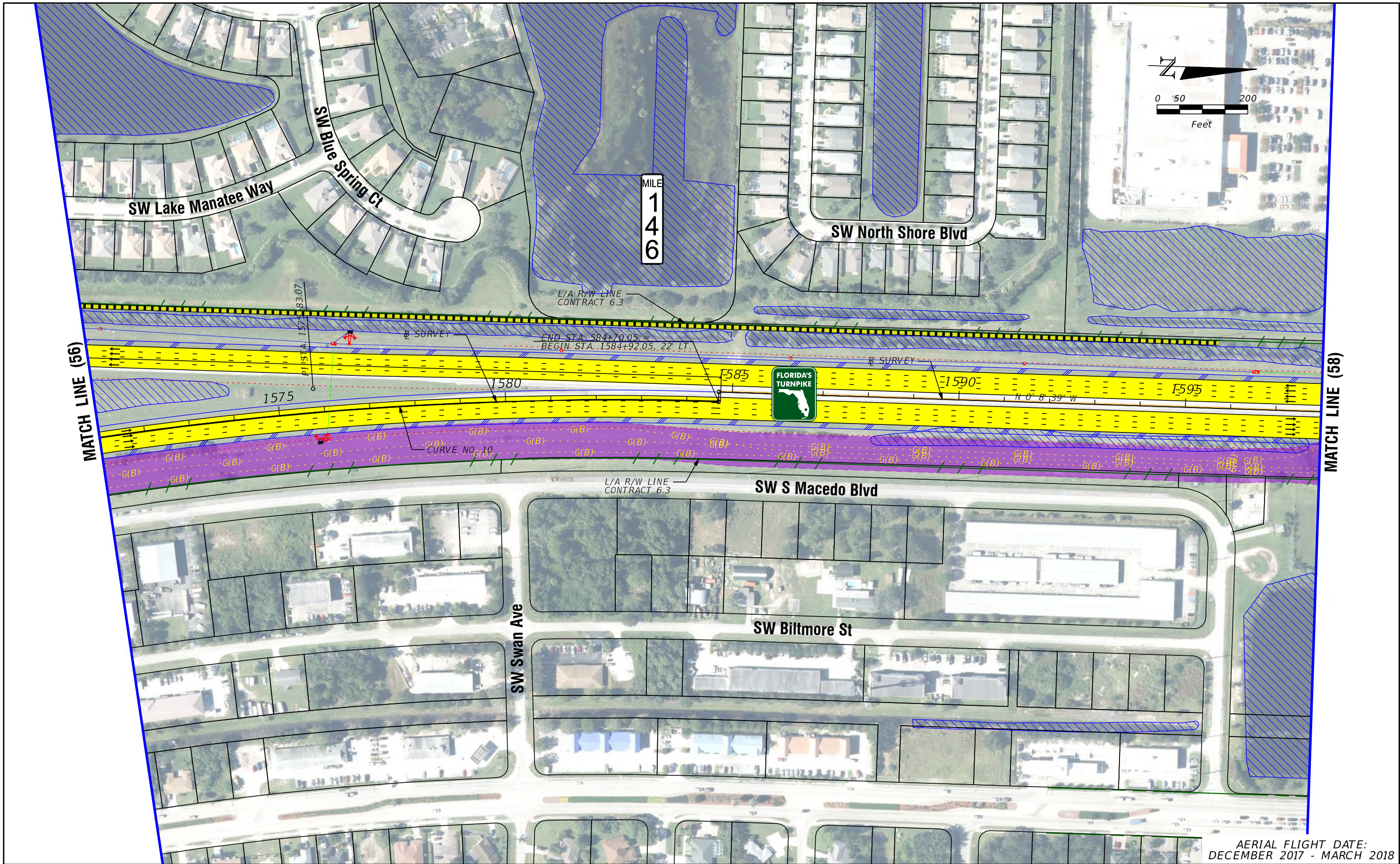
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FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.
C-62





AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	—	PROPOSED ROW NOISE BARRIER
—	TRAFFIC BARRIER WALL	—	PROPOSED SHOULDER NOISE BARRIER
—	EXISTING ROW LINE	—	PAVEMENT REMOVAL
—	EXISTING LIMITED ACCESS ROW LINE	—	WETLANDS/OTHER SURFACE WATERS
—	POTENTIAL ROW LINE	—	PROPOSED ROADWAY
—	POTENTIAL LIMITED ACCESS ROW LINE	—	PROPOSED BRIDGE
—	RAILROAD	—	

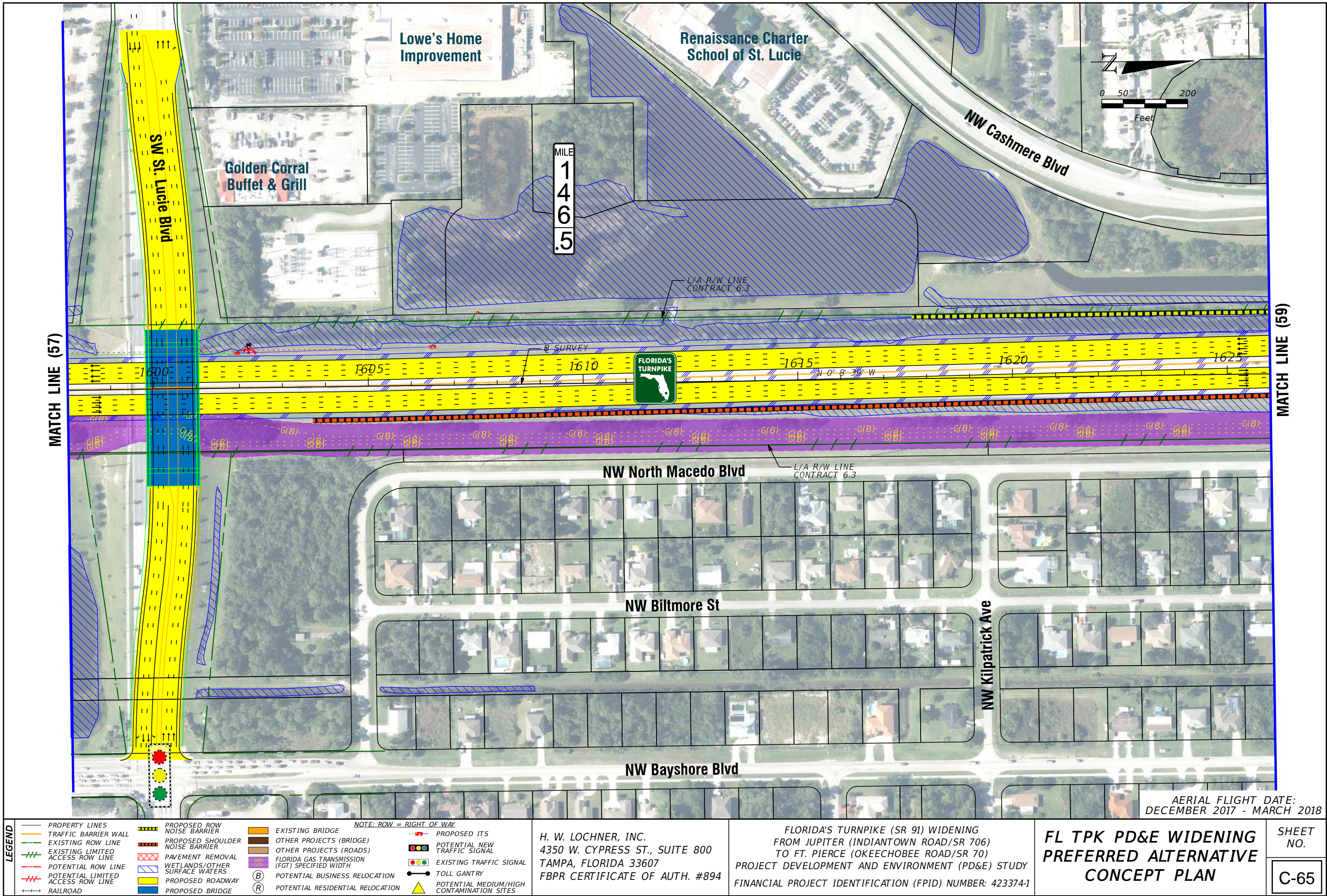
NOTE: ROW = RIGHT OF WAY

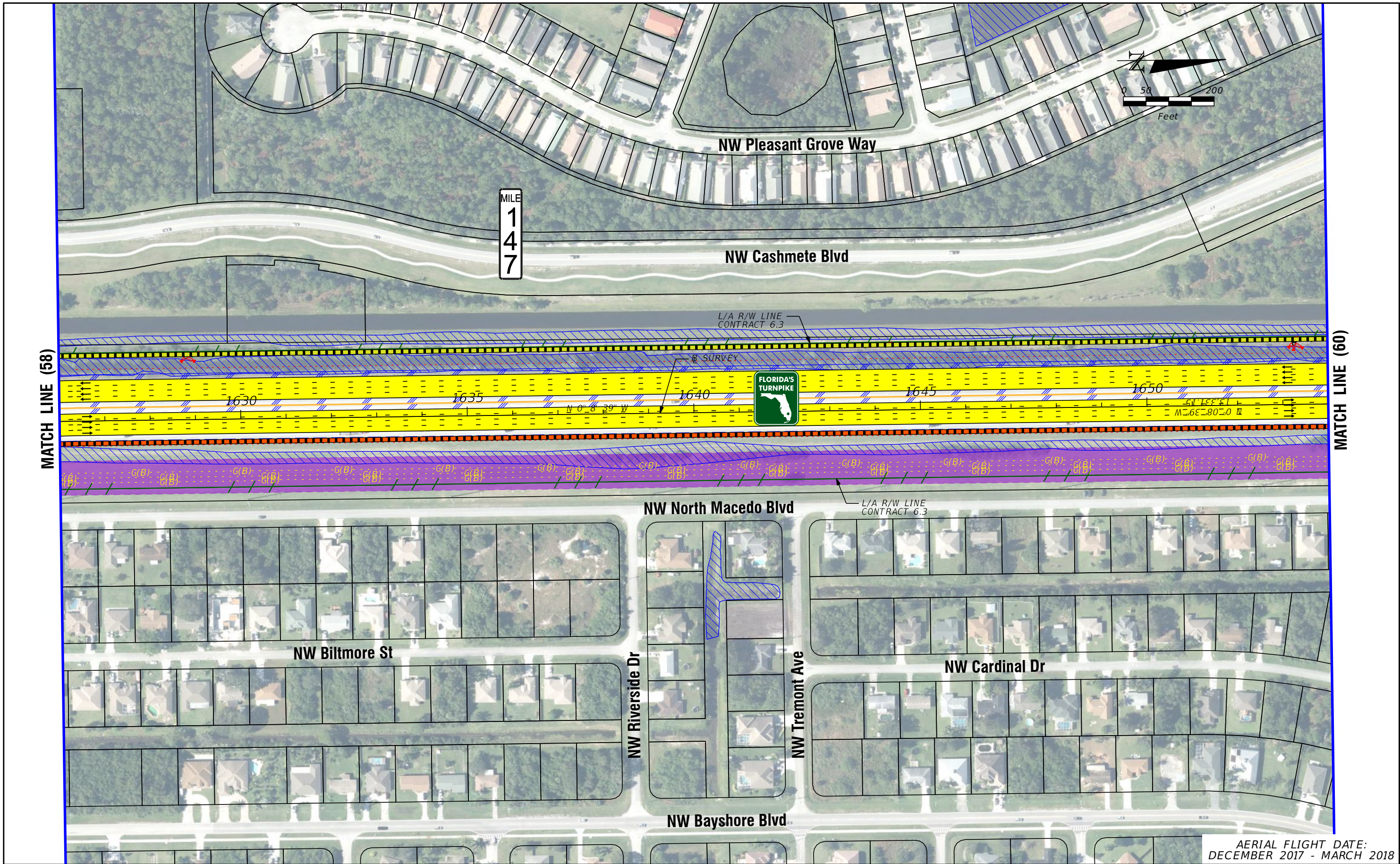
—	EXISTING BRIDGE	—	POTENTIAL ITS
—	OTHER PROJECTS (BRIDGE)	—	POTENTIAL NEW TRAFFIC SIGNAL
—	OTHER PROJECTS (ROADS)	—	EXISTING TRAFFIC SIGNAL
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	TOLL GANTRY
—	POTENTIAL BUSINESS RELOCATION	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL RESIDENTIAL RELOCATION	—	

FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-64





LEGEND	— PROPERTY LINES	— PROPOSED ROW NOISE BARRIER	— EXISTING BRIDGE	— NOTE: ROW = RIGHT OF WAY	— PROPOSED ITS
	— TRAFFIC BARRIER WALL	— PROPOSED SHOULDER NOISE BARRIER	— OTHER PROJECTS (BRIDGE)	— POTENTIAL NEW TRAFFIC SIGNAL	— EXISTING TRAFFIC SIGNAL
— EXISTING ROW LINE	— PAVEMENT REMOVAL	— OTHER PROJECTS (ROADS)	— FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	— TOLL GANTRY	— POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
— EXISTING LIMITED ACCESS ROW LINE	— WETLANDS/OTHER SURFACE WATERS	— POTENTIAL BUSINESS RELOCATION	— POTENTIAL RESIDENTIAL RELOCATION		
— POTENTIAL ROW LINE	— PROPOSED ROADWAY				
— POTENTIAL LIMITED ACCESS ROW LINE	— PROPOSED BRIDGE				
— RAILROAD					

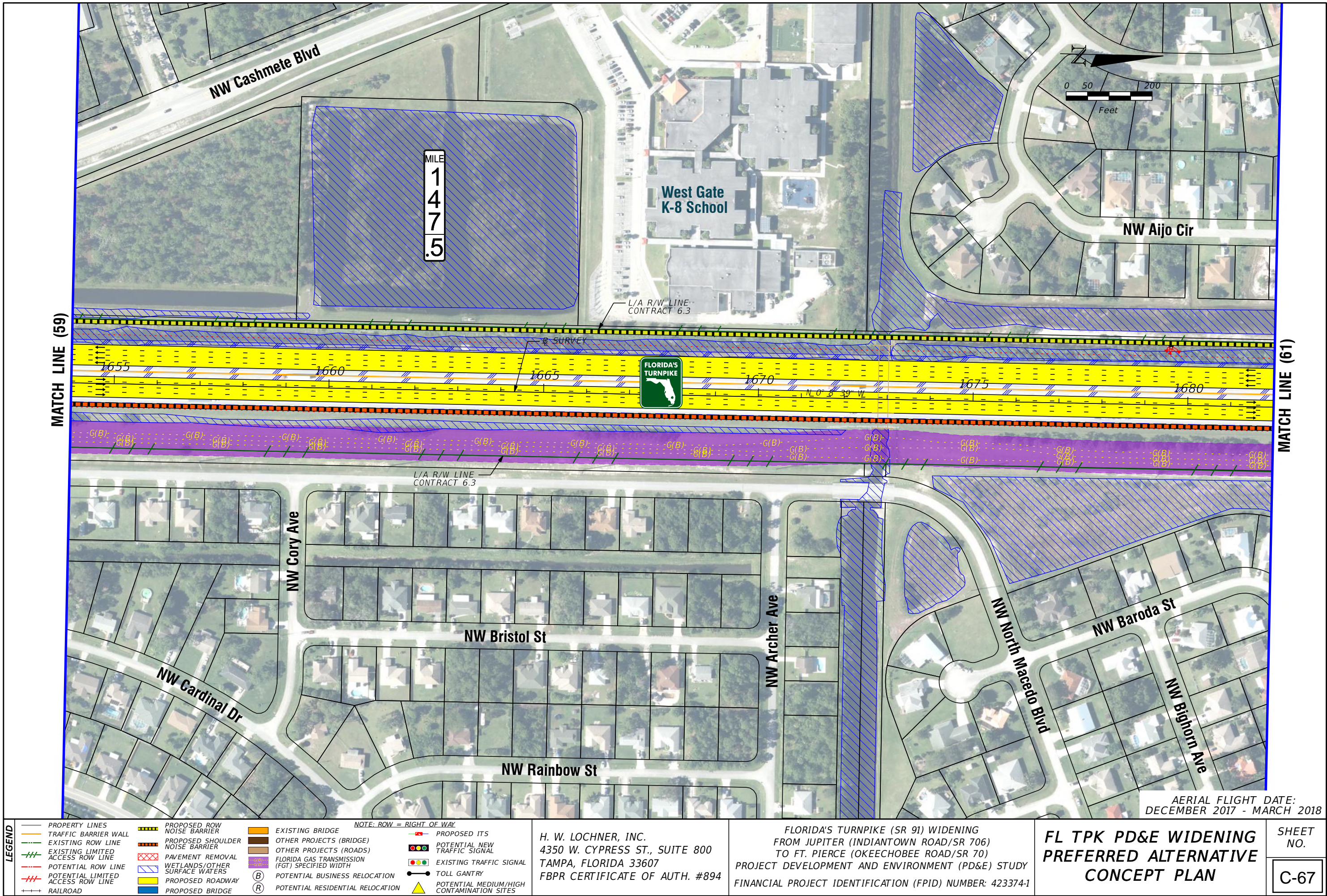
H. W. LOCHNER, INC.
4350 W. CYPRESS ST., SUITE 800
TAMPA, FLORIDA 33607
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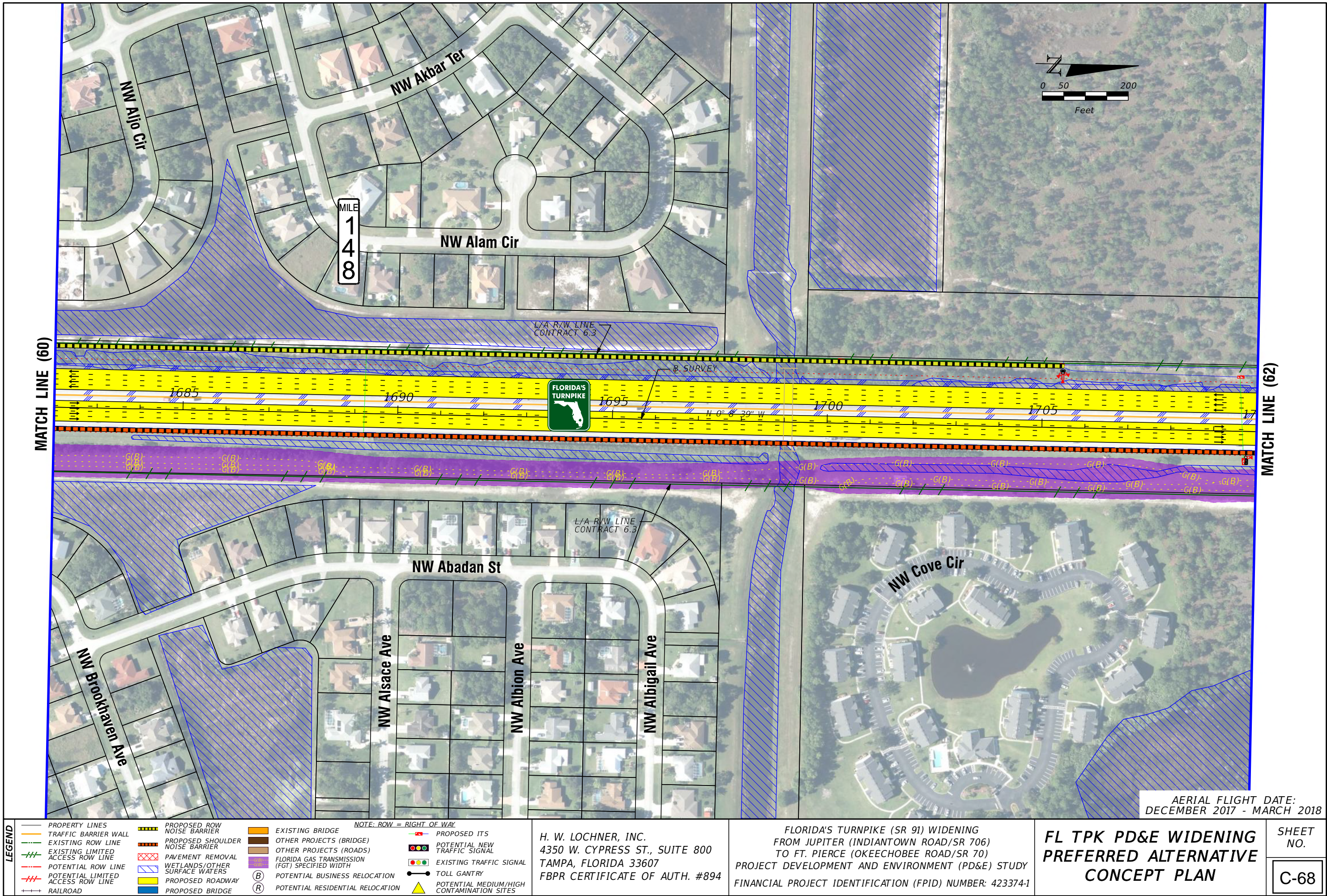
FLORIDA'S TURNPIKE (SR 91) WIDENING
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PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

SHEET NO.
C-66





LEGEND

- | | | | | |
|-----------------------------------|---------------------------------|--|--------------------------|---|
| PROPERTY LINES | PROPOSED ROW NOISE BARRIER | EXISTING BRIDGE | NOTE: ROW = RIGHT OF WAY | PROPOSED ITS |
| TRAFFIC BARRIER WALL | PROPOSED SHOULDER NOISE BARRIER | OTHER PROJECTS (BRIDGE) | | POTENTIAL NEW TRAFFIC SIGNAL |
| EXISTING ROW LINE | PAVEMENT REMOVAL | OTHER PROJECTS (ROADS) | | EXISTING TRAFFIC SIGNAL |
| EXISTING LIMITED ACCESS ROW LINE | WETLANDS/OTHER SURFACE WATERS | FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH | | TOLL GANTRY |
| POTENTIAL ROW LINE | PROPOSED ROADWAY | POTENTIAL BUSINESS RELOCATION | | POTENTIAL MEDIUM/HIGH CONTAMINATION SITES |
| POTENTIAL LIMITED ACCESS ROW LINE | PROPOSED BRIDGE | POTENTIAL RESIDENTIAL RELOCATION | | |
| RAILROAD | | | | |

H. W. LOCHNER, INC.
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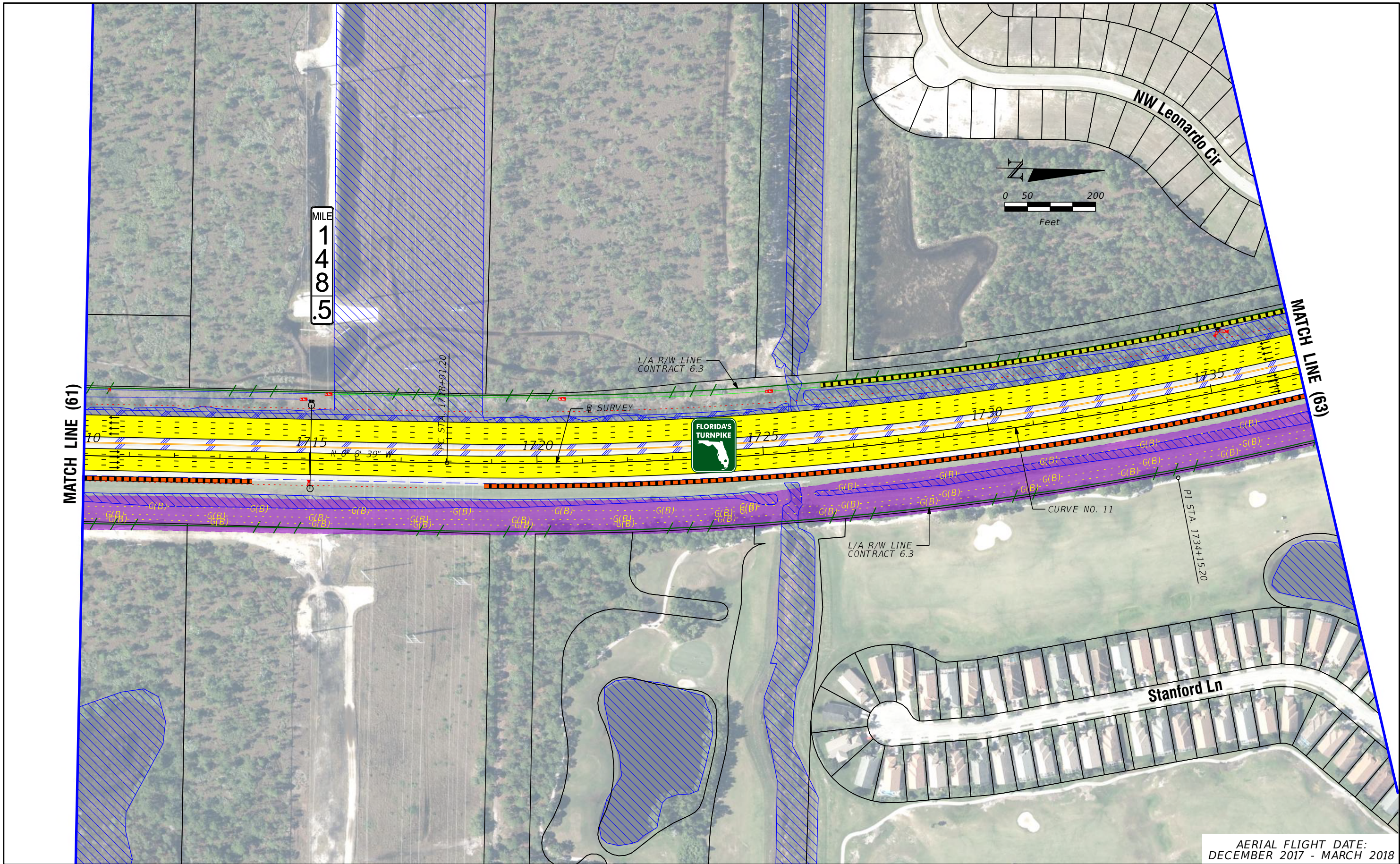
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.

C-68

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



MILE
1
4
8
.5



MATCH LINE (61)

MATCH LINE (63)



L/A R/W LINE
CONTRACT 6.3

B SURVEY

P.C. STA. 1718+01.20

N 0° 8' 39" W

1725

1720

1730

1735

CURVE NO. 11

P.I. STA. 1734+15.20

L/A R/W LINE
CONTRACT 6.3

Stanford Ln

NW Leonardo Cir

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
—	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
—	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)
—	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
—	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION
—	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION
—	RAILROAD		

NOTE: ROW = RIGHT OF WAY

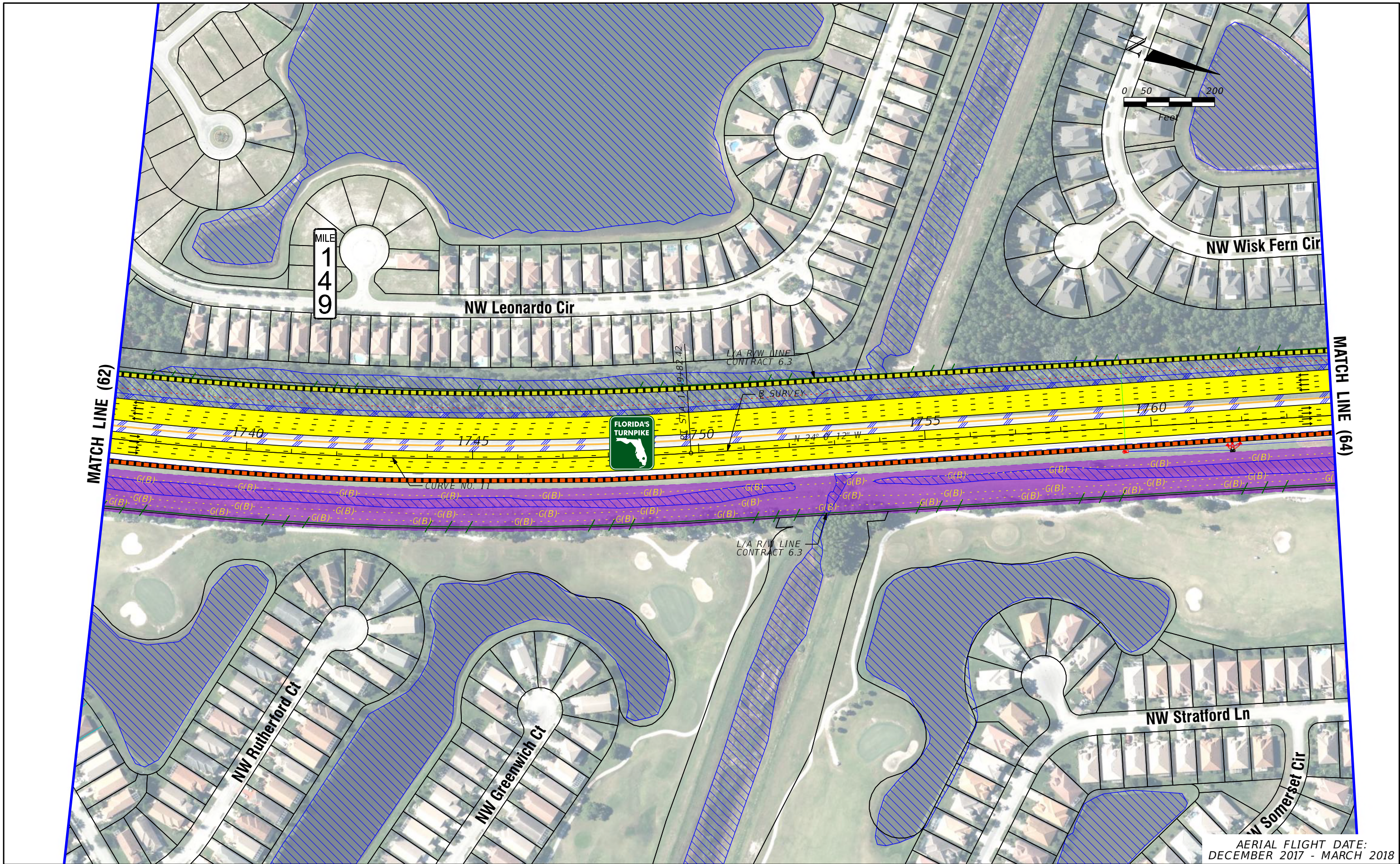
—	PROPOSED ITS
—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING TRAFFIC SIGNAL
—	TOLL GANTRY
—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

H. W. LOCHNER, INC.
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FLORIDA'S TURNPIKE (SR 91) WIDENING
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.
C-69



LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	POTENTIAL ITS
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL NEW TRAFFIC SIGNAL	EXISTING TRAFFIC SIGNAL
EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	TOLL GANTRY	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	POTENTIAL BUSINESS RELOCATION			
POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL RESIDENTIAL RELOCATION			
POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE				
RAILROAD					

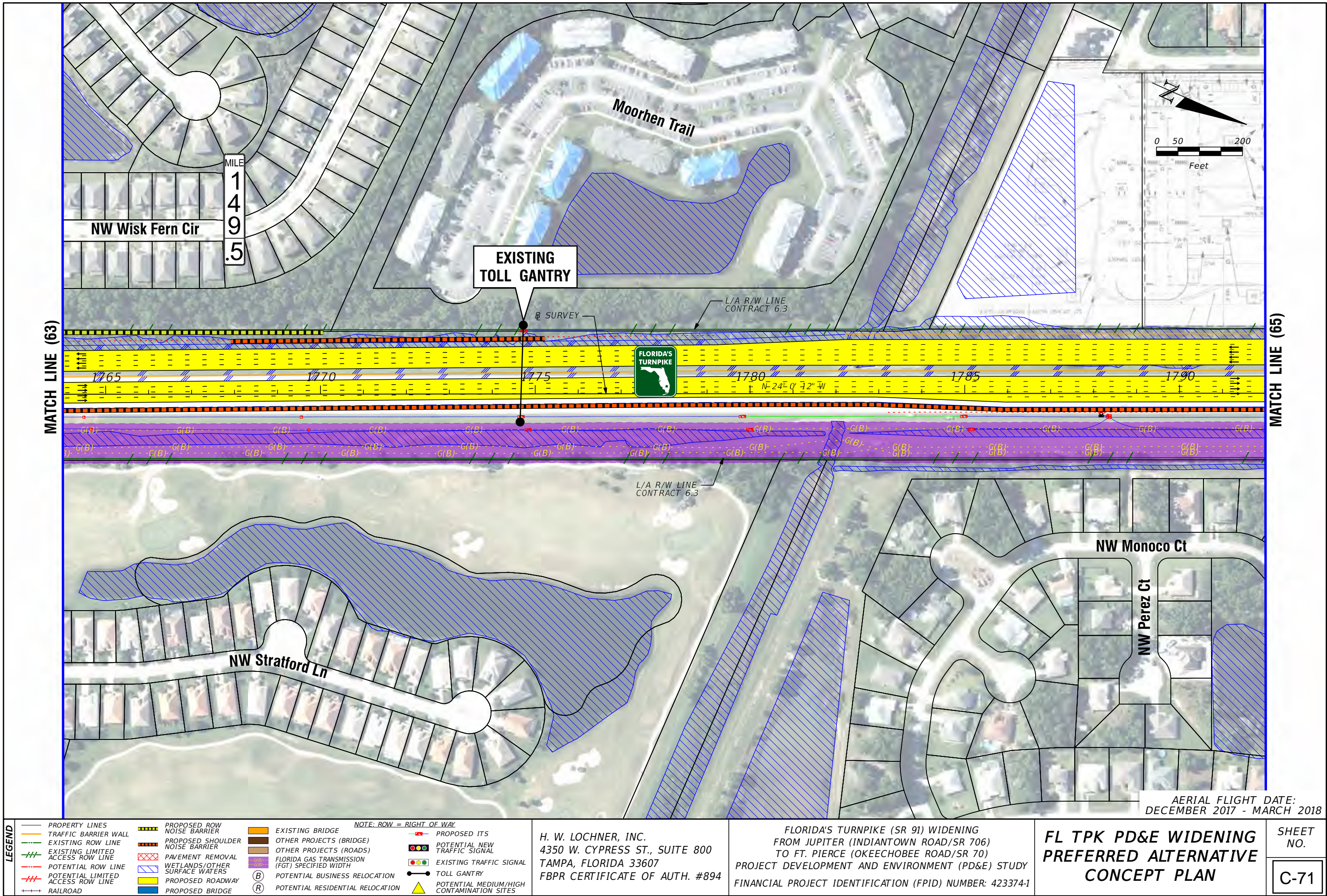
H. W. LOCHNER, INC.
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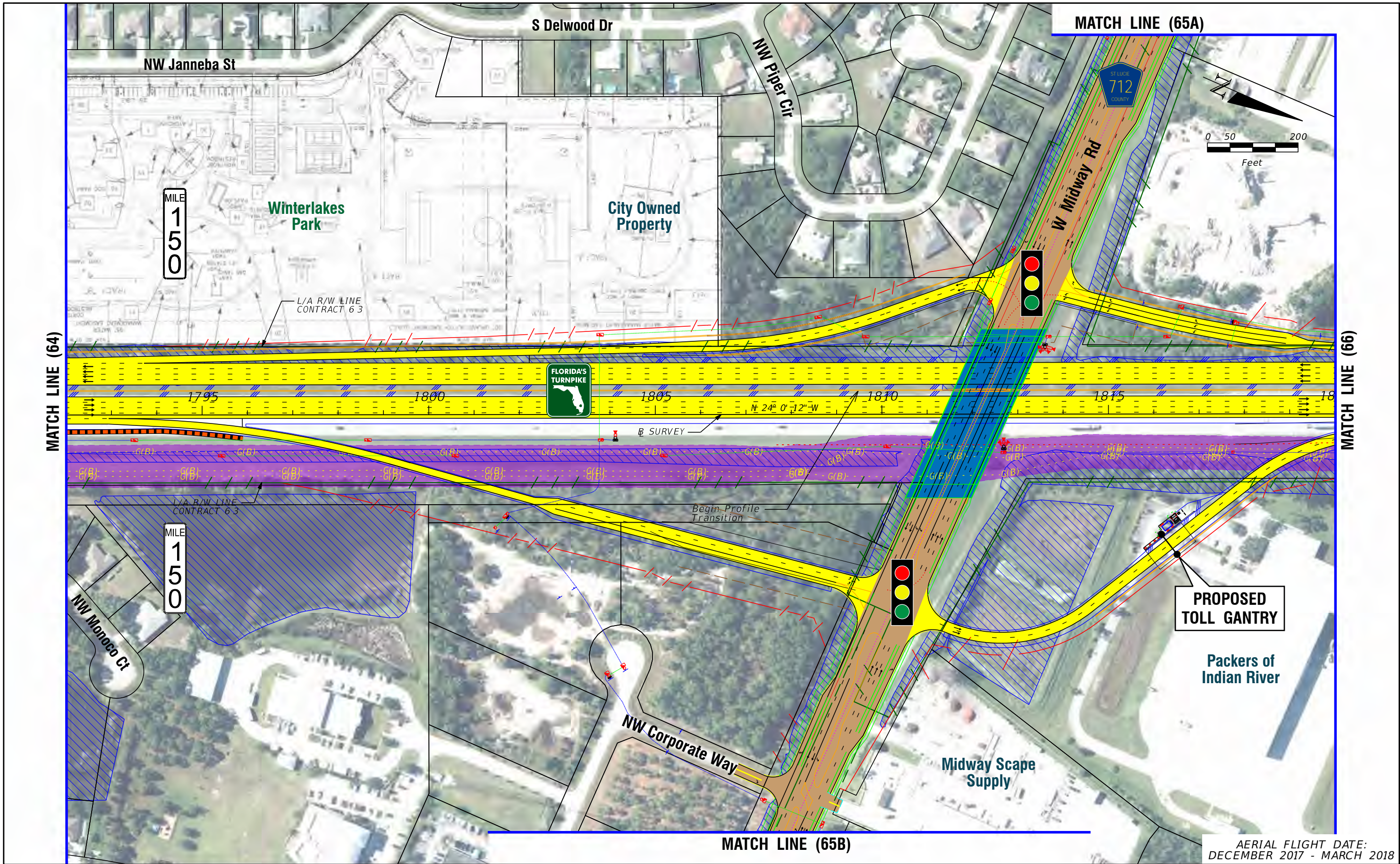
FLORIDA'S TURNPIKE (SR 91) WIDENING
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

**FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN**

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

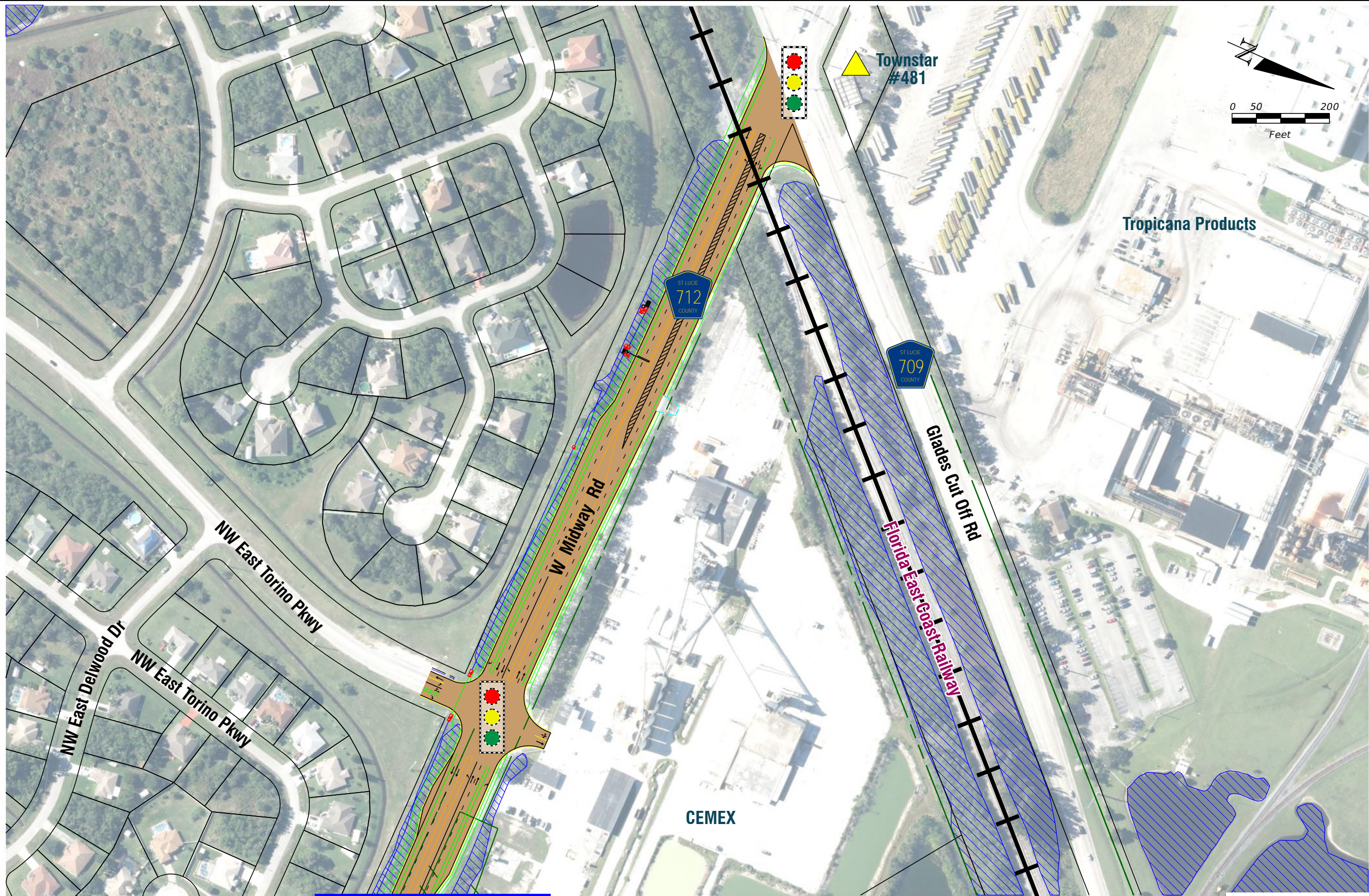
SHEET NO.
C-70





LEGEND — PROPERTY LINES — TRAFFIC BARRIER WALL — EXISTING ROW LINE — EXISTING LIMITED ACCESS ROW LINE — POTENTIAL ROW LINE — POTENTIAL LIMITED ACCESS ROW LINE — RAILROAD	PROPOSED ROW NOISE BARRIER PROPOSED SHOULDER NOISE BARRIER PAVEMENT REMOVAL WETLANDS/OTHER SURFACE WATERS PROPOSED ROADWAY PROPOSED BRIDGE	NOTE: ROW = RIGHT OF WAY EXISTING BRIDGE OTHER PROJECTS (BRIDGE) OTHER PROJECTS (ROADS) FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH POTENTIAL BUSINESS RELOCATION POTENTIAL RESIDENTIAL RELOCATION	PROPOSED ITS POTENTIAL NEW TRAFFIC SIGNAL EXISTING TRAFFIC SIGNAL TOLL GANTRY POTENTIAL MEDIUM/HIGH CONTAMINATION SITES	H. W. LOCHNER, INC. 4350 W. CYPRESS ST., SUITE 800 TAMPA, FLORIDA 33607 FBPR CERTIFICATE OF AUTH. #894	FLORIDA'S TURNPIKE (SR 91) WIDENING FROM JUPITER (INDIANTOWN ROAD/SR 706) TO FT. PIERCE (OKEECHOBEE ROAD/SR 70) PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1	FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN	SHEET NO. C-72
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AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND			
—	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
—	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
—	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)
—	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
—	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION
—	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION
—	RAILROAD		

NOTE: ROW = RIGHT OF WAY

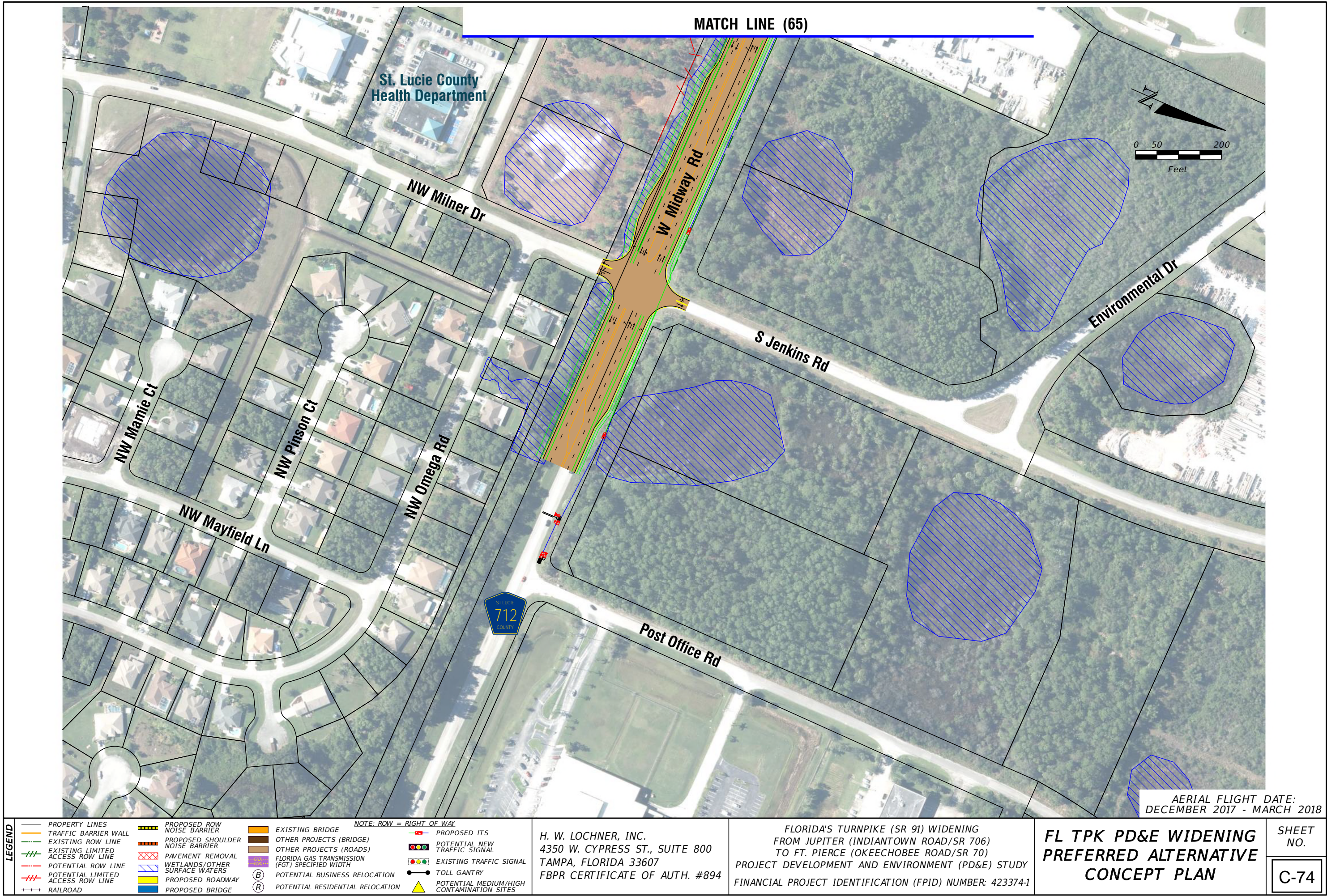
PROPOSED ITS
POTENTIAL NEW TRAFFIC SIGNAL
EXISTING TRAFFIC SIGNAL
TOLL GANTRY
POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

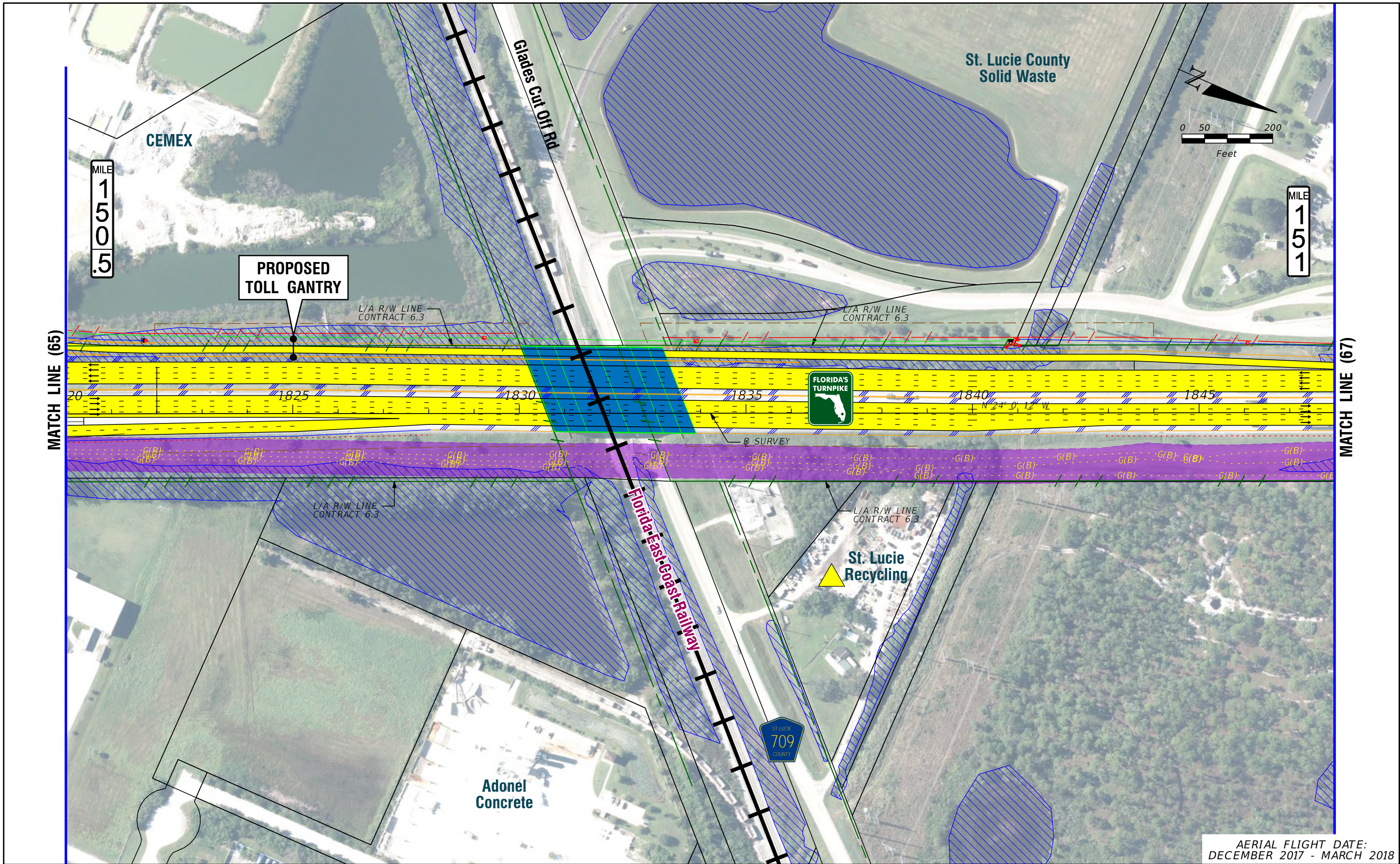
H. W. LOCHNER, INC.
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-73





AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

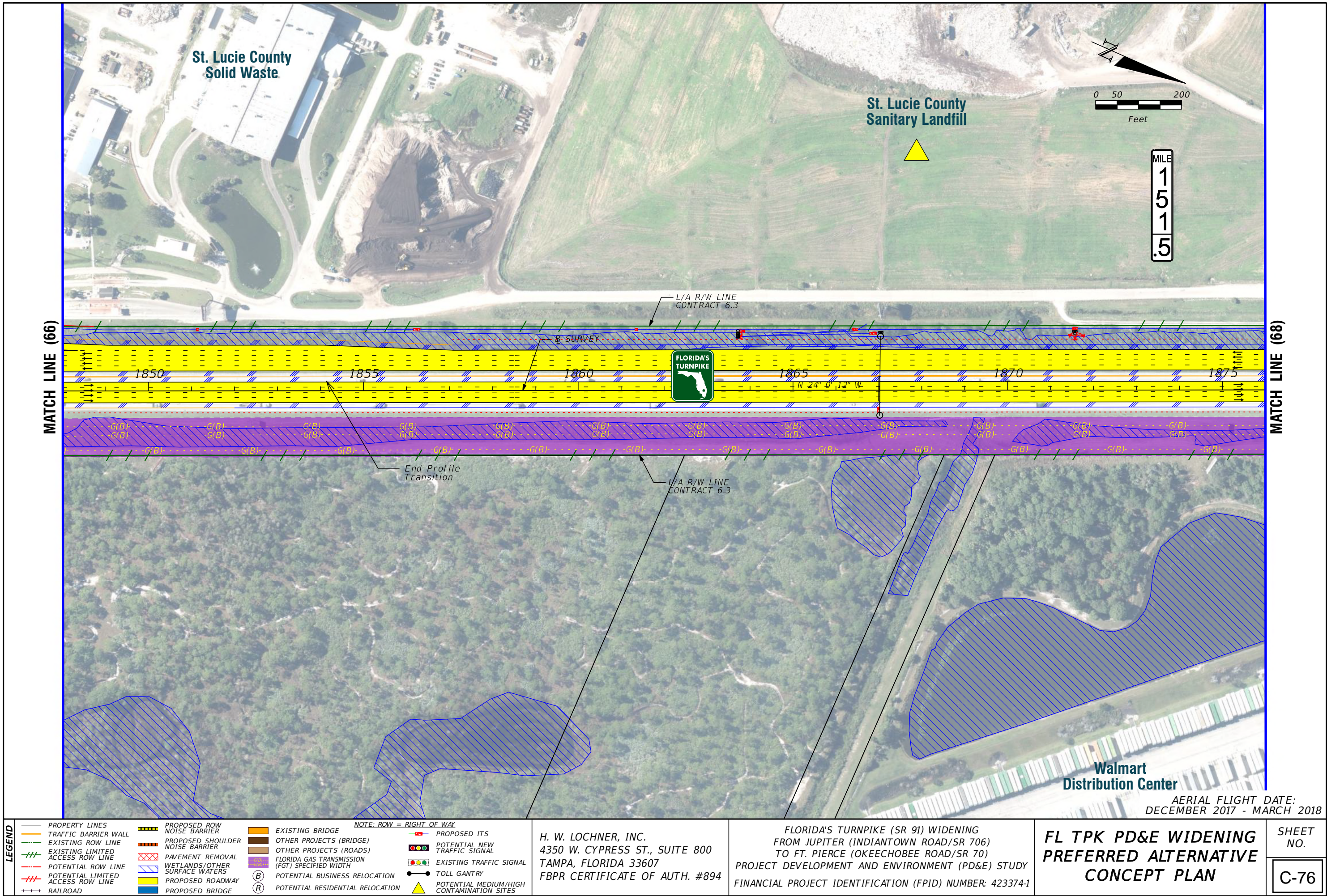
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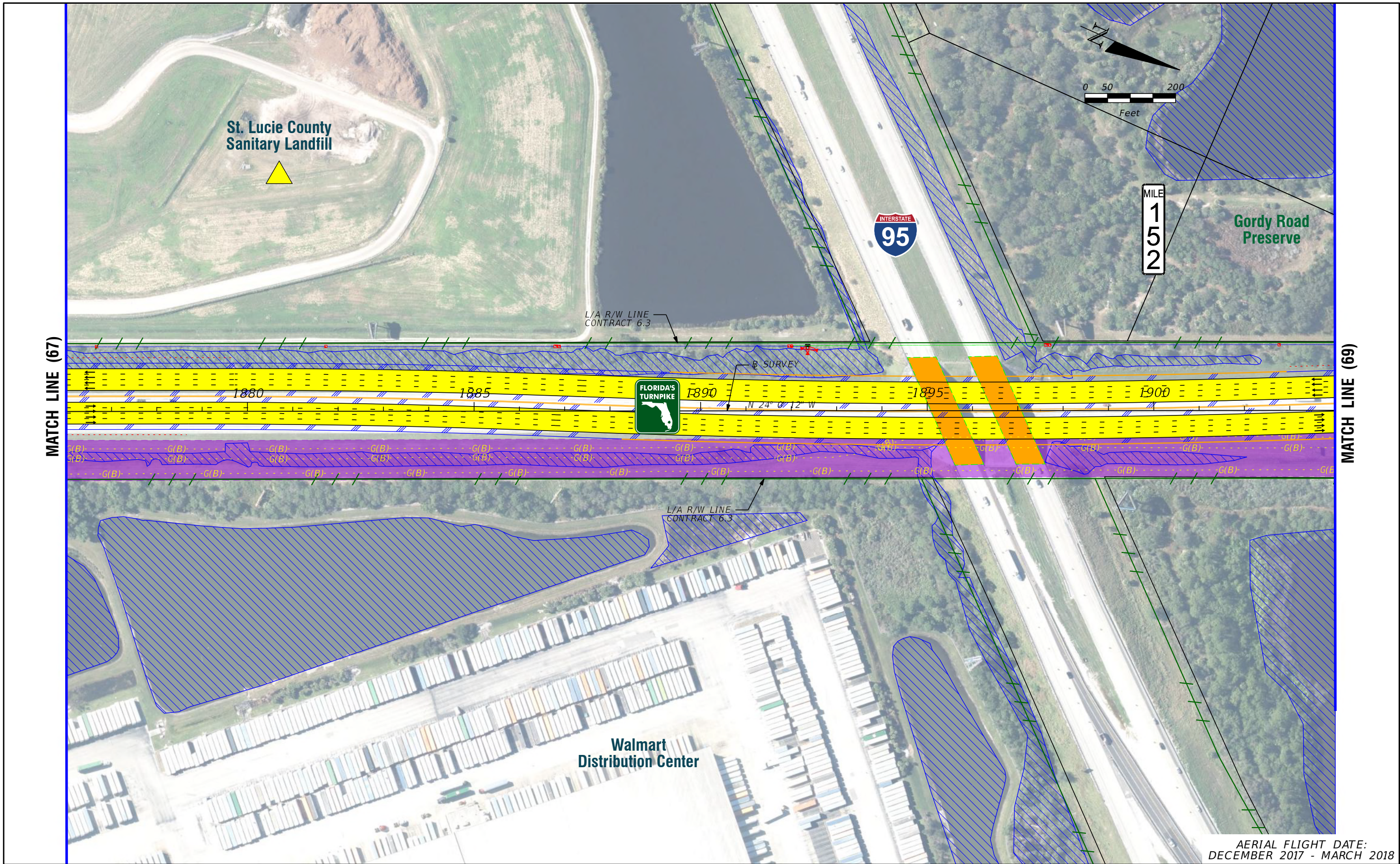
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.

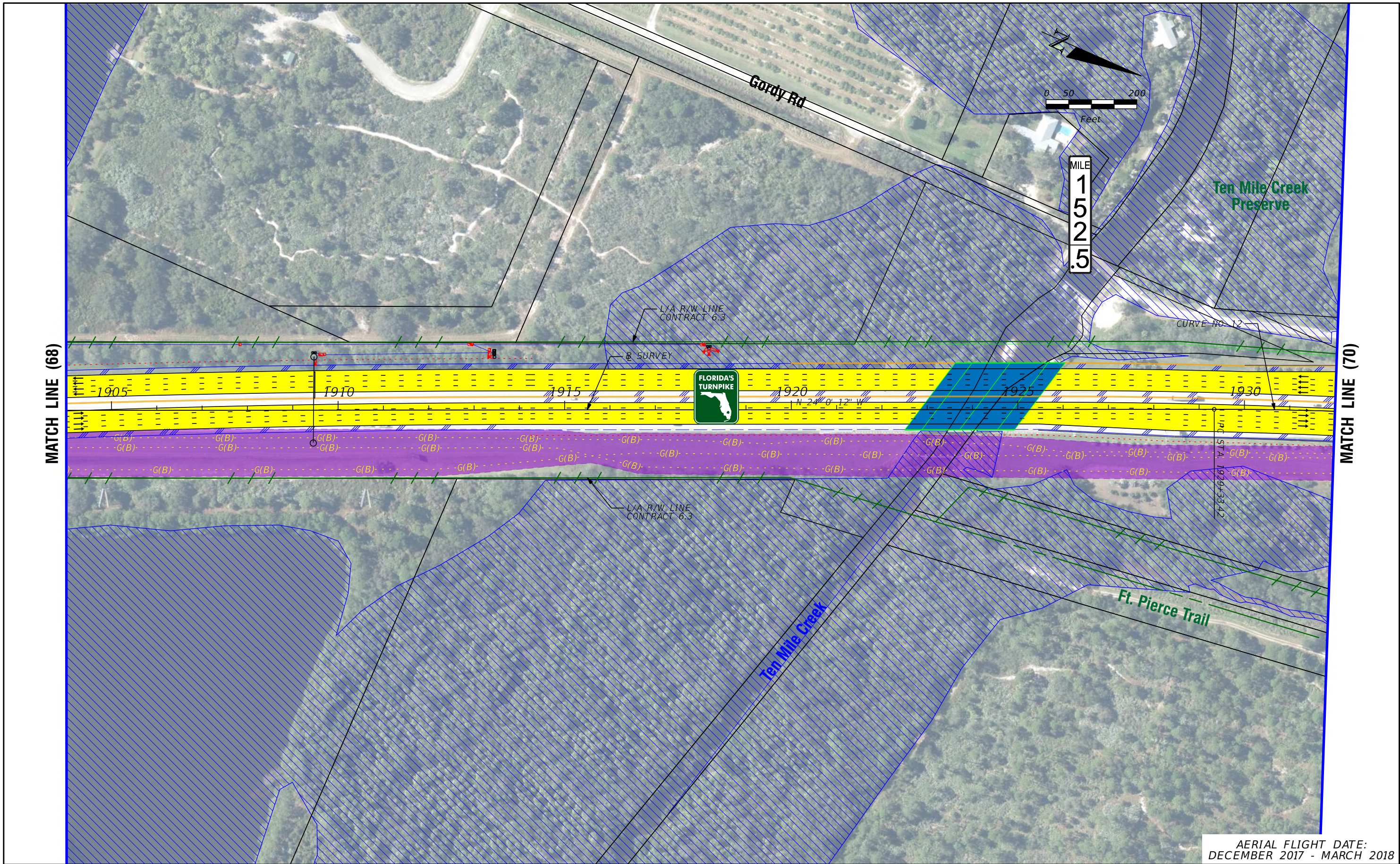
C-75





AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY		H. W. LOCHNER, INC. 4350 W. CYPRESS ST., SUITE 800 TAMPA, FLORIDA 33607 FBPR CERTIFICATE OF AUTH. #894	FLORIDA'S TURNPIKE (SR 91) WIDENING FROM JUPITER (INDIANTOWN ROAD/SR 706) TO FT. PIERCE (OKEECHOBEE ROAD/SR 70) PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1	FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN	SHEET NO. <div>C-77</div>
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL NEW TRAFFIC SIGNAL	POTENTIAL ITS				
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	EXISTING TRAFFIC SIGNAL	EXISTING LIMITED ACCESS ROW LINE				
	POTENTIAL ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	TOLL GANTRY	POTENTIAL LIMITED ACCESS ROW LINE				
	RAILROAD	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES					
		PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION						



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)
EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	
EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	
POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION	
POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION	
RAILROAD			

NOTE: ROW = RIGHT OF WAY

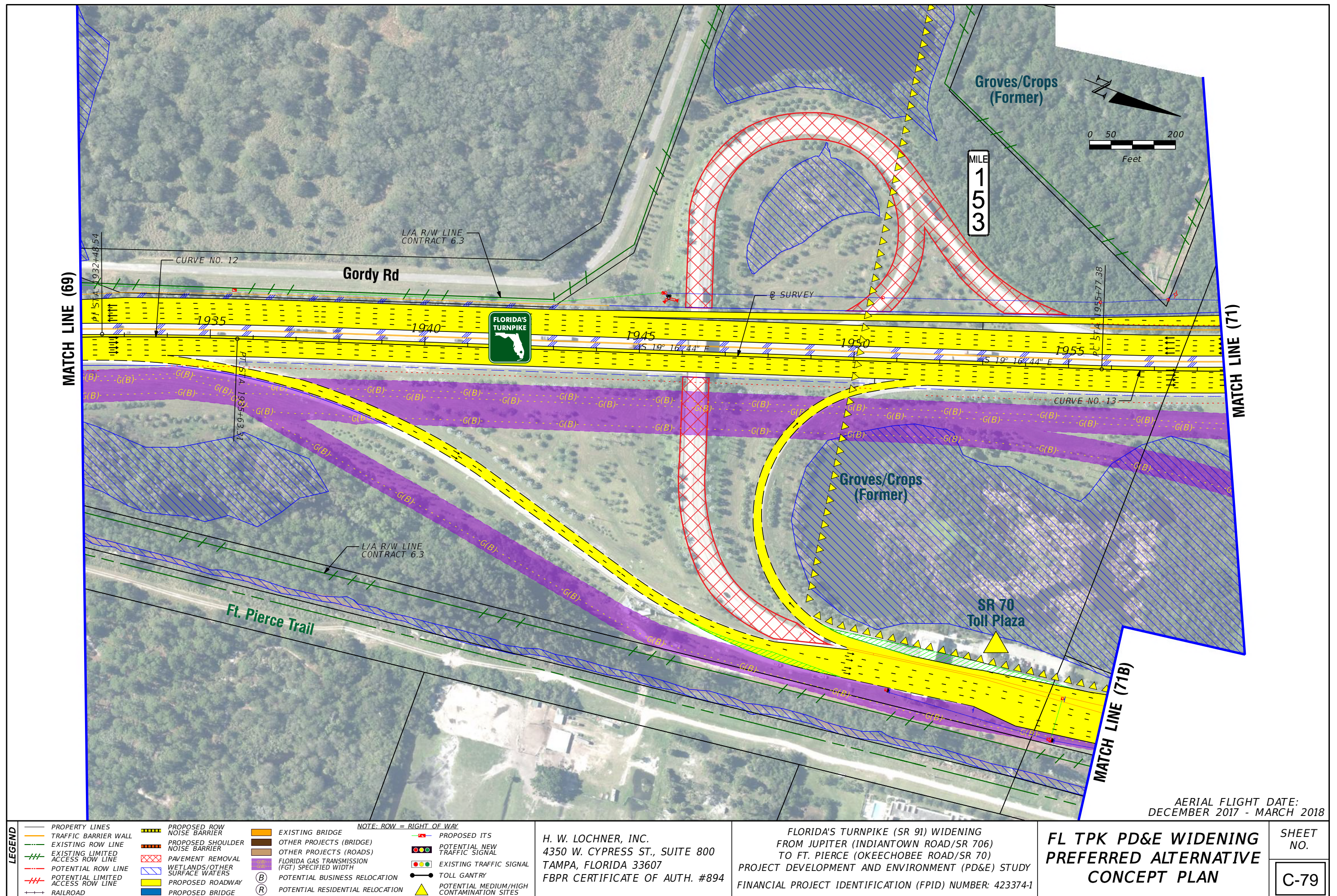
PROPOSED ITS
POTENTIAL NEW TRAFFIC SIGNAL
EXISTING TRAFFIC SIGNAL
TOLL GANTRY
POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

H. W. LOCHNER, INC.
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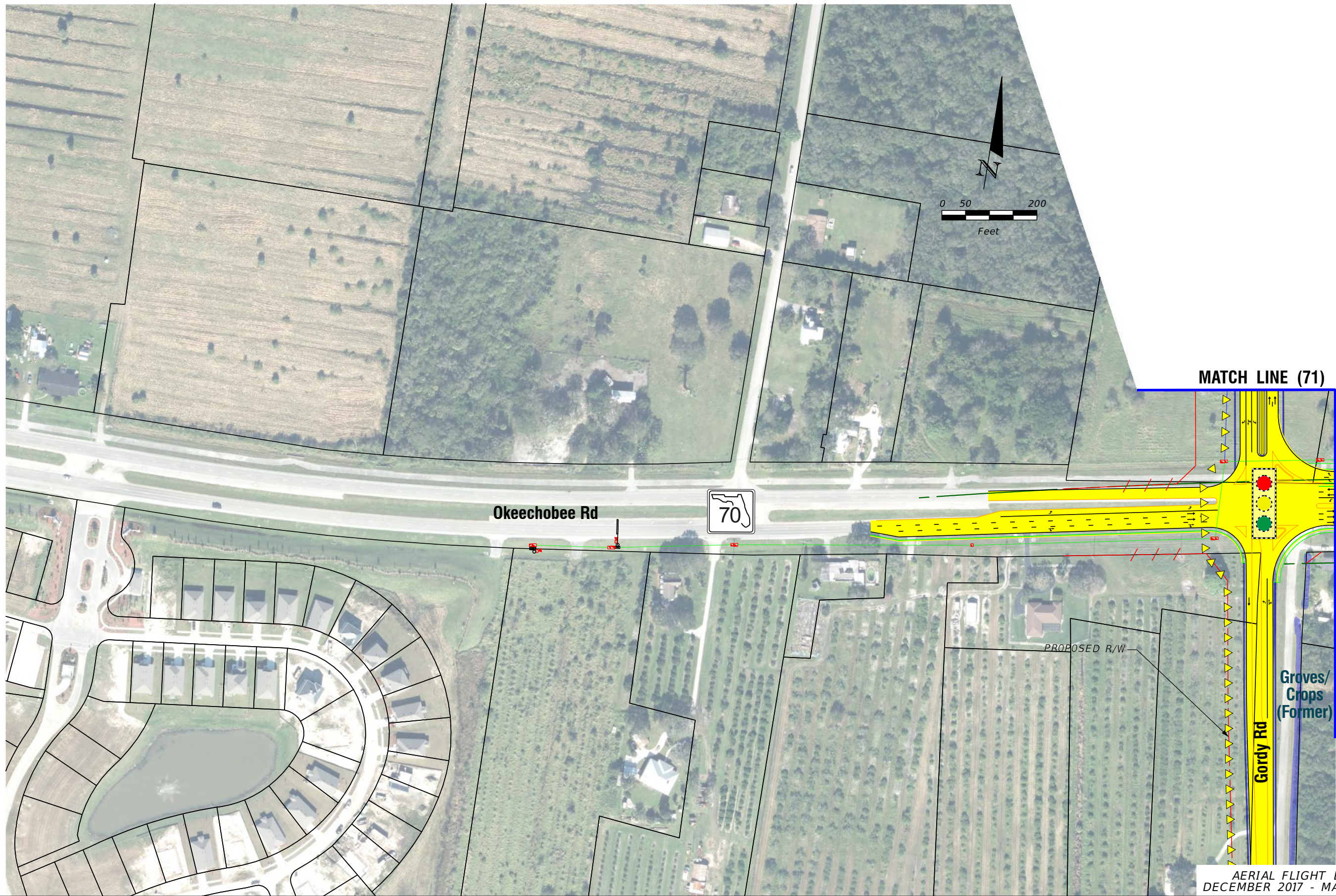
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FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET NO.
C-78







AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND		NOTE: ROW = RIGHT OF WAY	
—	PROPERTY LINES	—	PROPOSED ITS
—	TRAFFIC BARRIER WALL	—	POTENTIAL NEW TRAFFIC SIGNAL
—	EXISTING ROW LINE	—	EXISTING TRAFFIC SIGNAL
—	EXISTING LIMITED ACCESS ROW LINE	—	TOLL GANTRY
—	POTENTIAL ROW LINE	—	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
—	POTENTIAL LIMITED ACCESS ROW LINE	—	
—	RAILROAD	—	
—	PROPOSED ROW NOISE BARRIER	—	
—	PROPOSED SHOULDER NOISE BARRIER	—	
—	PAVEMENT REMOVAL	—	
—	WETLANDS/OTHER SURFACE WATERS	—	
—	PROPOSED ROADWAY	—	
—	PROPOSED BRIDGE	—	
—	EXISTING BRIDGE	—	
—	OTHER PROJECTS (BRIDGE)	—	
—	OTHER PROJECTS (ROADS)	—	
—	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	—	
—	POTENTIAL BUSINESS RELOCATION	—	
—	POTENTIAL RESIDENTIAL RELOCATION	—	

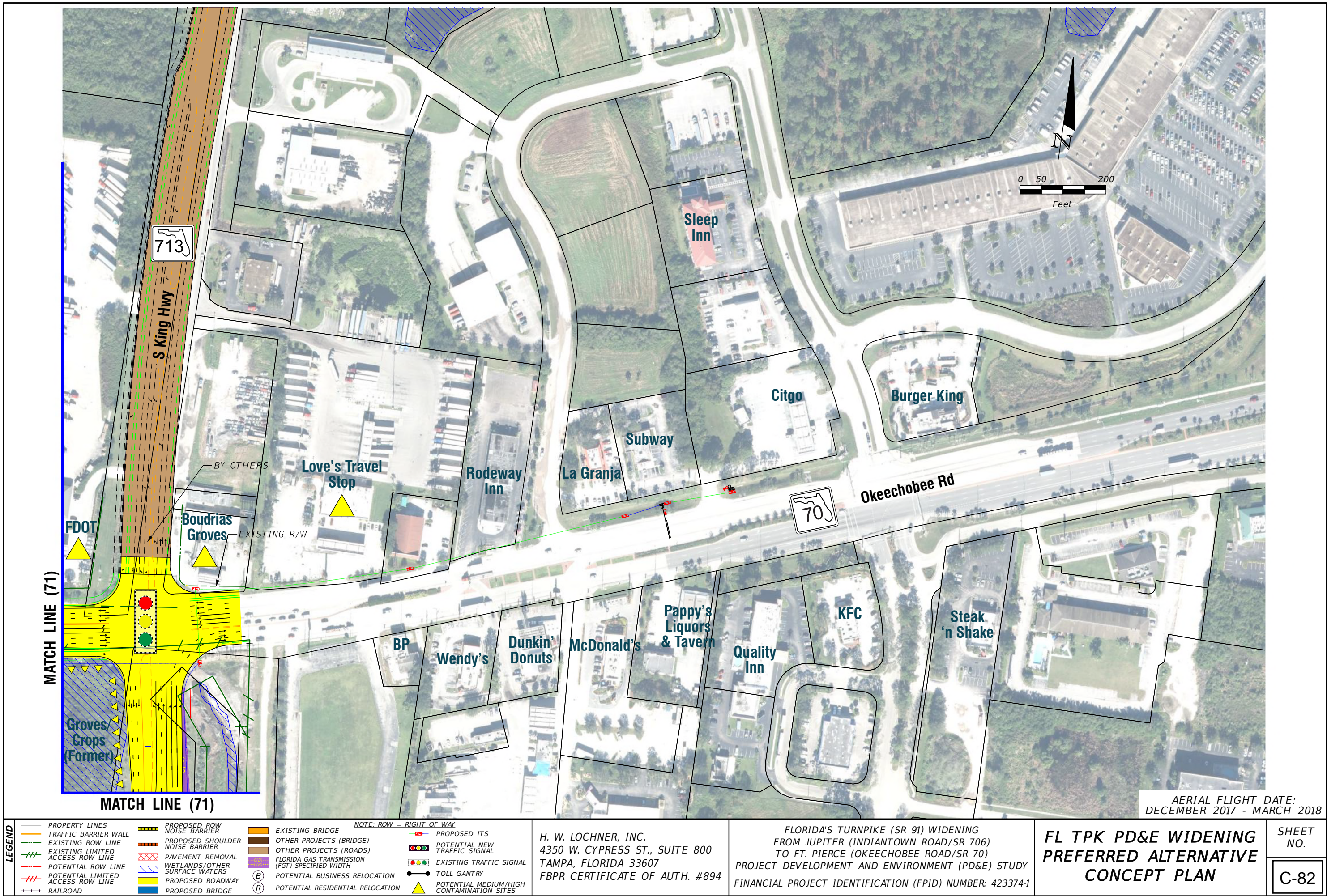
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TAMPA, FLORIDA 33607
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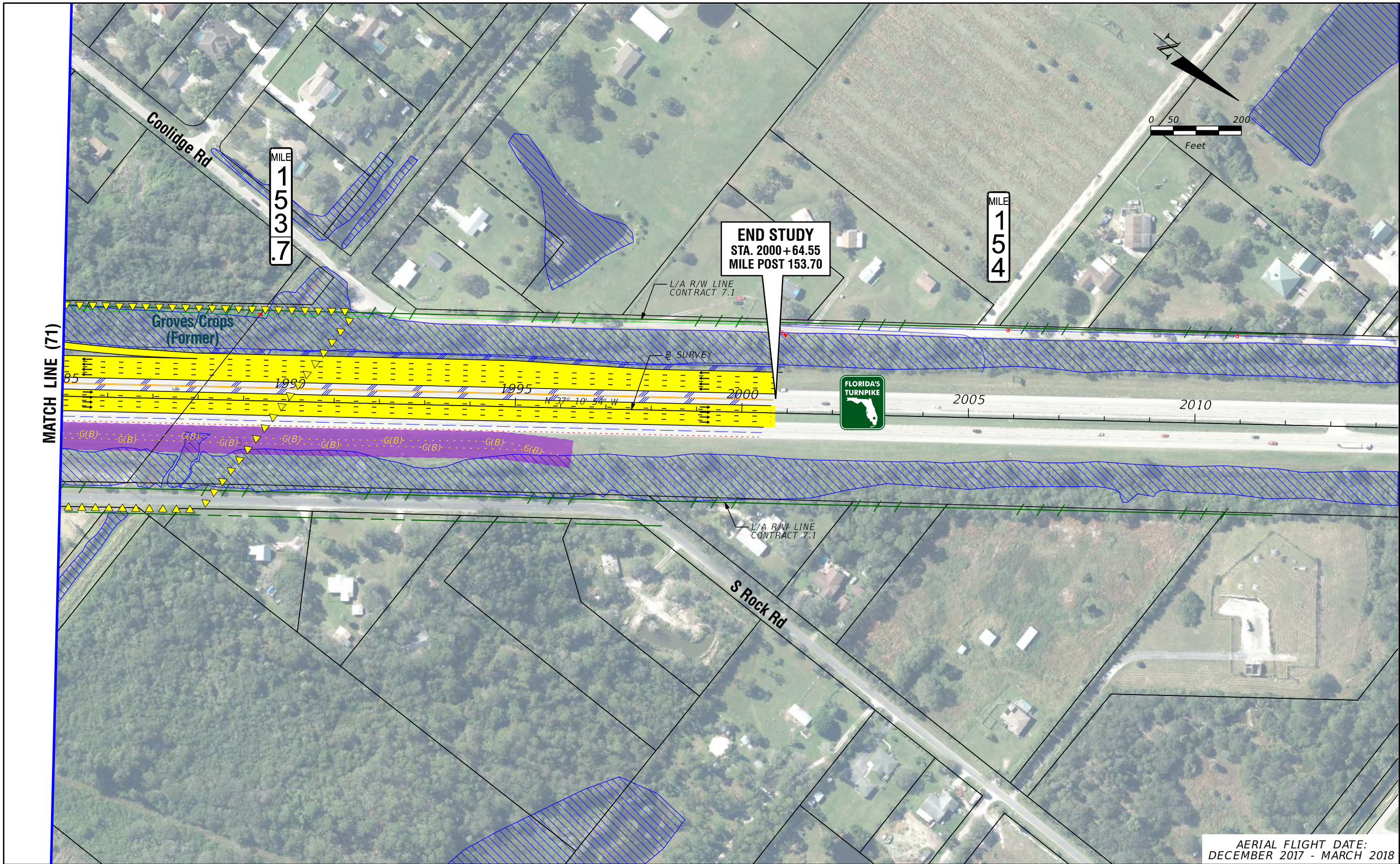
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.

C-81





AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND	PROPERTY LINES	PROPOSED ROW NOISE BARRIER	EXISTING BRIDGE	NOTE: ROW = RIGHT OF WAY	
	TRAFFIC BARRIER WALL	PROPOSED SHOULDER NOISE BARRIER	OTHER PROJECTS (BRIDGE)	POTENTIAL NEW TRAFFIC SIGNAL	POTENTIAL TRAFFIC SIGNAL
	EXISTING ROW LINE	PAVEMENT REMOVAL	OTHER PROJECTS (ROADS)	EXISTING TRAFFIC SIGNAL	TOLL GANTRY
	EXISTING LIMITED ACCESS ROW LINE	WETLANDS/OTHER SURFACE WATERS	FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH	POTENTIAL BUSINESS RELOCATION	POTENTIAL MEDIUM/HIGH CONTAMINATION SITES
	POTENTIAL ROW LINE	PROPOSED ROADWAY	POTENTIAL BUSINESS RELOCATION	POTENTIAL RESIDENTIAL RELOCATION	
	POTENTIAL LIMITED ACCESS ROW LINE	PROPOSED BRIDGE	POTENTIAL RESIDENTIAL RELOCATION		
	RAILROAD				

H. W. LOCHNER, INC.
4350 W. CYPRESS ST., SUITE 800
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTH. #894

FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE
CONCEPT PLAN

SHEET
NO.
C-83

APPENDIX D

SHPO Coordination Letters



Florida Department of Transportation

RON DESANTIS
GOVERNOR

Florida's Turnpike Enterprise
P.O. Box 613069, Ocoee, FL 34761
407-532-3999

KEVIN J. THIBAUT, P.E.
SECRETARY

September 16, 2020

Dr. Timothy Parsons, Director
Florida Division of Historical Resources
Department of State, R.A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250

Attn: Transportation Compliance Review Program

RE: **Cultural Resource Assessment Survey Report**
Florida's Turnpike (SR 91) Mainline Widening PD&E Study
From Jupiter (Indiantown Road) to Ft. Pierce (Okeechobee Road/SR 70)
(MP 117 to 153.7)
Palm Beach, Martin and St. Lucie Counties, Florida
FDOT Financial ID No.: 423374-1-22-01

Dear Dr. Parsons:

This Cultural Resource Assessment Survey (CRAS) is part of a Project Development and Environment (PD&E) Study for Florida's Turnpike Enterprise (FTE) to develop and evaluate potential capacity improvements to the existing Florida's Turnpike (SR 91) corridor in Palm Beach, Martin and St. Lucie Counties, Florida. In 2017, Lochner engaged Janus Research to conduct a CRAS for the Florida's Turnpike (SR 91) Mainline Widening PD&E Study from Jupiter (Indiantown Road) at Mile Post (MP) 117 to Fort Pierce (Okeechobee Road/SR 70) at MP 153.7, a distance of approximately 36.7 miles. The project consists of the widening of Florida's Turnpike from four to eight lanes by adding two general toll lanes in each direction.

The purpose of this CRAS was to locate and evaluate archaeological and historic resources within the area of potential effect (APE) and to assess their eligibility for inclusion in the *National Register of Historic Places* (National Register) according to the criteria set forth in 36 CFR Section 60.4. The archaeological APE consisted of the footprint of all existing and proposed ROW associated with the project. The APE for historic resources included parcels directly adjacent to the edge of the proposed project improvements for a distance of up to 150 feet.

This project is state-funded and this assessment complies with the revised Chapter 267, *Florida Statutes (F.S.)*; and the standards embodied in the FDHR's *Cultural Resource Management Standards and Operational Manual* (February 2003), and Chapter 1A-46 (*Archaeological and Historical Report Standards and Guidelines*), Florida Administrative Code. In addition, this report was prepared in conformity with standards set forth in Part 2, Chapter 8 (Archaeological and Historical Resources) of the *FDOT Project Development and Environment Manual*. All work also conforms to professional guidelines set forth in the Secretary of the Interior's Professional Qualification Standards (48 Federal Register [FR] 44716, as amended and annotated). Principal Investigators meet the Secretary of the Interior's Professional

Qualification Standards (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture.

No archaeological sites were identified within the archaeological APE. Background research, a pedestrian survey, and extensive subsurface testing conducted during the current survey determined that large portions of the archaeological APE have been subjected to land modification associated with the construction of Florida's Turnpike and its numerous interchanges, the surrounding development, and the installation of underground utilities. While subsurface testing was not feasible within areas of existing hardscape or underground utility corridors, 156 shovel tests were excavated throughout the archaeological APE, and no cultural material was identified within any of the tests. The results of the current survey confirmed a low potential for encountering intact archaeological resources within the archaeological APE.

The historic resources survey resulted in the identification of 31 previously recorded historic resources consisting of 15 canal segments (8MT1316, 8MT1517, 8MT1518, 8MT1591, 8MT1596, 8SL1809, 8SL3043, 8SL3120, 8SL3150-8SL3156), eight road segments (8MT1532, 8MT1597, 8MT1600/8SL1789, 8SL1657, 8SL1658, 8SL3114, 8SL3149, 8SL3158), one railroad segment (8SL3014), six buildings (8MT536, 8MT537, 8MT1667, 8SL1787, 8SL1788, 8SL3102), and one bridge (8SL3282) within the current project area. The survey also resulted in the identification of nine newly identified buildings (8MT1733-8MT1736, 8SL3329, 8SL3330, 8SL3332-8SL3334), 28 newly identified bridges (8MT1737-8MT1748, 8MT1749/8SL3335, 8MT1750, 8MT1751, 8PB16298, 8SL3336-8MT3347), and a newly identified segment of Florida's Turnpike (8PB19629) within the project area.

All but two of the historic linear resources (St. Lucie Canal (8MT1316) and Florida East Coast (FEC) Railway – Lake Harbor Branch (8SL3014)) have either been previously determined ineligible for the National Register or are considered ineligible for the National Register based on the results of this survey. Portions of the St. Lucie Canal (8MT1316) and FEC Railway - Lake Harbor Branch (8SL3014) have been determined eligible in other segments outside of the current project APE. Field survey reveals that these two resources maintain their historic associations and integrity within the current project APE and are therefore considered eligible for the National Register within the project APE.

All six of the previously recorded historic buildings (8MT536, 8MT537, 8MT1667, 8SL1787, 8SL1788, and 8SL3102) have been previously determined by the State Historic Preservation Officer (SHPO) to be National Register-ineligible. Field survey and historical research did not reveal any additional information to re-evaluate these resources, and therefore, they remain ineligible for the National Register.

Field survey resulted in the identification of nine newly identified historic buildings within the current project APE. All nine buildings (8MT1733-8MT1736, 8SL3329, 8SL3330, 8SL3332-8SL3334) are of a common style and type in South Florida and lack historical significance. Therefore, they are ineligible for individual listing in the National Register under Criteria A, B, C, or D.

The 29 bridges associated with Florida's Turnpike that are located within the current project APE are common types that were popular in the mid-twentieth century and were built throughout the US. Therefore, they are considered ineligible for the National Register under Criteria A, B, C, or D, individually and as a resource group.

Finally, there are no potential historic districts within, or partially within, the current project APE.

The CRAS Report for the Florida's Turnpike (SR 91) Widening PD&E Study from Jupiter to Fort Pierce is provided your review and comment. If you have any questions or need assistance, please contact me at 407.264.3301 or via email at Philip.Stein@dot.state.fl.us. Thank you for your continued assistance on FTE projects.

Sincerely,



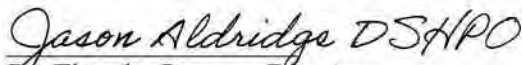
Philip Stein
Environmental Administrator
Florida's Turnpike Enterprise

Enclosures (*via temporary digital submittal policy*): PDF of signed transmittal letter, PDF of full CRAS report, collection of unflattened PDFs for the site file forms, collection of digital photographs associated with the historic resource site file forms, unflattened PDF version of the survey log, and a ZIP file containing the files making up the Shapefile for the survey area.

CC: Bill Howell, Lochner
James Pepe, Janus Research

The Florida State Historic Preservation Officer (SHPO) finds the attached Cultural Resources Assessment Survey Report complete and sufficient and ✓ concurs/ does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 2017-0763-B. Or, the SHPO finds the attached document contains insufficient information.

SHPO Comments:


Dr. Timothy Parsons, Director
State Historic Preservation Officer
Florida Division of Historical Resources

October 26, 2020
Date

APPENDIX E

Agency Coordination



PARTICIPANTS: Randall Overton, Mark Easley

COMPANY: US Coast Guard / KCA

PHONE: 305.415.6736

DATE/TIME: 14 August 2017 / 11:00 am

PROJECT: Florida's Turnpike Widening

SUBJECT: USCG Bridge Permits for Loxahatchee River Bridge and Thomas B Manual Bridge at Florida's Turnpike

NOTES:

I contacted Randy to discuss anticipated US Coast Guard (USCG) requirements associated with the replacement of the existing Florida's Turnpike bridge structure over the Loxahatchee River and the Florida's Turnpike southbound Thomas B Manual bridge structure over the St. Lucie River.

Randy stated that the segment of the Loxahatchee River containing the Florida's Turnpike bridge structure is not tidal and is presently not used for interstate commerce. In addition, because of the Wild & Scenic River designation on that segment of the river, it was unlikely that improvements to the channel, making it useable for interstate commerce is unlikely. As a result, the USCG would likely either make a determination of no jurisdiction or provide an advanced authorization for the replacement of the structure.

Replacement of the southbound Thomas B Manual Bridge structure would require a modification to the existing bridge permit at this location. The new structure would need to, at a minimum, meet the vertical and horizontal requirements of the newer northbound structure. In addition, because the proposed replacement involves the widening of the existing roadway (i.e., addition of a new travel lane), noise impacts associated with the residential development located in the south-west quadrant of the bridge would be a major concern and would need to be assessed as part of the project's PD&E study. The residents within this segment of the project were vocal during the last PD&E study that was done at this location. In addition, the logical termini would need to be determined for the study.

Randy recommended that the USCG be the lead federal agency on the PD&E study being done for the project.

Meeting Minutes

Project: FPID 423374-1-22-01

Description: Turnpike Mainline (SR 91) Widening PD&E from Jupiter (Indiantown Road) to Okeechobee Road (SR 70) – Palm Beach, Martin, and St. Lucie Counties

Meeting: SFWMD/USACE/NMFS/FDOT Pre-Application Meeting

Date/Time: 11/16/17 @ 11:10 am

Location: SFWMD HQ, West Palm Beach

Attendees:

Beverly Miller (SFWMD)
Jason Debish (SFWMD)
Beth Kacvinsky (SFWMD)
Carlos de Rojas, PE (SFWMD)
Trisha Stone (SFWMD)
Barbara Conmy (SFWMD)
Tarrie Ostrofsky (USACE)
Jennifer Schull (NMFS)
Erin Yao, PE (FTE) – by phone
Martin Horwitz (FTE) – by phone
Fred Gaines, PWS (Atkins/FTE)
Liz Bartell, PE (PGA)
Tim Polk, PE (PGA)
Sarah Johnson (KCA)
Bill Howell, PE (Lochner) – by phone
Tracy Ellison, PE (Lochner) – by phone
Jack Miller, PE (Lochner) – by phone

1. Background

- a. FTE introduced the project and stated that the PD&E Study limits are Turnpike Mainline (SR 91) from Indiantown Road (SR 706) to Okeechobee Road (SR 70), MP 117 to MP 153.7.
- b. PGA stated that the project will be permitted for the future (8-lane) condition.
- c. PGA stated that the proposed future improvements include widening the mainline from two to four lanes in each direction. The two alternatives being evaluated during the PD&E Study consist of four general toll lanes in each direction or two general toll lanes and two express toll lanes in each direction. FTE plans to account for the added impervious necessary for express lanes when permitting the project, even though the express lanes may not be constructed at this time.
- d. PGA stated that the project will also include improvements to the following interchanges: Stuart (SW Martin Highway/SR 714), Becker Road, Port St. Lucie Boulevard (SR 716), and Okeechobee Road (SR 70). The PD&E will also evaluate the potential for new interchanges. The major bridges within the project limits are the Loxahatchee River and Thomas B. Manuel Bridge over the St. Lucie

Canal. The project will also include bridge improvements over several other creeks and canals.

2. Existing Permits

- a. Turnpike mainline is permitted from MP 137.676 to 152.610 (Permit No. 56-00912-S). SFWMD confirmed that this permit should be modified for the proposed improvements. Several other permits exist within the 37-mile project for interchanges, the service plaza, bridges, and canal protection.

3. Water Quality

- a. SFWMD confirmed that the required water quality volume is 2.5" over the new impervious area in areas of reconstruction and widening but clarified that full treatment of new and existing impervious should be provided, if feasible. SFWMD stated that the required water quality volume shall also include the treatment volume provided in the existing condition, whether permitted or not. PGA confirmed that the new impervious area will be calculated for the future condition.
- b. SFWMD confirmed that an additional 50% of treatment shall be provided for any direct discharge to Outstanding Florida Waters (OFWs).
- c. SFWMD confirmed that nutrient loading is required for any direct discharge to water bodies that are impaired for nitrogen (TN) or phosphorus (TP). SFWMD clarified that although Dissolved Oxygen impairment is not typically a roadway impairment, there are times that it is related to high nutrient levels.
- d. PGA stated that there is a BMAP for St. Lucie River and Estuary Basin, but FTE is a de minimus stakeholder and has not been assigned an allocation for TN nor TP.
- e. PGA stated that the Loxahatchee TMDL Planning Unit (from Indiantown Road to SE Bridge Road) will be reviewed during the PD&E phase but stated that there are no current TMDLs within the project limits.

4. Water Quantity

- a. SFWMD confirmed that the proposed peak discharge for the 25-year, 3-day design shall not exceed that of the existing condition.
- b. PGA stated that she was aware of the following allowable discharge rates: C-23 Canal (31.5 csm for the 10-year design frequency) and C-24 Canal (30.25 csm for the 10-year design frequency). SFWMD stated that any widening of the bridges over these canals, or the C-18 and C-25 canals, will require a right-of-way permit.
- c. C-18, C-23 and C-24 will be handled by SFWMD WPB staff, while the C-25 will be handled by SFWMD Okeechobee staff.

5. Environmental Look Around (ELA)

- a. PGA stated that the ELA will be started during the PD&E phase. The PD&E Team plans to coordinate with the following Special WMDs: Northern Palm Beach County Improvement District, Loxahatchee River Environmental Control District, Hobe-St. Lucie Conservancy District, and North St. Lucie River Water Control District.
- b. PGA asked whether SFWMD was aware of any regional opportunities within the project limits, such as funding a SFWMD project for nutrient removal credit, and

discussed some alternative permitting approaches that may be necessary where the project is adjacent to sensitive lands to avoid off-site ponds?

- i. The project corridor is adjacent to two miles of SFWMD-owned property and two miles of Florida Forever lands. One alternative is to make use of SFWMD-owned lands and Florida Forever acquisitions. SFWMD stated that there may be an opportunity for funding of the pepper farm restoration located on the SFWMD-owned lands (Martin County is part owner). SFWMD added that the pepper farm could also provide a potential for floodplain compensation by reconnecting Cypress Creek. SFWMD stated that there is also a plan to construct a flow through marsh on the Florida Forever land to capture agricultural discharge and provide attenuation. PGA stated that this project would also be suitable for floodplain compensation and pollutant loading reductions, and SFWMD agreed. The Florida Forever property was purchased with Comprehensive Everglades Restoration Plan (CERP) funds. SFWMD stated that there are no current opportunities for funding the flow through marsh, but there may be an opportunity for funding in the future. SFWMD indicated that there is bridge culvert system connecting the east and west sides of the Florida Forever property that is important for access and requested that the connection not be removed in the future.
 - ii. Another alternative PGA presented was to provide attenuation in the State-owned lands. PGA stated that this approach was used for the SR 710 from Martin/Palm Beach County Line to Pratt and Whitney Entrance (SFWMD Permit No. 50-04716-P), which was successfully permitted through SFWMD. The SR 710 project provided full treatment on-site, but attenuation was provided off-site in adjacent wetlands to avoid the need for off-site ponds within sensitive lands. Modeling was used to demonstrate a negligible stage increase in the wetlands and no adverse impacts to adjacent properties. SFWMD concurred.
 - iii. PGA said that another alternative that may be reviewed is the use of Bio-Sorption Activated Media (BAM) filters. SFWMD said they were not familiar with this new technology and would need more information before granting approval to use for TN reduction. PGA stated that BAM has been permitted in other water management districts and additional information would be provided if the PD&E study identifies this alternative as a recommended approach.
 - iv. PGA stated that Martin County has been implementing septic-to-sewer conversions and asked whether nutrient removal credit could be obtained by funding a similar project. SFWMD said it would need to be discussed further if the PD&E study identifies this alternative as a recommended approach.
 - v. SFWMD does not know of any additional opportunities and reminded FTE that water quality and quantity aspects will need to stay within the basins impacted.
- c. PGA stated that the PD&E will look at potential joint-use opportunities with the adjacent golf course and the City of Port St. Lucie.

6. **Floodplain**

- a. PGA stated that there are several floodways within the project limits: Roebuck Creek, Danforth Creek, Bessy Creek, North Fork St. Lucie, and Tenmile Creek.
- b. PGA stated that the FEMA floodplains within the project limits are riverine and compensation would be provided for any impacts to these floodplains; however, a portion of the project is downstream of a SFWMD weir control structure. Floodplain impacts at this location would not require compensation, as they are considered tidal.
- c. SFWMD added that the proposed improvements shall not create a backwater increase nor reduce the cross-sectional area at the bridges.

7. Wetlands/Surface Waters

- a. KCA presented the types of wetlands anticipated within the project limits: freshwater marsh, forested wetlands, shrub wetlands, reservoirs, natural rivers, and drainage ditches and canals.
- b. SFWMD indicated that impacts to wetlands associated with OFWs need to show Avoidance and Minimization. Potential mitigation options exist with restoration/enhancement of OFWs and associated wetlands.
- c. KCA stated that the following mitigation options will be reviewed: Loxahatchee Mitigation Bank, Bluefield Ranch Mitigation Bank, R.G. Reserve Mitigation Bank, and DuPuis Reserve (Martin County). A cumulative impact analysis may be necessary based on the location of impacts and mitigation bank service area. SFWMD added that credits may be low or out at the R.G. Reserve Mitigation Bank.
- d. COE agreed with approach.

8. Protected Species

- a. KCA stated that no species-specific surveys have been conducted.
- b. KCA stated that there is a potential for the following protected species:
 - i. Federal
 - 1. Eastern indigo snake
 - 2. Wood stork
 - 3. Crested caracara*
 - 4. Snail kite*
 - 5. Manatee*
 - 6. Wood stork (5 CFAs)
 - 7. Red-cockaded woodpecker*
 - 8. Florida scrub-jay*
 - 9. Florida grasshopper sparrow*
 - (* project in species consultation area)
 - ii. State
 - 1. Wading birds
 - 2. Rookery at Okeechobee Road (SR 70) Toll Plaza
 - 3. Florida sandhill crane
 - 4. Gopher tortoise
 - 5. Southeastern American kestrel
 - 6. Sherman's fox squirrel
 - iii. Other
 - 1. Osprey
 - 2. Bald eagle

- c. FTE stated that the Florida Bonneted Bat Consultation Area (CA) may have recently changed, and the USFWS is in the process of expanding the CA and removing the focal areas, but it is currently still in a draft form.
- d. NMFS inquired about tidal systems and Essential Fish Habitat. Assumed to be minimal. FTE will research further and address in detail during design.

9. Loxahatchee Wild and Scenic River

- a. KCA discussed the project's Loxahatchee River involvement.
- b. Implemented under the Wild and Scenic River Act
 - i. SFWMD confirmed that Section 7a approval is needed.
- c. National Park Service is lead federal agency.
- d. SFWMD/FDEP develop and administer management plan – coordinate with Beth Kacvinsky
- e. Supported by Loxahatchee River Management Coordinating Council (25 members)
 - i. Three Federal Agencies
 - ii. Eight State Agencies
 - iii. Nine Local Agencies
 - iv. Five Non-Governmental Organizations
- f. Extends from southern end of Jonathan Dickinson State Park to southern end of Riverbend Park (Martin and Palm Beach Counties)
- g. Road crosses scenic segment of river.
- h. Addresses Impacts:
 - i. Free Flow Nature
 - ii. Water Quality
 - iii. Remarkable Values – (scenic, recreational, geological, fish & wildlife, historical, cultural)
- i. SFWMD added that Cypress Creek connects to the Loxahatchee River, but it is not considered part of wild and scenic river. KCA stated that the location of the Loxahatchee River within this PD&E project is considered scenic only (not wild).

10. Cultural Resources

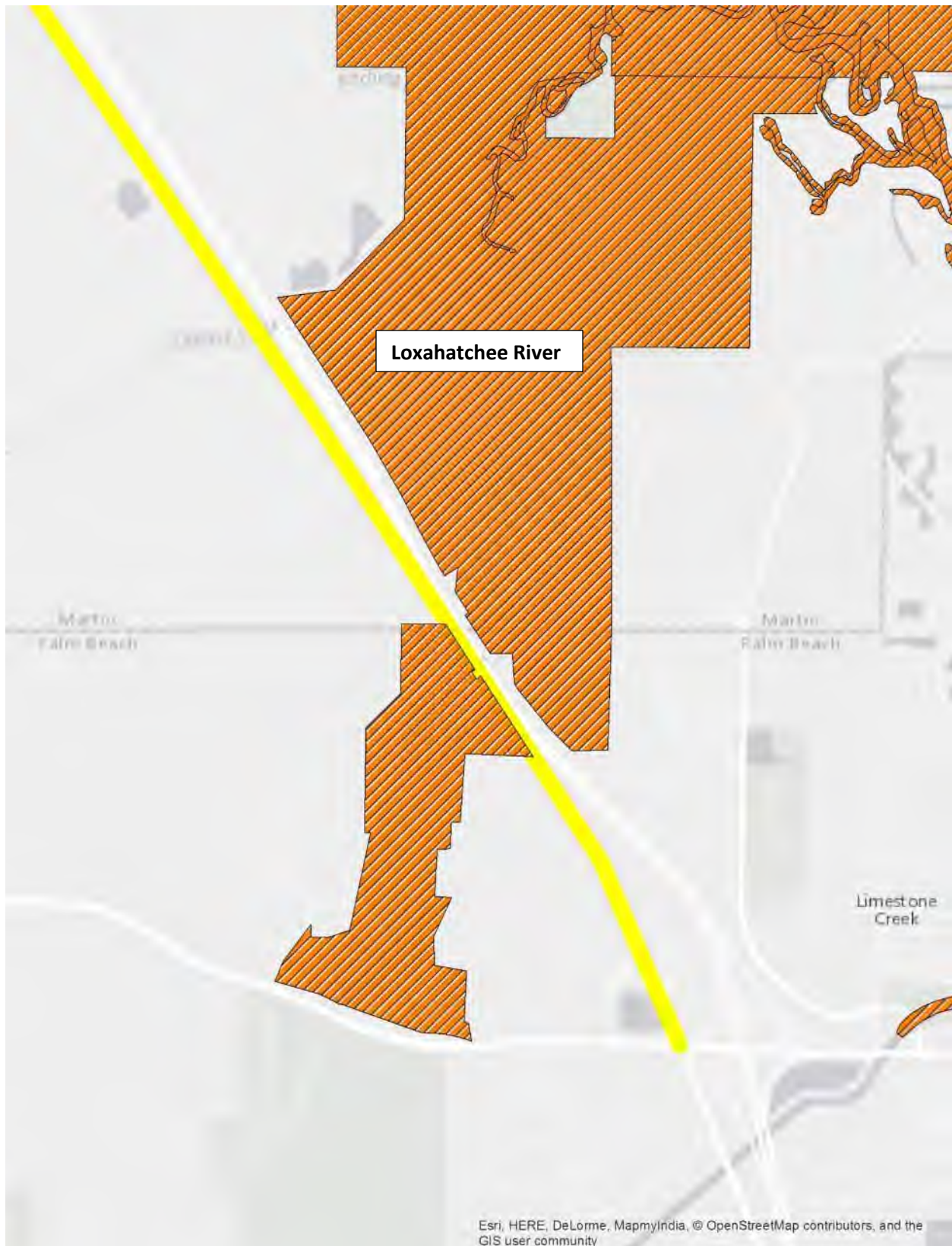
- a. KCA stated that a CRAS will be completed as part of this PD&E.

11. Permits and Approvals

- a. KCA stated that the following permits and approvals are anticipated:
 - i. USACE – Section 404 Dredge and Fill Permit
 - ii. USACE – Section 408 Alteration of a USACE Civil Works Project
 - 1. SFWMD said that a Section 408 will be needed for the C-23 canal.
 - iii. US Coast Guard - General Bridge Act of 1946 (33 USC 525)
 - iv. NPS – Section 7a Wild and Scenic Rivers Act Approval
 - v. SFWMD – Environmental Resource Permit
 - vi. SFWMD - Right-of-Way Occupancy Permit
 - 1. SFWMD said that a Right-of-Way Occupancy permit will be necessary for the following canals: C-18 (if within the project limits), C-23 upstream of weir, C-24 downstream of weir, and C-25 downstream of weir.
 - vii. FDEP - Sovereign Submerged Lands Easements

1. This will be submitted with the ERP, and SFWMD will process.
- viii. FDEP – NPDES – Obtained by Construction Contractor
 - ix. FWC - Gopher Tortoise Relocation Permit
 - x. FWC - Incidental Take Permit (Permitting requirements to be coordinated w/ FWC)
- b. FTE added that the ETDM number for this project is #14295.

Exhibit 1: Outstanding Florida Waters



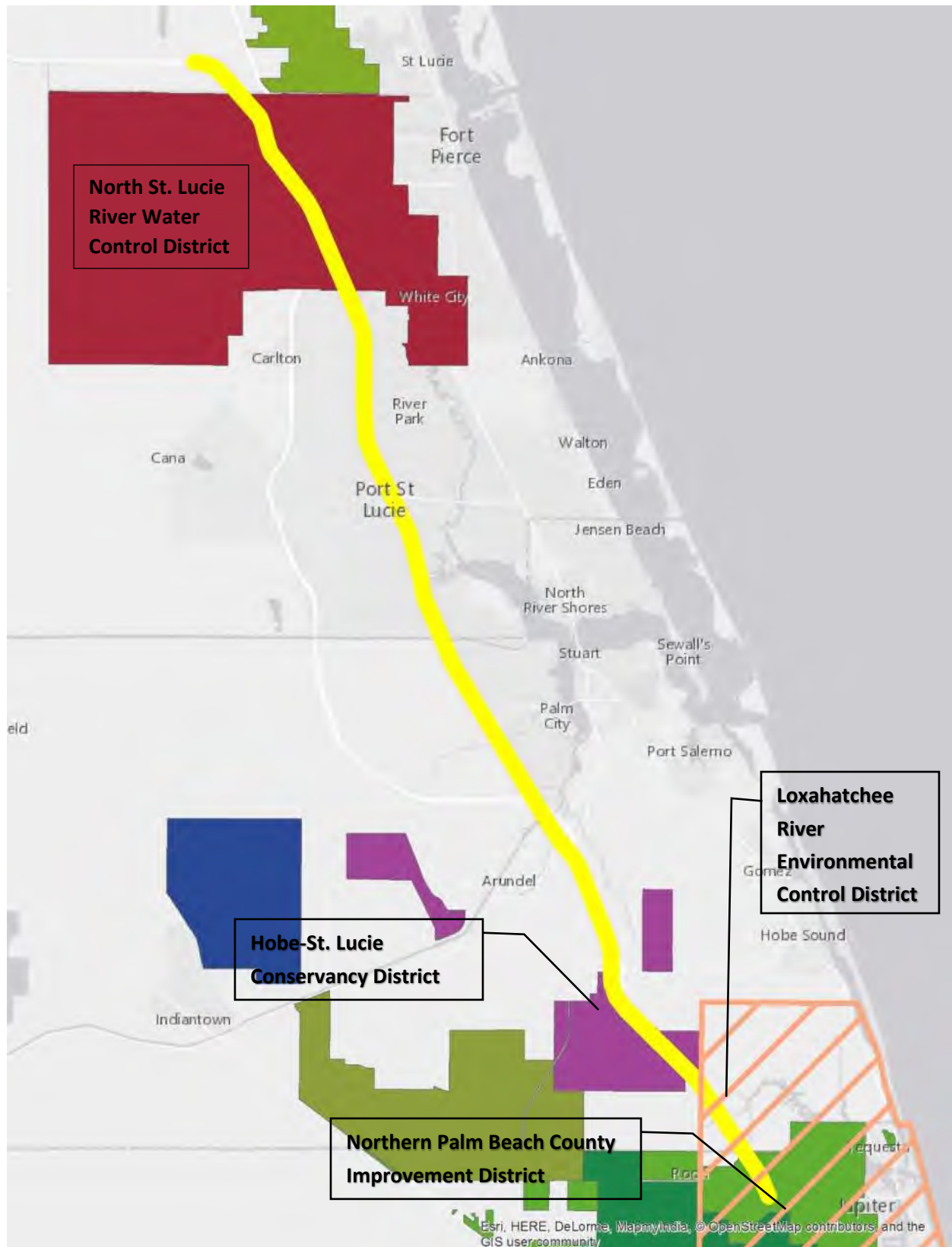
*Florida's Turnpike Mainline (SR 91) from Jupiter (Indiantown Rd) to Okeechobee Road (SR 70)
Palm Beach, Martin, and St. Lucie Counties
FPID 423374-1-22-01*

Exhibit 2: Impaired Water Body and BMAP



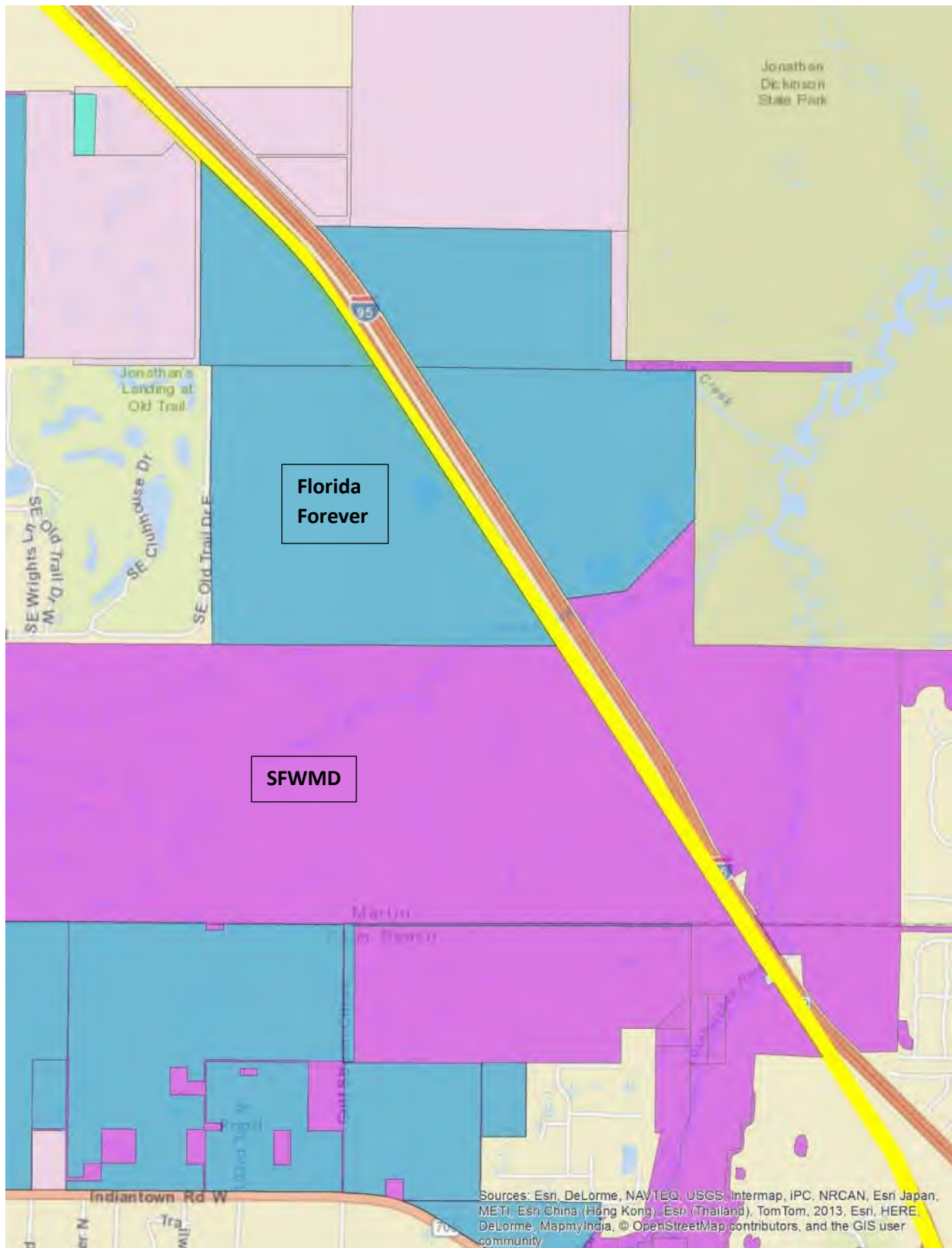
*Florida's Turnpike Mainline (SR 91) from Jupiter (Indiantown Rd) to Okeechobee Road (SR 70)
Palm Beach, Martin, and St. Lucie Counties
FPID 423374-1-22-01*

Exhibit 3: Special Water Management Districts



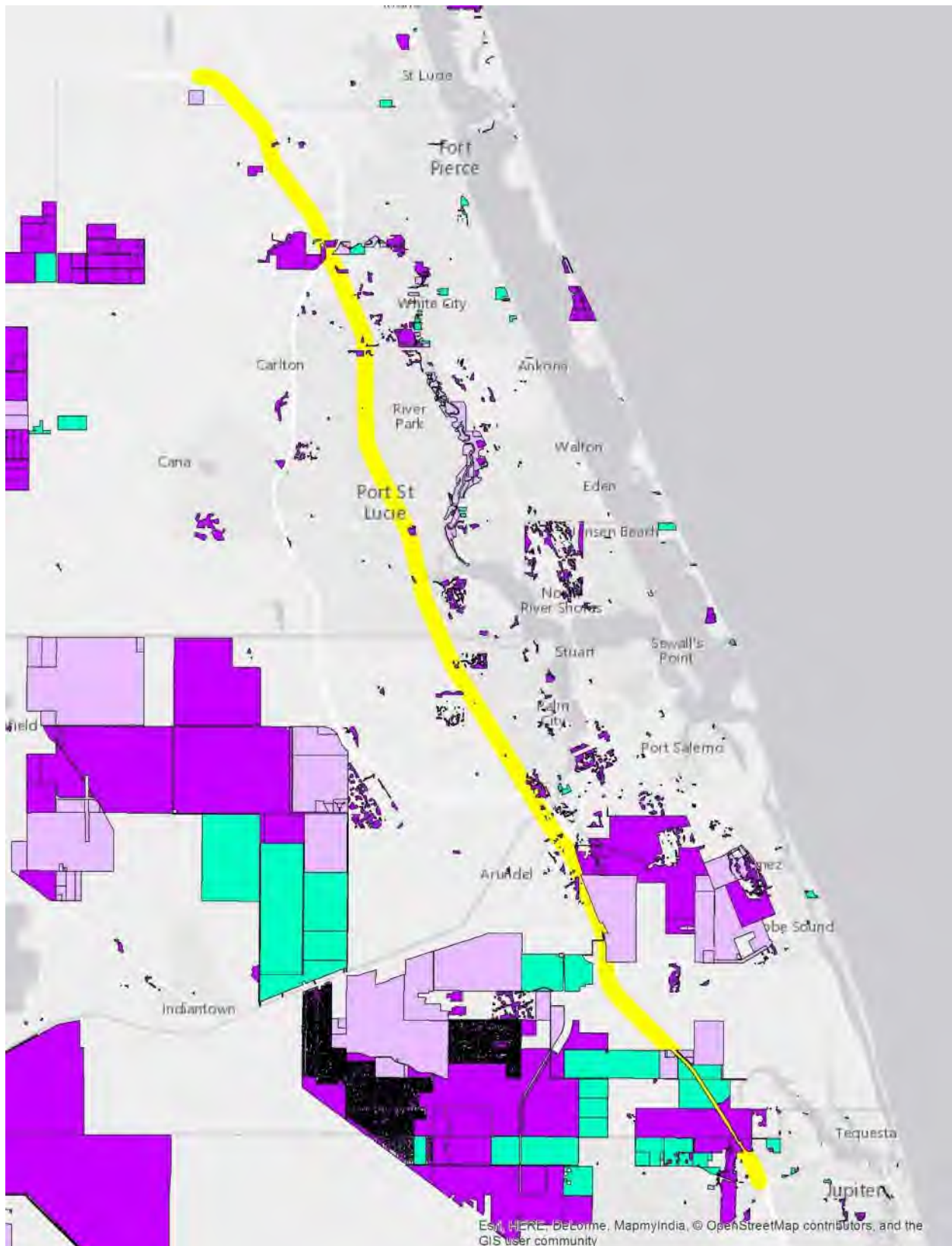
*Florida's Turnpike Mainline (SR 91) from Jupiter (Indiantown Rd) to Okeechobee Road (SR 70)
Palm Beach, Martin, and St. Lucie Counties
FPID 423374-1-22-01*

Exhibit 4: State-Owned Lands



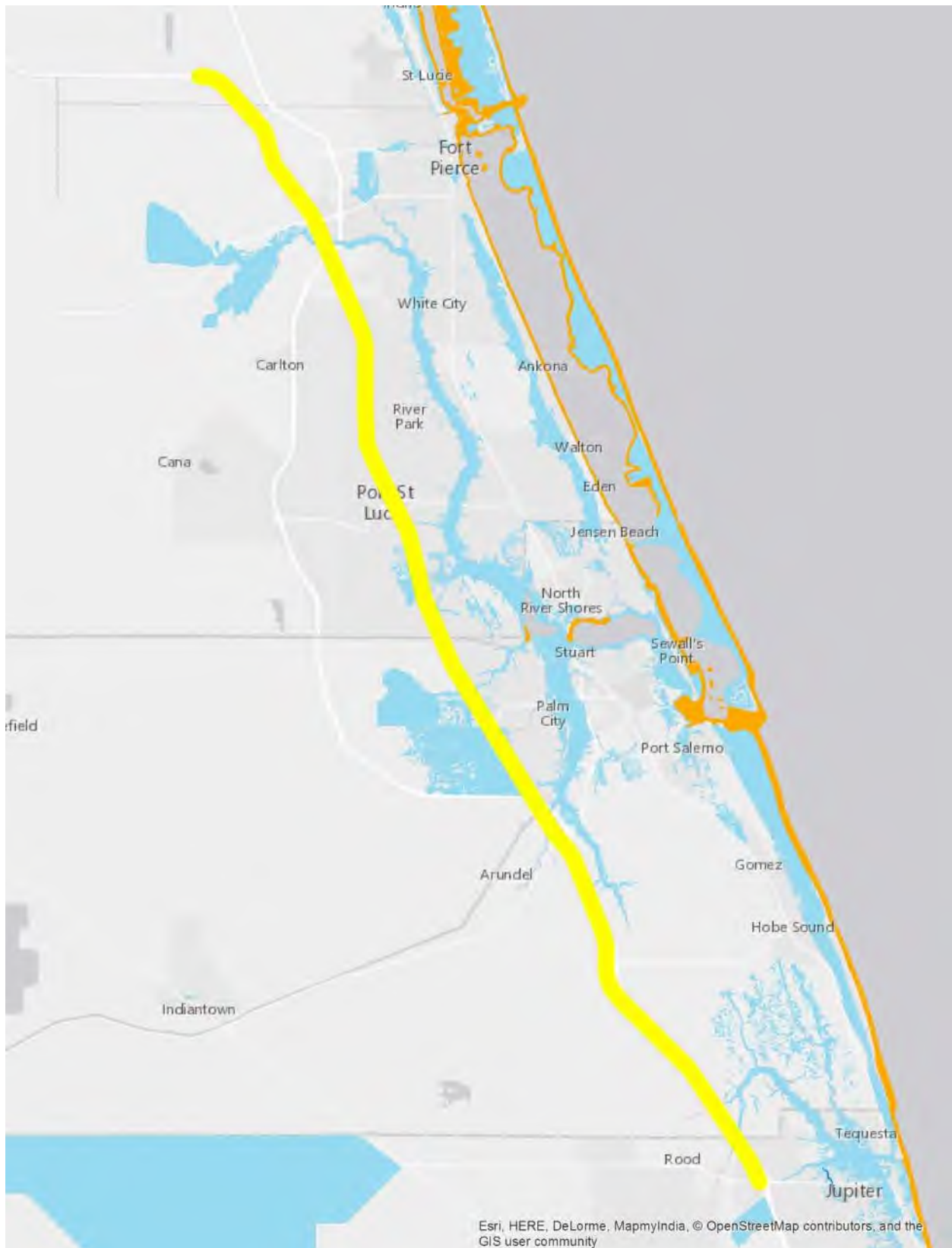
Florida's Turnpike Mainline (SR 91) from Jupiter (Indiantown Rd) to Okeechobee Road (SR 70)
Palm Beach, Martin, and St. Lucie Counties
FPID 423374-1-22-01

Exhibit 5: Florida Forever Acquisitions



*Florida's Turnpike Mainline (SR 91) from Jupiter (Indiantown Rd) to Okeechobee Road (SR 70)
Palm Beach, Martin, and St. Lucie Counties
FPID 423374-1-22-01*

Exhibit 6: FEMA Floodplains



*Florida's Turnpike Mainline (SR 91) from Jupiter (Indiantown Rd) to Okeechobee Road (SR 70)
Palm Beach, Martin, and St. Lucie Counties
FPID 423374-1-22-01*

From: Overton, Randall D CIV <Randall.D.Overton@uscg.mil>
Sent: Monday, December 4, 2017 2:57 PM
To: Mark Easley
Subject: RE: Turnpike PD&E from Jupiter to Ft. Pierce (FPID 423374-1) - Loxahatchee River Bridge Crossing

Mark,
There will be no Coast Guard Bridge Permit required for the Turnpike crossing of the Loxahatchee River (Lat/Long 26.954317, -80.165520).

Please let me know if you have questions regarding this determination.

Thank you,
Randy

-----Original Message-----

From: Mark Easley [<mailto:Mark.Easley@kisingercampo.com>]
Sent: Friday, December 01, 2017 1:50 PM
To: Overton, Randall D CIV
Subject: [Non-DoD Source] Turnpike PD&E from Jupiter to Ft. Pierce (FPID 423374-1) - Loxahatchee River Bridge Crossing

Randy,

Some time ago we discussed the Florida's Turnpike Crossing of the Loxahatchee River and USCG permitting requirements. During that discussion, I stated that the crossing was within the area of the Wild and Scenic River section of the Loxahatchee River. Based on your discussions, you stated that the crossing would probably be either "no permit needed" or an "advanced authorization" relative to the USCG permit requirements.

I was wondering if you ever had a chance to look into that?

Please give me a call if you would like to discuss.

Thanks,

ME

KCA Logo

Mark Easley
Senior Project Manager - Environmental Services

Email: Mark.Easley@kisingercampo.com <<mailto:Mark.Easley@kisingercampo.com>>

Work: 813.871.5331 ext 4144

201 N. Franklin St., Suite 400, Tampa, FL 33602

CONFIDENTIALITY NOTE: This communication may be privileged and confidential. It should not be disseminated to others. If received in error, please immediately reply that you have received this communication in error and then delete it. Thank you.

Loxahatchee River Environmental Control District Coordination Mtg

Turnpike Mainline (SR 91)
Widening PD&E Study from
Jupiter to Fort Pierce

Florida's Turnpike (SR 91) Widening PD&E Study from Jupiter (Indiantown Road) to Okeechobee Road (SR 70) (FPID#: 423374-1-22-01)

Palm Beach, Martin and St. Lucie Counties

July 2, 2020

Brian Ribaric *BR*

1. Introductions

- a. Loxahatchee River Environmental Control District (LRECD)
Albrey Arrington, PhD
Kris Dean, PE
- b. Florida's Turnpike Enterprise (FTE) and GEC
Henry Pinzon, PE – FTE
Rax Jung, PhD, PE – FTE
Philip Stein – FTE
Annemarie Hammond – FTE
Brian Ribaric, PE – Atkins
Doug Zang, AICP – Atkins
Adriana Kirwan, PE – HNTB
Fred Gaines, PWS – Atkins
- c. Lochner and PGA
Bill Howell, PE – Lochner
Liz Bartell, PE - PGA

Note: Items in Green are Notes in addition to the agenda topics.

2. Project Overview

- a. Evaluating the potential widening of the Turnpike Mainline (SR 91) from four to eight lanes from Indiantown Rd (SR 706) to Okeechobee Rd (SR 70)
- b. Evaluating potential interchange reconfigurations
- c. Identifying stormwater management and ROW needs to meet FDOT and permitting agency requirements
- d. Loxahatchee River is an OFW and Wild and Scenic River
- e. Conducting Environmental Look Around efforts to identify joint-use and nonconventional stormwater opportunities
 - i. Florida Forever Lands
 - 1. Pepper Farms and Flow-Through Marsh
 - ii. Martin County Septic-to-Sewer Conversions

3. Stormwater Requirements

- a. Will meet SFWMD treatment and attenuation requirements
- b. Loxahatchee River is classified as an Outstanding Florida Water (OFW)
 - i. No anticipated direct discharge to Lox River
 - ii. Direct discharge to OFWs will require an additional 50% treatment
- c. No anticipated direct discharge to WBID 3230, which is impaired for Nutrients (algal mats)
 - i. Direct discharge may require nutrient removal

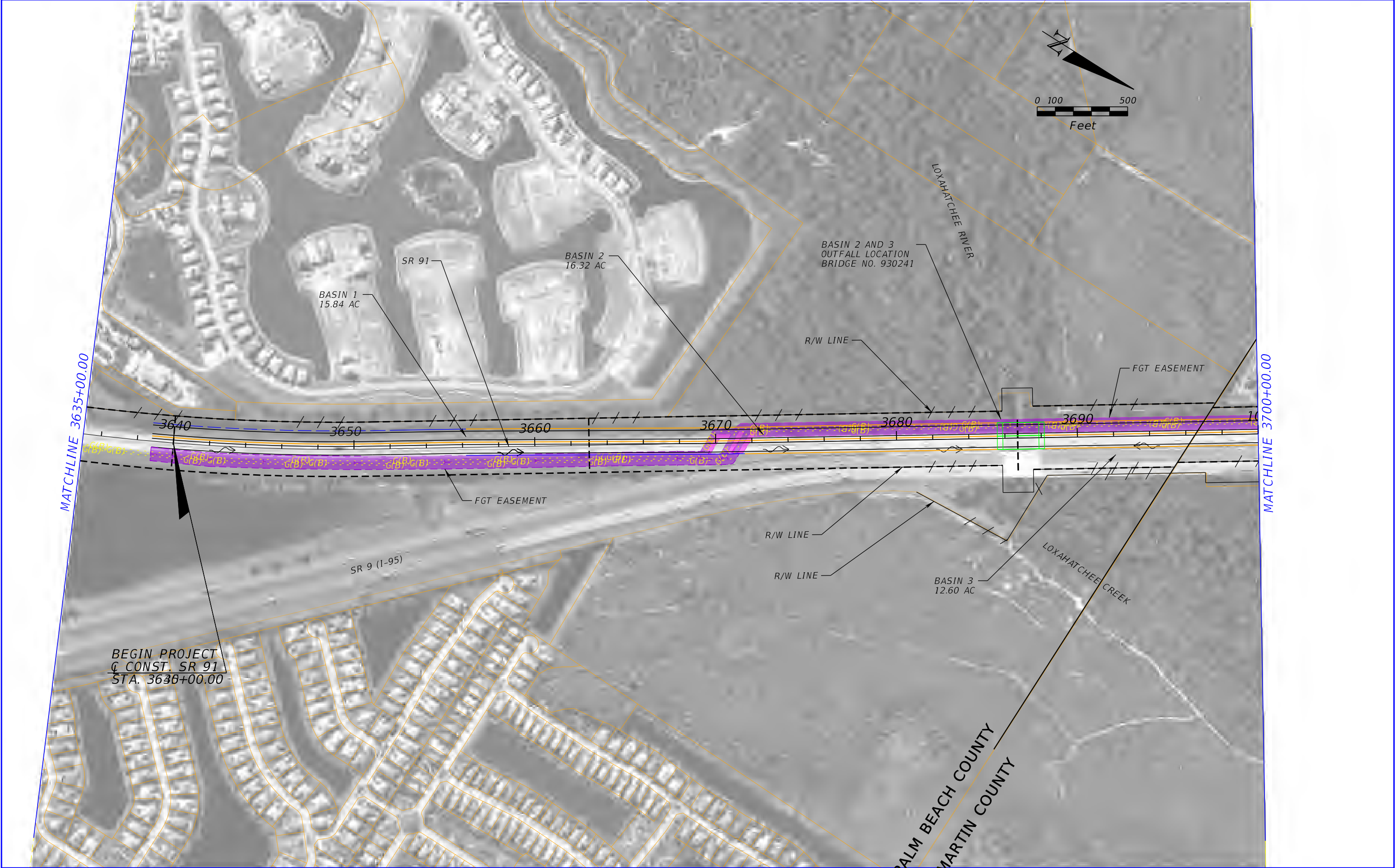
4. Reclaimed Water Supply Opportunities

- a. **LRECD is interested in storage and supply**
 - i. **There are opportunities for new stormwater management facilities or retrofits to provide reclaimed water**
- b. **There is reclaimed infrastructure west of I-95**
- c. **There is a pump station near I-95/SR 91 interchange**
 - i. **Limited to 12 million gallons per day**
- d. **There is significant demand for reclaimed water in the area, particularly the golf courses**

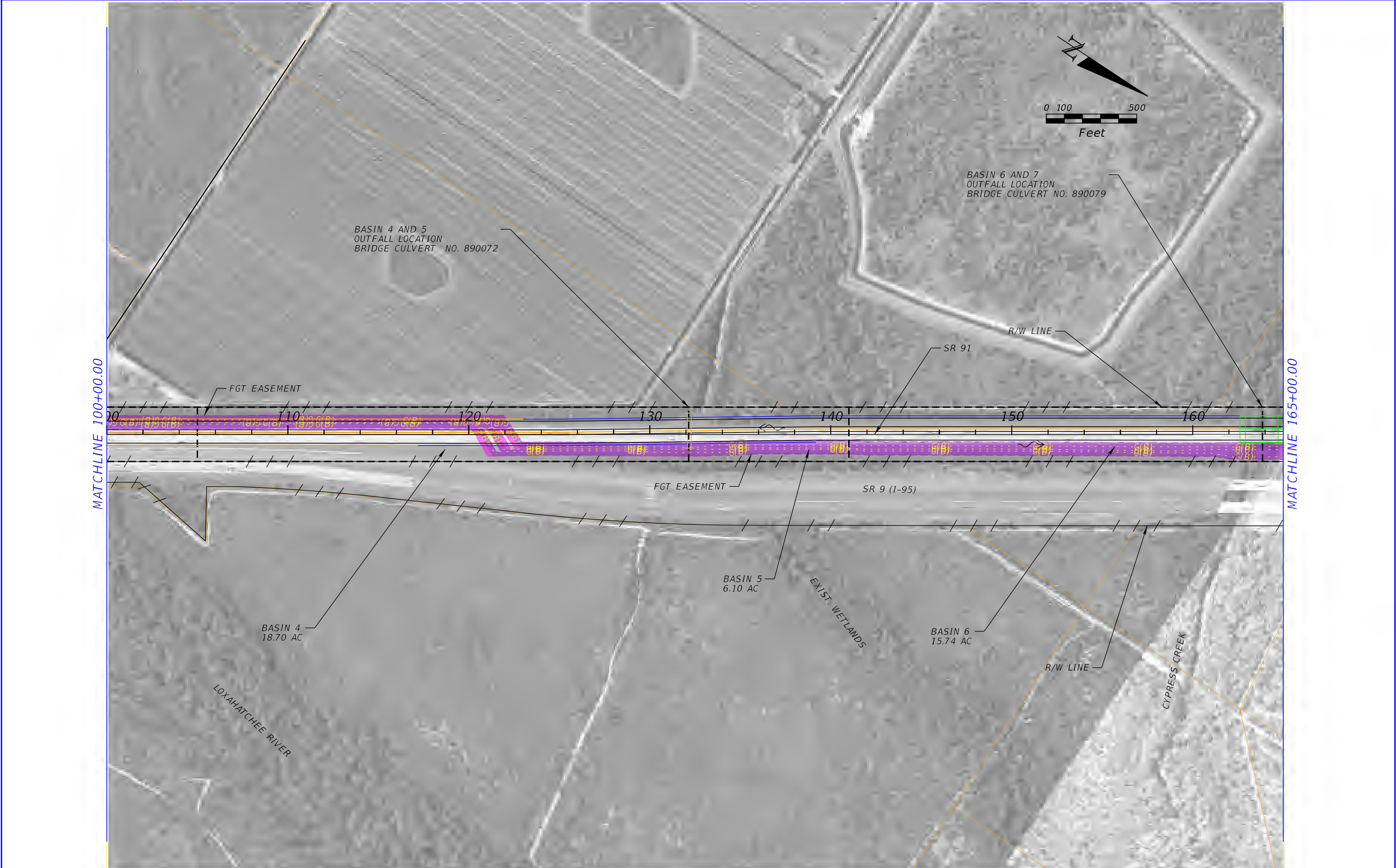
- i. LRECD is the regional provider of reclaimed water
 - e. Stormwater harvesting is another alternative for providing reclaimed water. LRECD suggested looking into staging the interchange lakes at the highest level possible to promote stormwater harvesting options.
5. Additional Discussion/Questions
- a. LRECD is concerned with the following and believes that highway stormwater runoff can potentially address some of these concerns:
 - i. eutrophication of the river and would like to prevent nutrients from discharging to river, ii. the alternative of collocating aquifer storage and recovery (ASR) wells with storage or retention areas, LRECD willing to participate in the cost of ASR.
 - iii. saltwater intrusion due to wellfield pumping
 - iv. highway runoff may not need to be treated if blending with reclaimed water or other sources depending on storage and use.
 - b. FTE stated that currently there is no funding for future projects associated with the PD&E, which could be a good thing as it provides an opportunity to continue discussions with the various stakeholders.
 - c. LRECD offered to meet as future projects are determined to continue general discussion or get into more specific details.

ACTION ITEMS

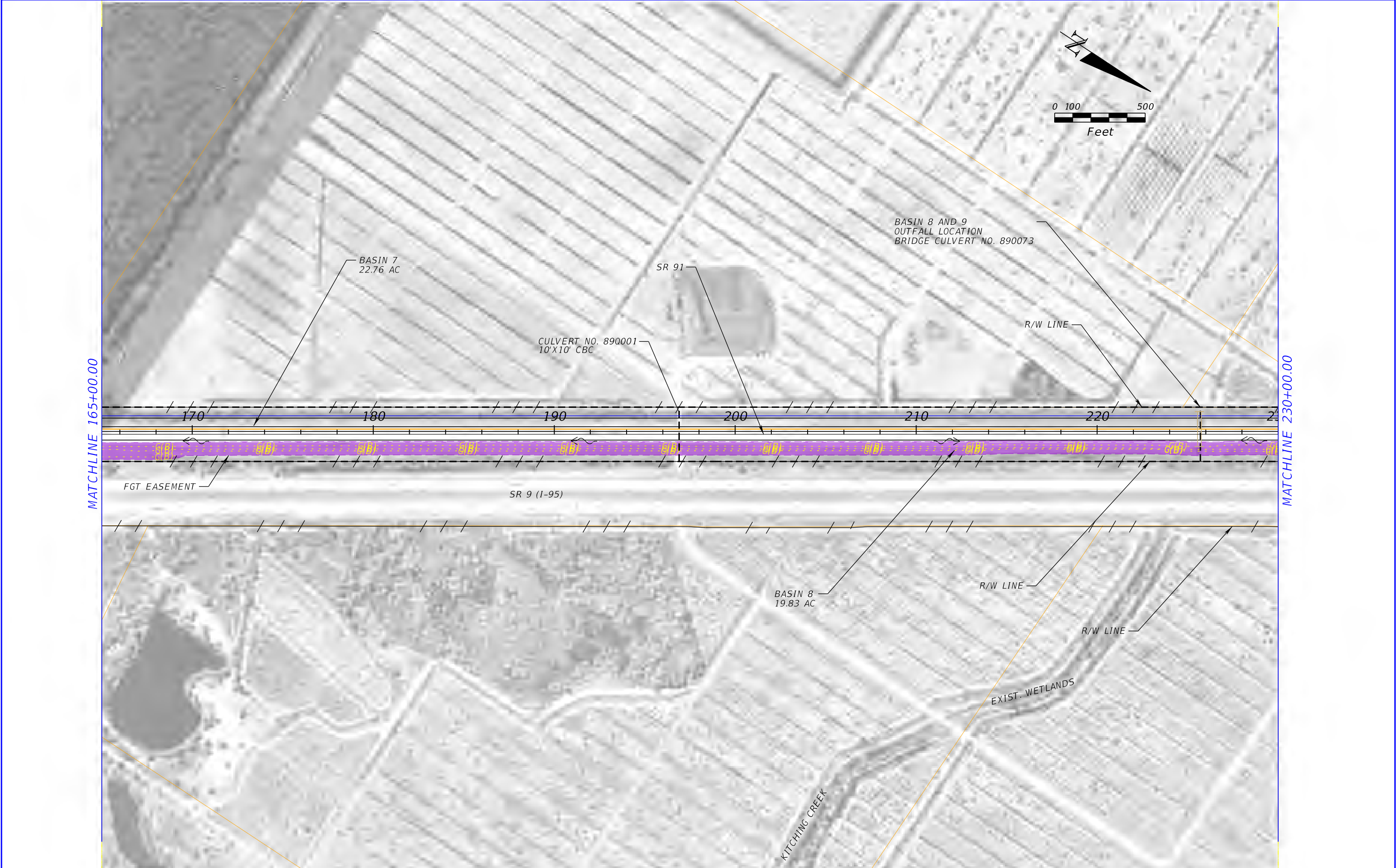
- *Schedule future coordination meetings for future projects as necessary.*
- *Meeting Notes.*



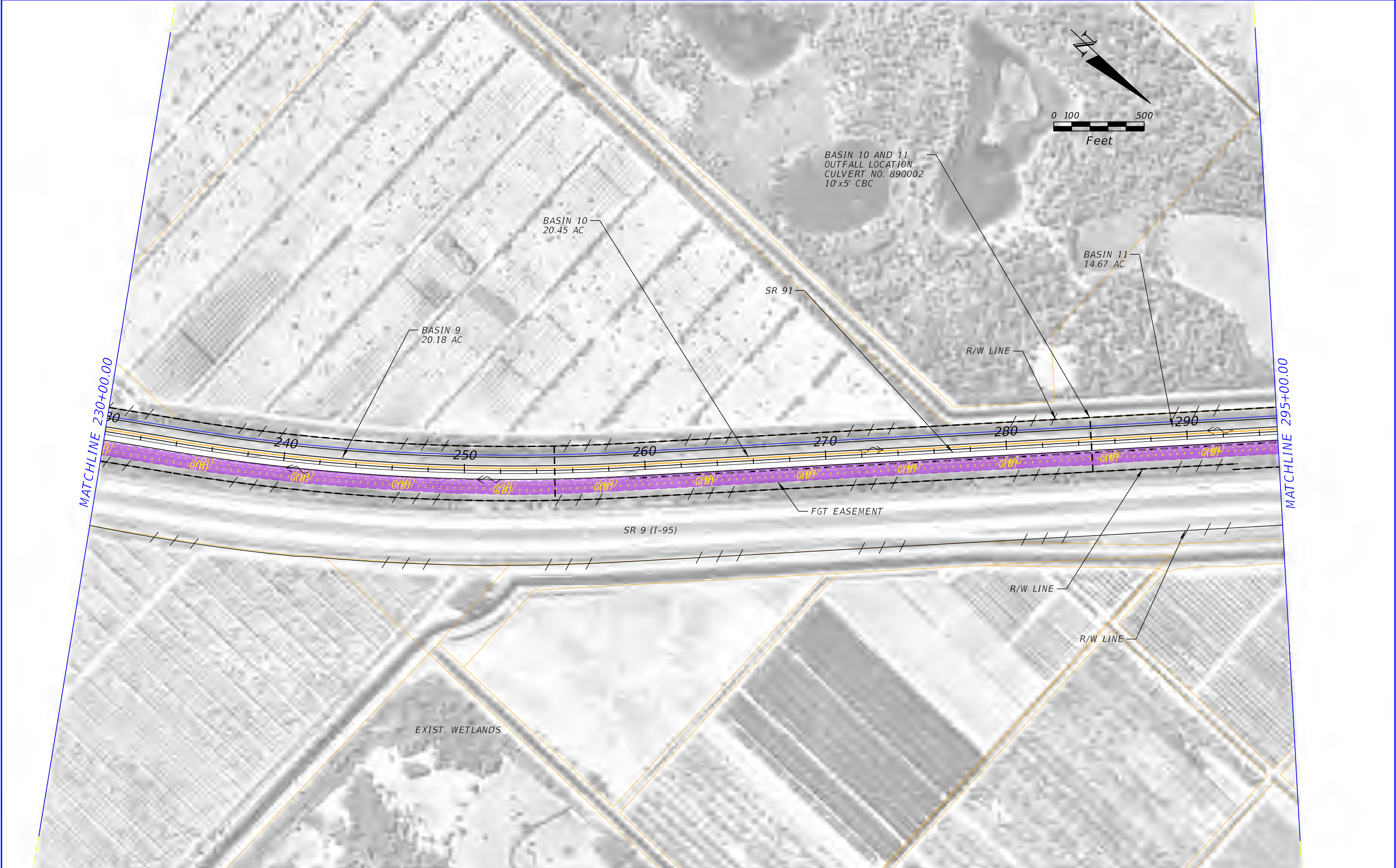
REVISIONS				PATEL, GREENE AND ASSOCIATES, LLC 280 W. Canton Ave. Suite 400 Winter Park, Florida 32789 Elizabeth M. Bartell, PE #69125	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			DRAINAGE MAP POST-DEVELOPMENT	SHEET NO. <div>E-18</div>
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 91	PALM BEACH	423374-1-22-01		



REVISIONS				PATEL, GREENE AND ASSOCIATES, LLC 280 W. Canton Ave. Suite 400 Winter Park, Florida 32789 Elizabeth M. Bartell, PE #69125	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			DRAINAGE MAP POST-DEVELOPMENT	SHEET NO. <div>E-19</div>
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 91	MARTIN	423374-1-22-01		



REVISIONS				PATEL, GREENE AND ASSOCIATES, LLC 280 W. Canton Ave. Suite 400 Winter Park, Florida 32789 Elizabeth M. Bartell, PE #69125	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			DRAINAGE MAP POST-DEVELOPMENT	SHEET NO. <div>E-20</div>
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 91	MARTIN	423374-1-22-01		



REVISIONS				PATEL, GREENE AND ASSOCIATES, LLC 280 W. Canton Ave. Suite 400 Winter Park, Florida 32789 Elizabeth M. Bartell, PE #69125	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			DRAINAGE MAP POST-DEVELOPMENT	SHEET NO. <div>E-21</div>
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 91	MARTIN	423374-1-22-01		

FPID Number: 423374-1-22-01

Project Description: Turnpike Mainline (SR 91) Widening PD&E from Jupiter to Ft. Pierce

Meeting Name: Loxahatchee River Environmental Control District Coordination Meeting

Date: Click or tap to enter a date.

Location: Go-To Meeting Link:

Call-In Number:

Access Code:

1. Introductions

- a. Loxahatchee River Environmental Control District
- b. Florida's Turnpike Enterprise (FTE) and GEC
- c. Lochner and PGA

2. Project Overview

- a. Evaluating the potential widening of the Turnpike Mainline (SR 91) from four to eight lanes from Indiantown Rd (SR 706) to Okeechobee Rd (SR 70)
- b. Evaluating potential interchange reconfigurations
- c. Identifying stormwater management and ROW needs to meet FDOT and permitting agency requirements
- d. Loxahatchee River is an OFW and Wild and Scenic River
- e. Conducting Environmental Look Around efforts to identify joint-use and nonconventional stormwater opportunities
 - i. Florida Forever Lands
 - 1. Pepper Farms and Flow-Through Marsh
 - ii. Martin County Septic-to-Sewer Conversions

3. Stormwater Requirements

- a. Will meet SFWMD treatment and attenuation requirements
- b. Loxahatchee River is classified as an Outstanding Florida Water (OFW)
 - i. No anticipated direct discharge to Lox River
 - ii. Direct discharge to OFWs will require an additional 50% treatment
- c. No anticipated direct discharge to WBID 3230, which is impaired for Nutrients (algal mats)
 - i. Direct discharge may require nutrient removal

4. Reclaimed Water Supply Opportunities

5. Additional Discussion/Questions

MEETING NOTES

North St. Lucie River Water Control District Coordination Meeting

Turnpike Mainline (SR 91)
Widening PD&E Study from
Jupiter to Fort Pierce

Florida's Turnpike (SR 91) Widening PD&E Study from Jupiter (Indiantown Road) to Okeechobee Road (SR 70) (FPID#: 423374-1-22-01)

Palm Beach, Martin and St. Lucie Counties

July 2, 2020

Brian Ribaric *BRR*

1. Introductions

- | | |
|---|---------------------------------|
| a. North St. Lucie River Water Control District (NSLRWCD) | |
| Patrick Helms, PE – AECOM | Katherine Caricchio, PE – AECOM |
| b. Florida's Turnpike Enterprise (FTE) and GEC | |
| Henry Pinzon, PE - FTE | Brian Ribaric, PE – Atkins |
| Rax Jung, PhD, PE - FTE | Doug Zang, AICP – Atkins |
| Philip Stein – FTE | Adriana Kirwan, PE – HNTB |
| Annemarie Hammond – FTE | Fred Gaines, PWS - Atkins |
| c. Lochner and PGA | |
| Bill Howell, PE – Lochner | Liz Bartell, PE - PG |

Note: Items in Green are Notes in addition to the agenda topics.

2. Project Overview provided by FTE

- a. Evaluating the potential widening of the Turnpike Mainline (SR 91) from four to eight lanes from Indiantown Rd (SR 706) to Okeechobee Rd (SR 70)
- b. Evaluating potential interchange reconfigurations
- c. Identifying stormwater management and ROW needs to meet FDOT and permitting agency requirements
- d. Conducting Environmental Look Around efforts to identify joint-use and nonconventional stormwater opportunities
 - i. Florida Forever Lands
 1. Pepper Farms and Flow-Through Marsh
 - ii. Martin County Septic-to-Sewer Conversions
- e. **Project is not currently funded for design, ROW, or construction.**

3. Proposed Design at Ten Mile Creek

- a. Proposed widening of bridge over Ten Mile Creek
 - i. Ten Mile Creek is a FEMA regulatory floodway and will require a FEMA No-Rise Certification
 - ii. Anticipate 6.8 acres of encroachment into the Ten Mile Creek FEMA floodplain
 1. **FTE proposed floodplain compensation provided within NSLRWCD canal system/Ten Mile Creek. NSLRWCD stated this approach has been done before. The example provided was the Okeechobee Portofino Landings, in which the top of berm or littoral shelf of the channel was expanded to provide floodplain compensation.**
 2. **FTE will address FEMA no-rise and CLOMR as required.**
 3. **Ten Mile Creek is a sovereign submerged land (SSL).**

NORTH ST. LUCIE RIVER WATER CONTROL
DISTRICT COORDINATION MEETING

- iii. NSLRWCD stated that there is a volumetric discharge requirement (2 inches per acre per day for the 10-year, 3-day storm event) and a head loss requirement (0.3 foot) that is provided in the Permit Information and Criteria Manual.
 - 1. FTE clarified that FDOT projects are exempt from local requirements under Florida Statutes. FTE will permit through SFWMD utilizing SFWMD and FDOT stormwater design criteria.

4. History of Erosion and Shoaling

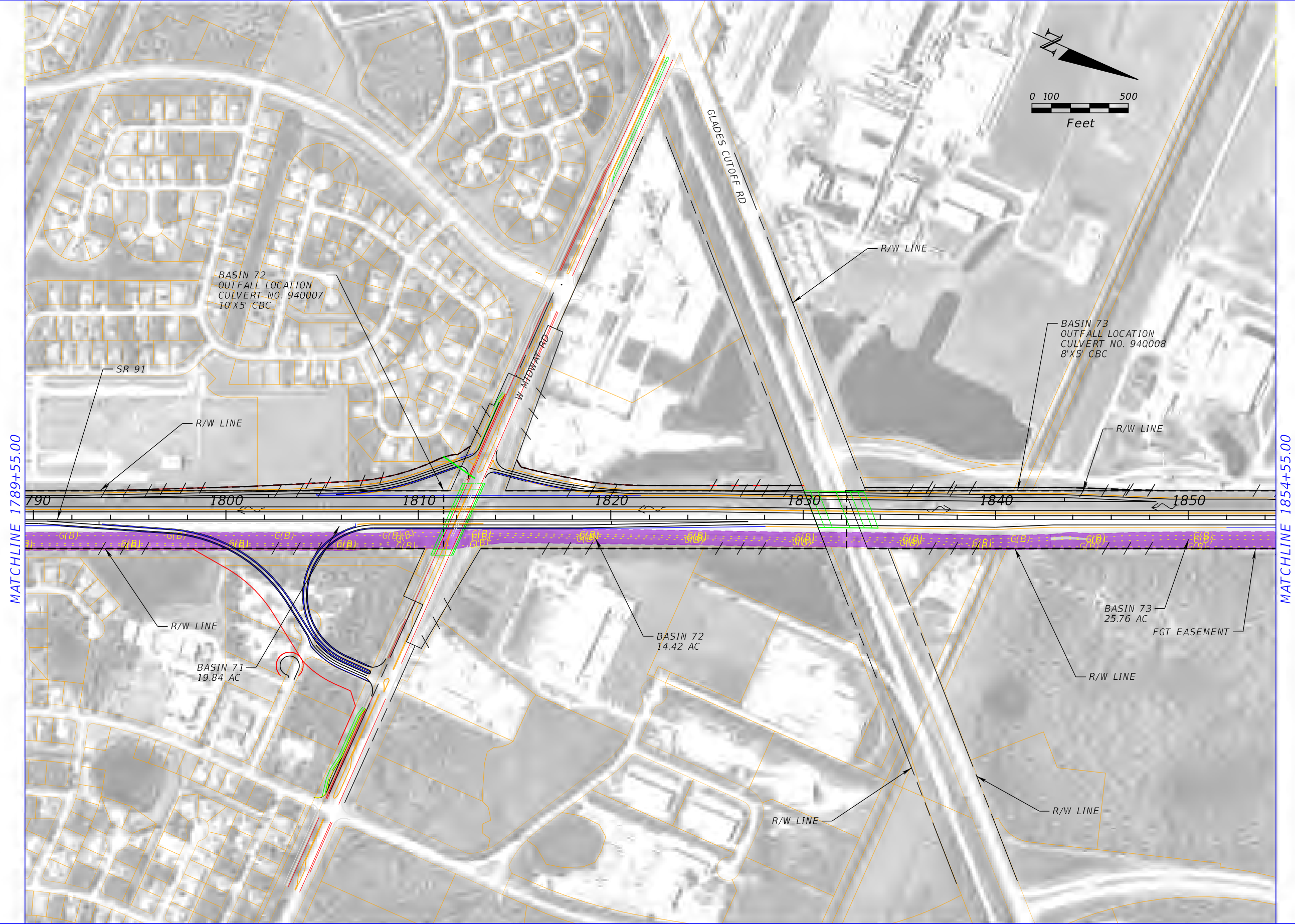
- a. FTE Bridge Embankment Protection (FPID 409327-1) in 2003
- b. NSLRWCD does not know of any current issues but requested inspection of the gabions and condition of the channel at Ten Mile Creek during design.

5. Additional Discussion/Questions

- a. NSLRWCD stated there is a DBHydro monitoring site at Gordy Road (East) that shows the flow is tidal.
- b. The control structures are not managed or dictated by SFWMD permit.
- c. NSLRWCD provided right of way (ROW) history on the west side of the Turnpike at Ten Mile Creek vicinity. NSLRWCD indicated that Midway Road/Canal 103 ROW has been conveyed to St. Lucie County. NSLRWCD Canal 102 culvert crossing flows west to east to NSLRWCD Canal 101 remnant at the FTE ROW line. NSLRWCD's Canal 96 at Ten Mile Creek/Gordy Road Structure stops at FTE ROW line and flows across FTE ROW to Ten Mile Creek. SFWMD is relying on the NSLRWCD Canal 96 outfall for the Ten Mile Creek Reservoir. NSLRWCD suggested a meeting with FTE ROW to clear up confusion over ROW limits.
- d. NSLRWCD asked if the widening south of SR 70 Interchange will impact the NSLRWCD's Canal 40 access berm to Ten Mile Creek. FTE responded that widening is proposed to the west in this location and that no impact to the NSLRWCD's Canal 40 or maintenance berm is anticipated.
- e. NSLRWCD inquired about widening at the Canal 49 bridge culvert. FTE responded that the culvert will either be extended or replaced.
- f. NSLRWCD referenced the canal crossing head loss criteria. FTE responded that reference will be added to the PD&E documentation.
- g. NSLRWCD indicated that approx.. 60% of NSLRWCD's 6500 sq. mi. district drains to Ten Mile Creek. Ten Mile Creek maintenance dredging is a challenge since it is Sovereign Submerged Lands. NSLRWCD is coordinating future Ten Mile Creek dredging with FDEP, SFWMD and COE. New bridges and bridge replacements will have to meet current criteria. NSLRWCD has been fined previously for doing unauthorized work within Ten Mile Creek. FTE indicated that the current concept indicates the mainline bridge over Ten Mile Creek will be widened and not replaced.
- h. FTE mentioned that a future PD&E project from SR 70 north will also potentially involve some NSLRWCD crossings. FTE will coordinate with NSLRWCD during that PD&E and future design projects as required.
- i. NSLRWCD indicated that there are maintenance challenges of NSLRWCD canals and culverts within FTE ROW. NSLRWCD has met with Turnpike's maintenance contractor in the past to discuss but challenges remain. FTE indicated that it would pass along the information directly to FTE Maintenance.
- j. NSLRWCD indicated that they don't have any water needs that could be provided by the project as part of the Environmental Look Around aspect.

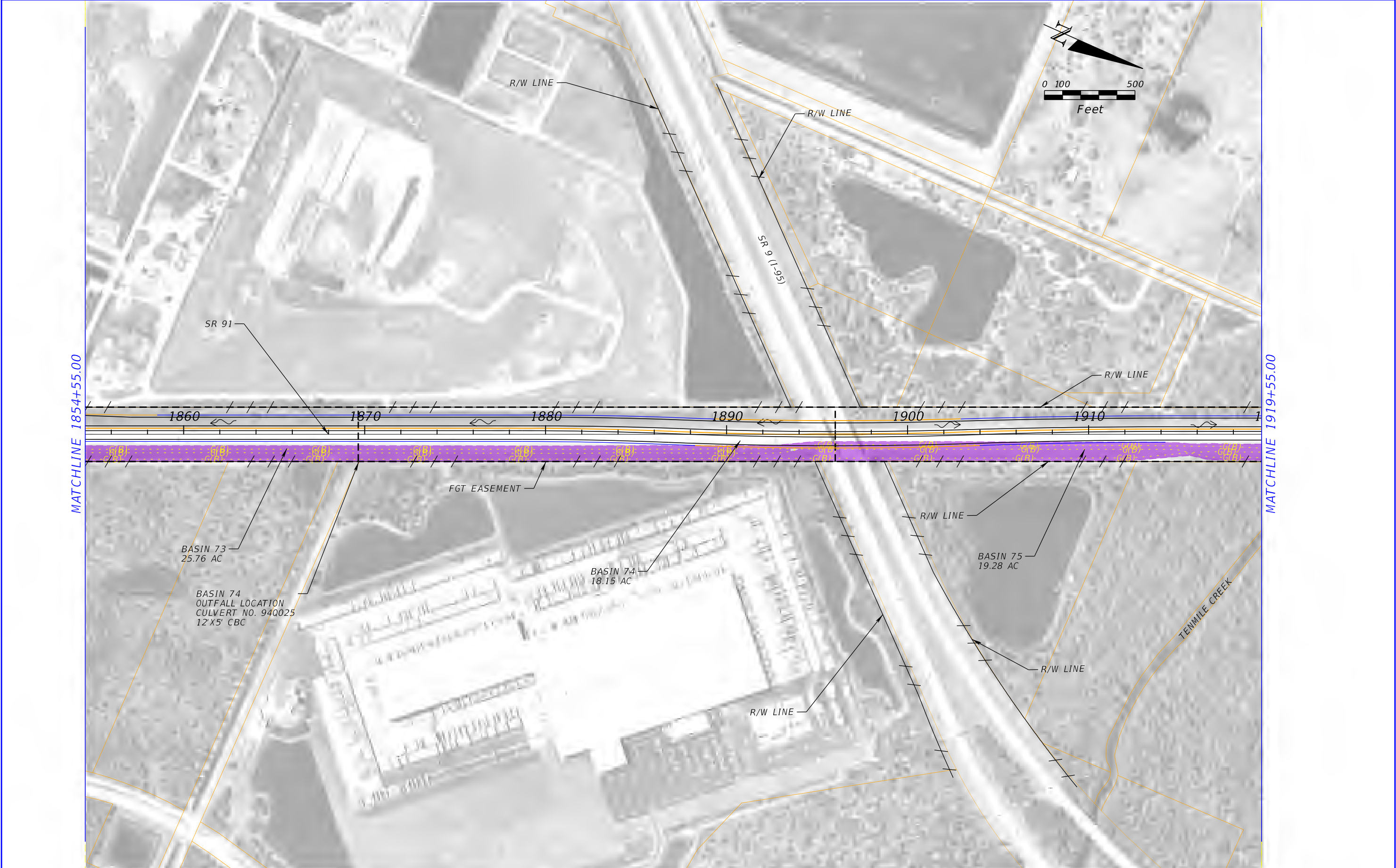
ACTION ITEMS:

- a. Inform FTE ROW of NSLRWCD's request for a meeting regarding NSLRWCD canal flow across FTE ROW.
- b. Inform FTE Maintenance of NSLRWCD's request for a meeting regarding NSLRWCD maintenance challenges within FTE ROW.
- c. Meeting Notes

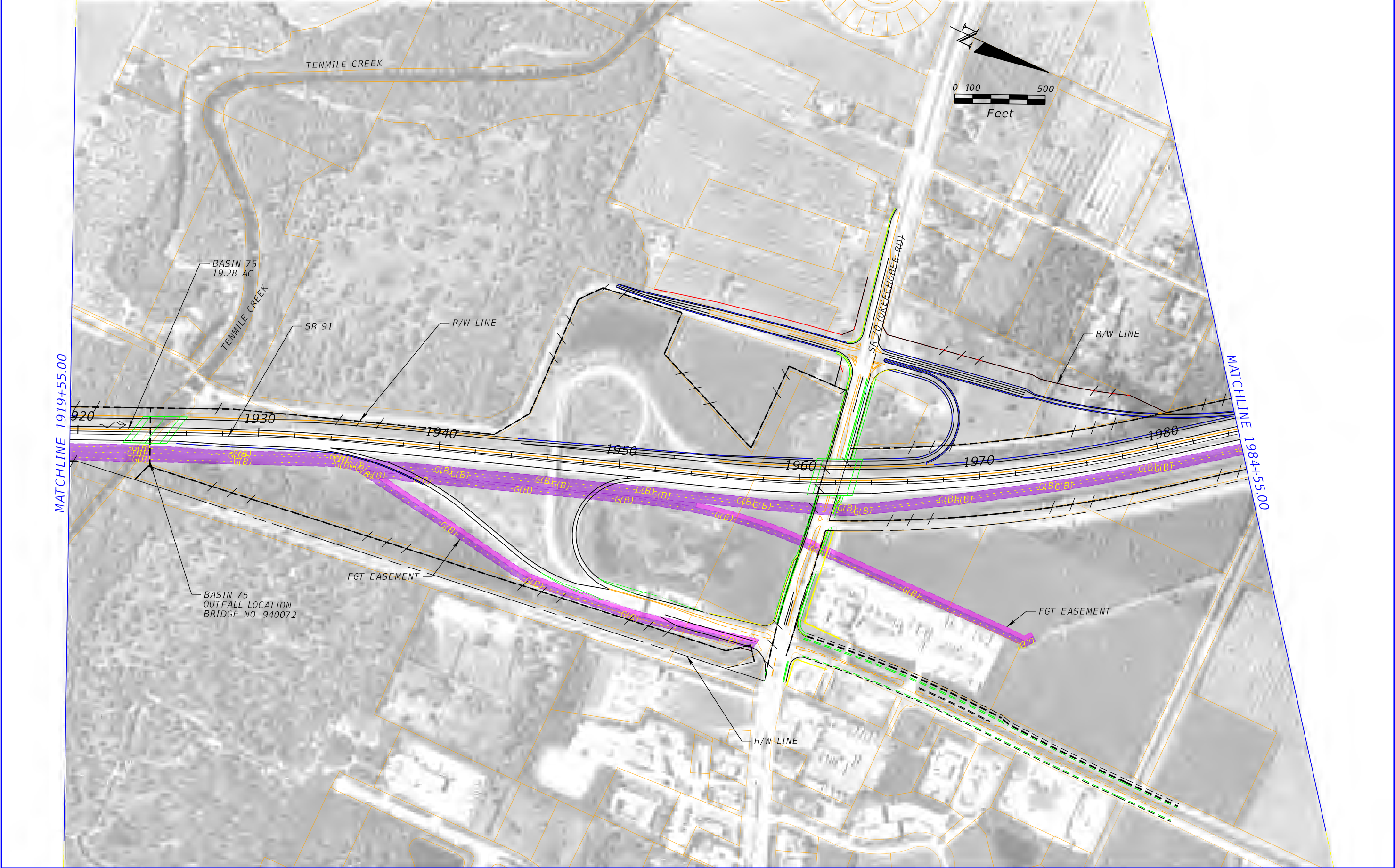


REVISIONS				PATEL, GREENE AND ASSOCIATES, LLC 280 W. Canton Ave. Suite 400 Winter Park, Florida 32789 Elizabeth M. Bartell, PE #69125	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			DRAINAGE MAP POST-DEVELOPMENT	SHEET NO. <div>E-25</div>
DATE	DESCRIPTION	DATE	DESCRIPTION						
					ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 91	ST. LUCIE	423374-1-22-01		

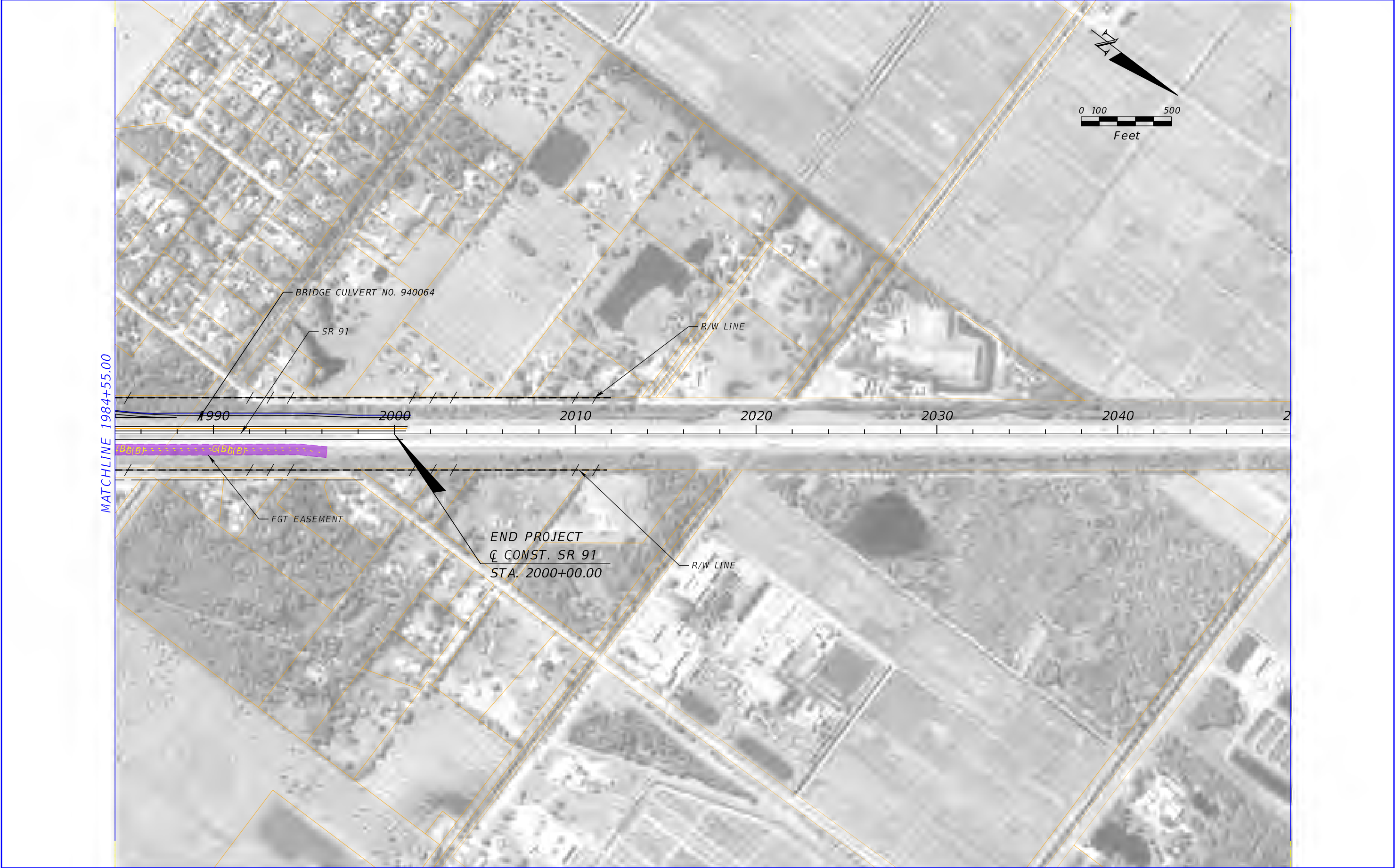
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REVISIONS				PATEL, GREENE AND ASSOCIATES, LLC 280 W. Canton Ave. Suite 400 Winter Park, Florida 32789 Elizabeth M. Bartell, PE #69125	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			DRAINAGE MAP POST-DEVELOPMENT	SHEET NO. <div>E-26</div>
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 91	ST. LUCIE	423374-1-22-01		



REVISIONS				PATEL, GREENE AND ASSOCIATES, LLC 280 W. Canton Ave. Suite 400 Winter Park, Florida 32789 Elizabeth M. Bartell, PE #69125	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			DRAINAGE MAP POST-DEVELOPMENT	SHEET NO. <div>E-27</div>
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 91	ST. LUCIE	423374-1-22-01		



REVISIONS				PATEL, GREENE AND ASSOCIATES, LLC 280 W. Canton Ave. Suite 400 Winter Park, Florida 32789 Elizabeth M. Bartell, PE #69125	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			DRAINAGE MAP POST-DEVELOPMENT	SHEET NO. <div>E-28</div>
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 91	ST. LUCIE	423374-1-22-01		

ST. LUCIE COUNTY

END PROJECT

SR 91 Florida's Turnpike

Matchline See Exhibit 2 of 3

0 0.75 1.5 3 4.5 6 Miles

Legend

- A
- AE
- AH
- AO
- OPEN WATER
- VE



Florida's Turnpike Mainline (SR 91)
Turkey Lake Service Plaza
Ocoee, Florida 34761

FEMA MAP

E-29

FPID 423374-1-22-01

Date: 1/17/2019

Exhibit 3 of 3

...restMap contributors, and the GIS user community. Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations (BFEs) shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Transverse Mercator State Plane Florida East FIPS 0901. The **horizontal datum** was NAD83 HARN, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov/> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NNGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242 or visit its website at <http://www.ngs.noaa.gov/>.

Base map information shown on this FIRM was provided in digital format by St. Lucie County and the Florida Geographic Data Library.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

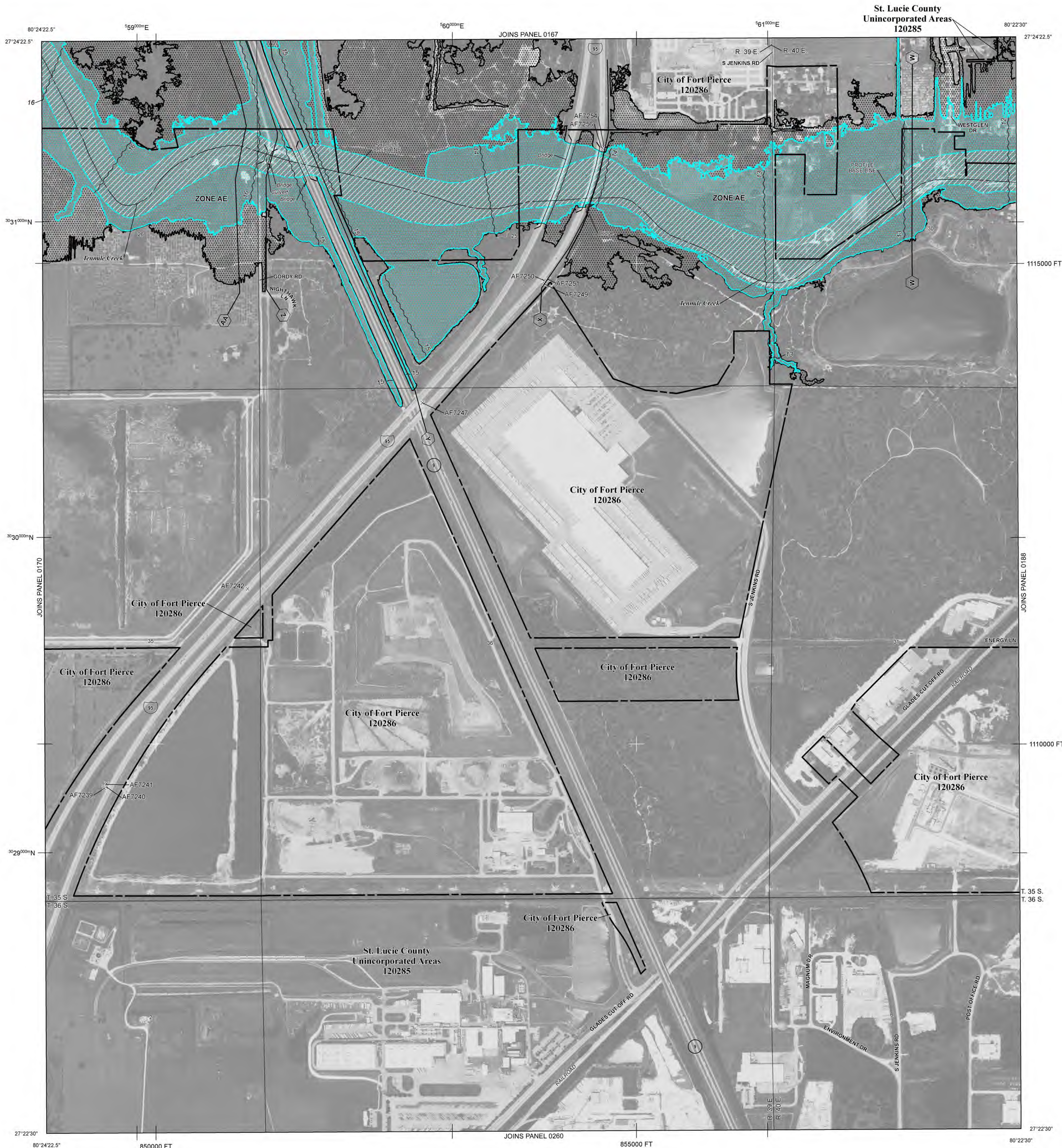
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Information eXchange (FMIX)** at 1-877-336-2627 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FMIX may also be reached at its website at <http://mxc.fema.gov/>.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/rfp/>.

The **"profile base lines"** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the "profile base line", in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance 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 AO** 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 AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Areas to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

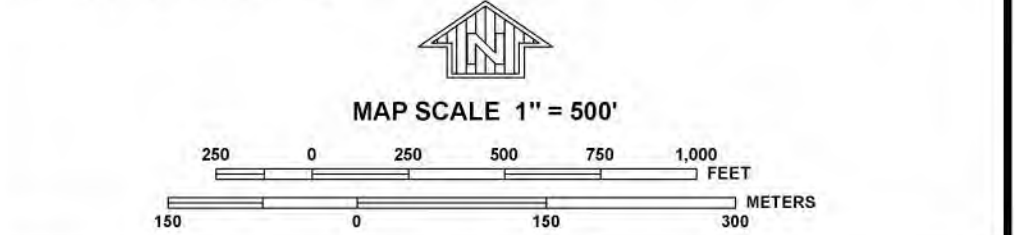
* Referenced to the North American Vertical Datum of 1988

- Cross section line**
- Transect line**
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 1000-meter Universal Transverse Mercator grid ticks, zone 17
- 5000-foot grid values: Florida State Plane coordinate system, East Zone (FIPSZONE = 0901), Transverse Mercator projection
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- MAP REPOSITORIES**
- Refer to Map Repositories List on Map Index
- EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**
- August 19, 1991
- EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**
- November 4, 1992
- June 30, 1999

February 16, 2012 - to update corporate limits, to add Base Flood Elevations, to add Special Flood Hazard Areas, to change Special Flood Hazard Areas, to add roads and road names, to update the effects of wave action, and to incorporate previously issued Letters of Map Revision.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0169J

FIRM
FLOOD INSURANCE RATE MAP
ST. LUCIE COUNTY,
FLORIDA
AND INCORPORATED AREAS

PANEL 169 OF 420

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FORT PIERCE, CITY OF	120286	0169	J
ST. LUCIE COUNTY	120285	0169	J

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER

1211C0169J

MAP REVISED

FEBRUARY 16, 2012

Federal Emergency Management Agency

E-30



An employee-owned company

General Consultant
Florida Department of Transportation, Turnpike District



February 27, 2002

Mr. Don Loving
Senior Regulatory Supervisor
Martin/St. Lucie Service Center
South Florida Water Management District
210 Atlanta Avenue
Stuart, Florida 34994

RECEIVED
FEB 28 2002

BY: **MSL**

Re: Bridge Embankment Protection at Ten Mile Creek (Bridge # 940072)
Financial Project ID No.: 409327-1
St. Lucie County
Request for approval of channel maintenance

Dear Mr. Loving:

The Florida Department of Transportation, Florida's Turnpike (Turnpike) is proposing the rehabilitation of the Ten Mile Creek (Canal No. 71) shoreline downstream of the Gordy Road Structure and abutment protection at the Turnpike bridge. Due to high flows that periodically exceed the structure's capacity, bank and shoreline erosion has occurred and has resulted in sediment being deposited in the center of the channel.

The Turnpike proposes to remove the sedimentation and restore the channel to its original condition. Additionally, the current bridge abutment protection requires improvement, as it is substandard. The Turnpike's proposed project includes the restoration work originally to be conducted by the North St. Lucie River Water Control District (NSLRWCD), as a maintenance activity, under SFWMD Permit No. 56-00658-S (see attached).

Pursuant to our telephone conversation on November 20, 2001, the Turnpike is requesting approval to conduct the described work as a maintenance activity as well. Construction is scheduled to begin on October 30, 2002. Attached please find a set of construction plans and copies of correspondence between the NSLRWCD and the SFWMD.

If you have any questions or require additional information, please do not hesitate to contact me at (407) 532-3999 ext. 3410.

Sincerely

Jay C. Burtell
District Permit Coordinator

Attachments

Cc: John Post (TPK)
Mike Sasser (TPK)
Alexandru Tomacinschi (PHA)
Stuart McGahee (LBFH)



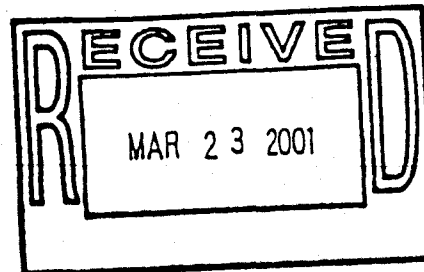
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

MARTIN/ST. LUCIE SERVICE CENTER 210 Atlanta Avenue, Stuart, FL 34994
(561) 223-2600 • FL WATS 1-800-250-4100 • Suncom 269-2600 • Fax (561) 223-2608 • www.sfwmd.gov/org/exo/mslsc/

CON 24-06

March 20, 2001

Mr. Marty Sanders, P.E., District Engineer
North St. Lucie River Water Control District
2721 South Jenkins Road
Ft. Pierce, FL 34981



Dear Mr. Sanders:

**SUBJECT: NSLRWCD Structure S-71-1 Channel Maintenance
(a.k.a. Gordy Road Structure)
SFWMD Permit No. 56-00658-S
St. Lucie County
Secs. 26/Twp. 35 S/ Rge. 39 E**

The purpose of this correspondence is to approve your request of March 8, 2001, to conduct stream channel maintenance and sedimentation removal downstream of NSLRWCD Structure S-71-1 (Gordy Road Structure). The subject drawing and description of the scope of work will be added to our files. With this approval I am requesting the following items prior to commencement of construction:

- Date of commencement.
- An on-site meeting with myself, the contractor and NSLRWCD staff seventy-two (72) hours prior to construction to confirm the proposed turbidity control plan.

Be advised that the maintenance activity authorized by this correspondence does not eliminate the necessity for NSLRWCD to obtain other Federal or local authorizations prior to the commencement of the subject activity.

Should you have questions or need additional information regarding this authorization or the requested items noted above, please contact me (800-250-4100, ext. 3607) at this office.

Sincerely,

Donald R. Loving
Donald R. Loving
Senior Regulatory Supervisor
Martin/St. Lucie Service Center

C: Mr. Jay Burrell, Turnpike District

E-32

GOVERNING BOARD

Michael Collins, Chairman
Michael D. Norton, Vice Chairman
Mitchell W. Berger

Vera M. Carter
Gerardo B. Fernandez
Patrick J. Gleason

Nicolas J. Gutierrez, Jr.
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Trudi K. Williams

EXECUTIVE OFFICE

Frank R. Finch, P.E., Executive Director
James E. Blount, Chief of Staff

SERVICE CENTER

Paul S. Millar, Director

SCANNED

JOHN SCOTTO

BOARD OF SUPERVISORS

MYRON (MAC) VARN, JR.
PRESIDENT

STEVEN D. CASSENS
PRESIDENT PRO TEM

NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT

2721 SOUTH JENKINS ROAD
FORT PIERCE, FLORIDA 34981
TELEPHONE (561) 461-5050

MARTY E. SANDERS, P.E.
DISTRICT ENGINEER

CAROL A. DONAHUE
SECRETARY-TREASURER

FRANK H. FEE, III
ATTORNEY

Bob Gifford

March 29, 2001

Andres E. Aquino
Assistant Permits Engineer
Sverdrup Corporation
P.O. Box 9828
Ft. Lauderdale, FL 33310-9828

Re: NSLRWCD Structure S-71-1 / Gordy Road
Maintenance of Channel

Dear Mr. Aquino:

Per your request, please find the following information regarding the maintenance of Canal No. 71 (Ten-mile Creek) at the Gordy Road Structure. The plans hereby referenced were forwarded to you on March 20, 2001.

The History:

The Gordy Road Structure was constructed in the early 1960's as part of a water control plan designed by the Soil Conservation Service.

The water control structure was originally designed with retention dikes tying the structure back into natural ground. For events exceeding the structure capacity, stormwater discharges around the structure and downstream into Canal No. 71 (Ten-Mile Creek). As a result of high flows that exceed the structure's capacity, erosion occurs to the channel banks. Most recently during a 1995 event, approximately 8.5 inches of rainfall caused the structure to overflow and exceed its capacity resulting in the depositing of a shoal downstream of the water control structure.

The Proposed Plan:

We propose to remove the sedimentation and restore the stream channel to its original design section as shown on the Turnpike plans dated 1955 and the Gordy Road plans dated 1962. To help prevent this erosion problem in the future, large diameter (1 - 2 foot) riprap boulders will be placed along the north bank of the channel where the erosion has occurred in the past. Behind these boulders filter fabric will be placed so that material does not migrate between the

461-2450

Fed Funds
\$30K +/-

FAXED
3/29

thinks its ok to transfer \$ to TPK

boulders. Additionally, a rock rubble emergency discharge channel will be constructed over this embankment so that in the event that the discharge exceeds the structure capacity the excess stormwater will be routed over the rock rubble and will not cause further erosion and sedimentation.

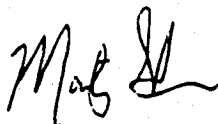
The Work:

The work will be accomplished utilizing backhoe and front-end loader to move material. Floating turbidity booms will be placed at the east and west edge of the Florida Turnpike bridge to prevent any downstream migration of sedimentation during the removal of the material. No work will be done during discharge from Structure S-71-1.

Because of the current low flow conditions, we are requesting that this work be authorized under maintenance exemption. It is imperative that we begin work immediately. We believe the work can be accomplished in 3 – 4 weeks. Given the current dry conditions and no anticipated rainfall, it is highly likely that this work can be accomplished before any significant rainfall.

Please feel to call if you have any questions.

Sincerely,



Marty Sanders, P.E.
District Engineer

Enclosures

Cc: Wade C. Fleming

P:\74-0901\S-71-1\MAINTENANCE-SFWMD-AQUINO-L01.doc

Subject: Ten Mile Creek Right-of-Way map

Date: Tue, 26 Mar 2002 09:54:20 -0500

From: jay.burrell@dot.state.fl.us

To: dloving@sfwmd.gov

Per our conversation on 3/25. Please let me know if you require any further information.

Jay C. Burrell
District Permit Coordinator
Florida's Turnpike Headquarters
P.O. Box 613069
Ocoee, FL 34761
(407) 532-3999 ext. 3410
jay.burrell@dot.state.fl.us

----- Forwarded by Jay Burrell/TP/FDOT on 03/26/2002 09:48 AM -----

Stephanie
Pulsifer

03/26/2002
08:47 AM


To: Jay Burrell/TP/FDOT@FDOT
cc: Mike Joiner/TP/FDOT@FDOT
Subject: Ten Mile Creek Right-of-Way map

Good morning.

Enclosed please find the zipped Right-of-Way map in .tif format for the Ten Mile Creek Bridge.
(See attached file: 10 Mile Cr.zip)

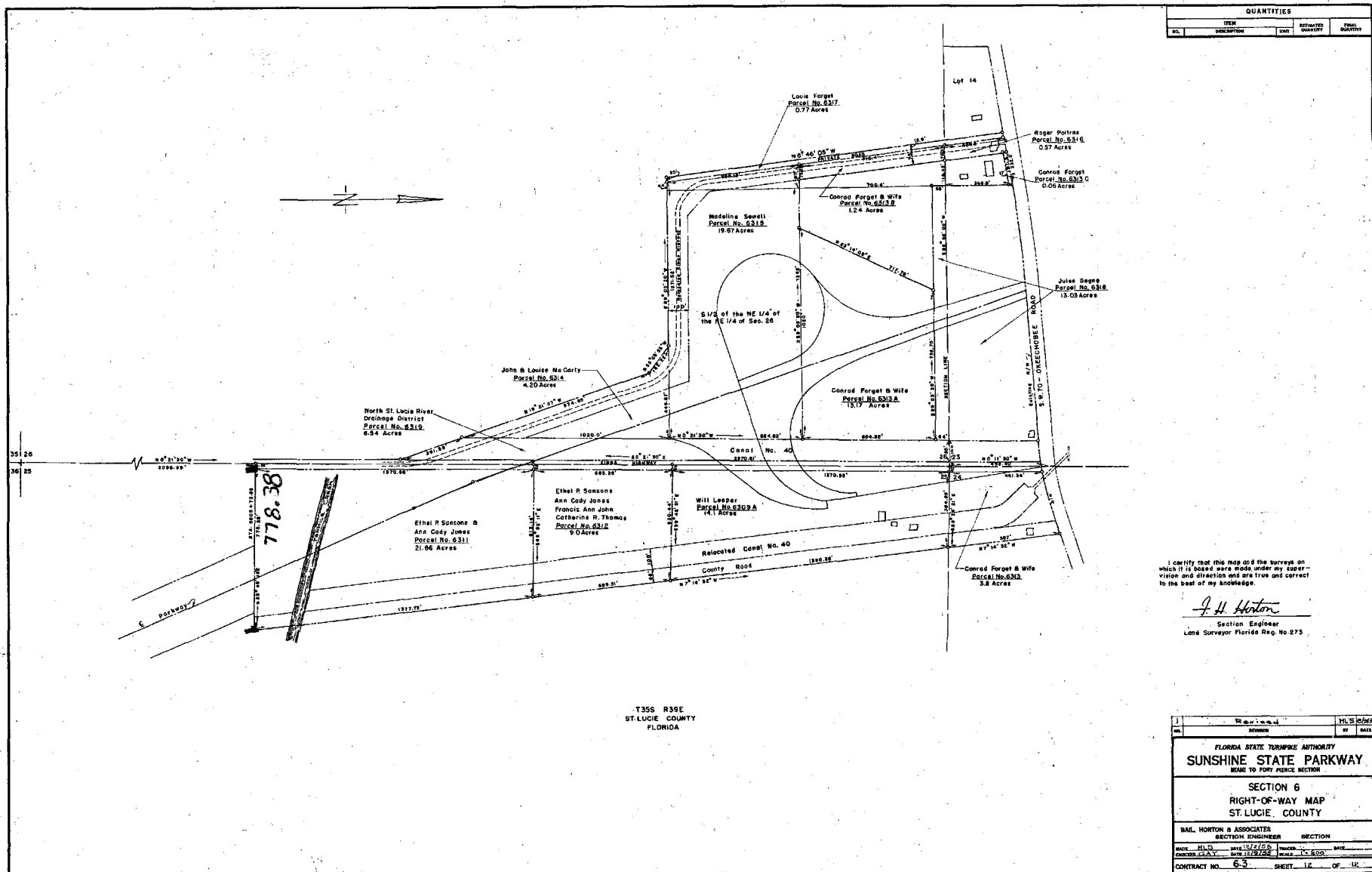
If I can be of further assistance, please do not hesitate to contact me.
Thanks!

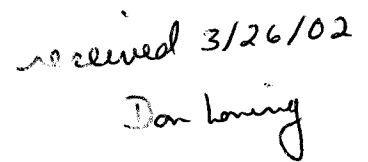
Stephanie Pulsifer
Survey and Mapping
Department of Transportation
Turnpike Headquarters
Turnpike Mile Post 263, Florida's Turnpike
(Building 5315, Turkey Lake Service Plaza)
Ocoee, Florida 34761
(PH) 407-532-3999 Ext. 3427
(FAX) 407-822-6538
stephanie.pulsifer@dot.state.fl.us

 10 Mile Cr.zip	Name: 10 Mile Cr.zip Type: Zip Compressed Data (application/x-zip-compressed) Encoding: base64
---	---

E-36

SCANNED







SOUTH FLORIDA WATER MANAGEMENT DISTRICT

MARTIN/ST. LUCIE SERVICE CENTER 210 Atlanta Avenue, Stuart, FL 34994
(772) 223-2600 • FL WATS 1-800-250-4100 • Suncom 269-2000 • Fax (772) 223-2608 • www.sfwmd.gov/org/exo/mslsc/

CON 24-06

Environmental Resource Regulation Department

Application Number: 020326-18

April 26, 2002

Mr. Jay C. Burrell, District Permit Coordinator
Florida Department of Transportation, Turnpike District
P.O. Box 613069
Ocoee, FL 34761

Dear Mr. Burrell:

Subject: Exemption Number: 56-01594-P
Channel Maintenance & Bridge Embankment Protection @ Ten Mile Creek
St. Lucie County, S26/T35S/R39E

This is to acknowledge receipt of your request to conduct channel maintenance, sedimentation removal and abutment repairs to the Turnpike Bridge over Ten Mile Creek in St. Lucie County. The work will consist of the removal of existing sediments from the stream channel, straighten the existing channel and stabilization of the Ten-Mile Creek shoreline, as well as the northern and southern turnpike bridge abutments as shown on the attached exhibits. No other work is authorized under this exemption.

The South Florida Water Management District (District) has reviewed the information submitted and has determined that the proposed activity will have only minimal or insignificant individual or cumulative adverse impacts on the water resources of the District. Therefore, based solely on the documents submitted to the District on February 28, 2002 and March 26, 2002, the project qualifies for an exemption pursuant to subsection 373.406(6), Florida Statutes. Activities which qualify for an exemption must be conducted and operated using appropriate best management practices and in a manner which does not cause a water quality violation pursuant to Florida Administrative Code 62-302.

This letter does not relieve you from the responsibility of obtaining other permits (federal, state or local) which may be required for this project.

The determination that this project qualifies as an exempt activity may be revoked if the installation is substantially modified, if the basis for the exemption is determined to be materially incorrect, or if the installation results in a violation of state water quality standards. Any changes made in the construction plans or location of the project may necessitate a permit from the District. Therefore, you are advised to contact the District before beginning the project and before beginning any work in wetlands which is not specifically described in the submittal.

E-39

GOVERNING BOARD

Trudi K. Williams, P.E., *Chair*
Lennart E. Lindahl, P.E., *Vice-Chair*
Pamela Brooks-Thomas

Michael Collins
Hugh M. English
Gerardo B. Fernández

Patrick J. Gleason, Ph.D., P.G.
Nicolas J. Gutiérrez, Jr., Esq.
Harkley R. Thornton

EXECUTIVE OFFICE

Henry Dean, *Executive Director*

Mr. Jay C. Burreli
Florida Department of Transportation
Ten-Mile Creek Improvements
April 26, 2002
Page 2 of 3

The notice of determination that the project qualifies as an exempt activity constitutes final agency action by the District unless a petition for administrative hearing is filed. Upon timely filing of a petition, this Notice will not be effective until further order by the District. Please be advised that if the District has not published a notice in the newspaper advising the public that it is determining that this activity is exempt pursuant to subsection 373.406, Florida Statutes. Enclosed is a sample package used for newspaper noticing by the District. Publication, using the District form, notifies the members of the public (third parties) of their rights to challenge the determination. If proper notice is given by publication, third parties have a 21-day time limit on the time to file a petition opposing the determination. If you do not publish a notice, a party's right to challenge the determination extends for an indefinite period of time. If you wish to have certainty that the period of filing such a challenge is closed, then you may publish, at your own expense, such a notice in a newspaper of general circulation. A copy of the form of the notice and list of newspapers of general circulation is attached for you use. If you choose to publish this notice, please provide us with an affidavit of publication when it becomes available.

This package includes:

- Attachment 1 The name address and telephone number for the newspaper of general circulation typically used by the District to advertise permits that are issued by the Governing Board is provided.
- Attachment 2 A copy of a sample notice that the District staff used is included to provide guidance on the language to be used in the notice. This language satisfies the legal requirements for noticing.
- Attachment 3 A copy of a sample affidavit of publication is also included. The affidavit is provided to you by the newspaper to provide proof of publication. The original affidavit should be submitted to:

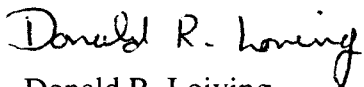
Ms. Loretta Scragg
South Florida Water Management District
P.O. Box 24680
West Palm Beach, FL 33416-4680

- Attachment 4 Location Map and Plans

Mr. Jay C. Burrell
Florida Department of Transportation
Ten-Mile Creek Improvements
April 26, 2002
Page 3 of 3

At least seventy-two (72) hours prior to the commencement of construction of the proposed works, the District is requesting a pre-construction meeting with the contractors to review methods or work and construction timing. If you have any questions, please contact me at (800) 250-4100, extension 3607.

Sincerely,



Donald R. Loiving
Senior Regulatory Supervisor
Environmental Resource Compliance Division
Martin/St. Lucie Service Center
South Florida Water Management District

DRL/sbm

Attachments

c: Don West, St. Lucie County Engineer
Florida Department of Environmental Protection (Port St. Lucie office)
U.S. Army Corps of Engineers (Stuart)
North St. Lucie River Water Control District



Legal Advertisement Newspaper Addresses and Deadlines

Each newspaper has a different schedule for the advertisement of legal ads. The following table outlines the newspaper, the address, deadline the publishing day, phone numbers and contacts for the legal ads.

County	Newspaper	Contact	Deadline	Publish Day	Fax	Phone
Broward	Ft. Lauderdale News/Sun Sentinel 333 Southwest 12 th Avenue Deerfield Beach, FL 33442	Dedrie Floyd	Monday 2:30	Following Thursday	(941) 425-1006	(941) 425-1033
Charlotte	Charlotte Sun Herald 23170 Harborview Road Charlotte Harbor, FL 33980	Mary Skaggs	Monday 5:00	Following Thursday	(941) 629-2085	(941) 629-2655
Collier	Naples Daily News 1075 Central Avenue Naples, FL 33490	Pam Perrell	Monday 4:00	Following Thursday	(941) 263-4703	(941) 263-4832
Glades	Independent Newspapers Inc. C/o Glades County Democrat @ P.O. Box 7013 Dover, DE 19903	No Contact	Thursday 5:00	Following Thursday	(863) 983-7537	(863) 943-0511
Handry	Independent Newspapers Inc. C/o Clewiston News(S) P.O. Box 7013 Dover, DE 19903	No Contact	Thursday 5:00	Following Thursday	(863) 983-7537	(863) 983-9145
Highlands	Lake Placid Journal 232 North Main Street Lake Placid, FL 33852	Sharon Jones	Monday 5:00	Following Thursday	(941) 899-0331	(941) 455-2622
Lee	Fort Myers News Press 2442 Dr. Martin Luther King, Jr. Hwy Fort Myers, FL 33901	Brenda Leighton	Monday 12:00	Following Thursday	(941) 337-1335	(941) 335-0211
Martin	Stuart News 1939 Southeast Federal Highway Stuart, FL 34994	Mary Byrne	Tuesday 12:00	Following Thursday	(861) 221-4126	(861) 237-1550
Miami-Dade	Miami Herald 1 Herald Plaza Miami, FL 33101 Attn: Ms. Cooper	Ms. Cooper	Tuesday 3:00	Following Thursday	(305) 995-8121	(305) 376-2584
Miami-Dade	South Dade News Ledger 15 Northeast 1 st Road Homestead, FL 33090 Attn Carol (Legal)	Carol Raymond	Tuesday 5:00	Following Friday	(305) 248-0596	(305) 248-2311
Monroe	Key West Citizen 3420 Northside Drive Key West, FL 33040	Cristal Vraho	Tuesday 12:00	Following Thursday	(305) 294-0768	(305) 294-6641
Okeechobee	Independent Newspapers Inc. C/o Okeechobee News (A) P.O. Box 7013 Dover, DE 19903	No Contact	Wednesday 10:00	Following Friday	(877) 354-2424	(863) 763-3131
Orange	Orlando Sentinel Star 633 North Orange Avenue Orlando, FL 32802	Julia Nichols	Tuesday 5:00	Following Thursday	(407) 420-5011	(407) 420-5160
Osceola	Osceola Shopper/News Gazette 108 Church Street Kissimmee, FL 34742	Barbara Pollard	Friday 5:00	Following Thursday	(407) 846-8516	(407) 846-7600
Palm Beach	Palm Beach Post 2751 South Dixie Highway West Palm Beach, FL 33405	Claudia Dunn	Monday 3:00	Following Thursday	(561) 320-4340	(561) 320-3106
Polk	Lakeland Ledger 300 West Lime Street Lakeland, FL 33815	Jennifer Clendenning	Friday 3:00	Following Thursday	(941) 587-7975	(941) 666-7000
St. Lucie	Fort Pierce News Tribune 600 Edwards Road Fort Pierce, FL 34954	Pat Shammon	Wednesday 12:00	Following Thursday	(561) 466-5997	(561) 461-2000

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT
PUBLIC NOTICE OF APPLICATION**

Notice is hereby given that pursuant to Chapter 373, Florida Statutes, the following application(s) for permit has been received for a project(s) in Broward County:

Deerfield Beach Energy LLC (Deerfield Beach Energy Center) 1400 Smith St, Houston, TX 77002, has submitted Application 010112-7 for a Water Use Permit for 30 acres of industrial lands. The water will be withdrawn from the Biscayne Aquifer and the project is located in Section 9, Township 48 South, Range 42 East.

Minto Communities Inc (Lido Isles) 4400 W Sample Rd, Suite 200, Coconut Creek, FL 33073, has submitted Application 001215-2 for modification of Surface Water Management Permit 06-01835-S for 153.68 acres of residential lands. The water will be discharged via an existing system and the project is located in Section 20, Township 51 South, Range 40 East.

Shamrock of Broward Ltd (Shamrock Condominium) 12615 SW 91st Street, Miami, FL 33186, has submitted Application 010111-18 for an Environmental Resource Permit for 2.3 acres of residential lands. The water will be discharged to an onsite retention system and the project is located in Section 2, Township 51 South, Range 42 East.

Watermark Communities Inc (Heron Bay East) 11575 Heron Bay Blvd, 2nd Floor, Coral Springs, FL 33076, has submitted Application 010116-7 for modification of Surface Water Management Permit 06-00073-S for 250.63 acres of residential lands. The water will be discharged to the LWDD L-36 Canal via the NSID Waterways and the project is located in Sections 31,32/5,6, Townships 47/48 South, Range 41 East.

Broward County Board of County Commissioners (N Central County Neighborhood Improvement Project) 115 S Andrews Ave, Room 421, Ft Lauderdale, FL 33301, has submitted Application 010119-10 for an Environmental Resource Permit for 945 acres of residential lands. The water will be discharged to the C-12 and C-13 Canals and the project is located in Sections 28,29,31,32, Township 49 South, Range 42 East.

Broward County Parks and Recreation Division (Offsite Mitigation at Long Key Natural Area) 1000 NW 38th Street, Oakland Park, FL 33308, has submitted Application 010124-12 for modification of Environmental Resource Permit 06-02416-P for 29.4 acres of offsite mitigation lands. The water will be discharged via an existing system and the project is located in Section 23, Township 50 South, Range 40 East.

Interested persons may comment upon the application or submit a written request for a copy of the staff report containing proposed agency action regarding the application by writing to the South Florida Water Management District, Attn: Environmental Resource Regulation, PO Box

ATTACHMENT 2
sheet 1 of 2

E-43

SCANNED

24680, West Palm Beach, FL 33416-4680, but such comments or requests must be received by 5:00 PM within 21 days from the date of publication.

No further public notice will be provided regarding this application. A copy of the staff report must be requested in order to remain advised of further proceedings. Substantially affected persons are entitled to request an administrative hearing regarding the proposed agency action by submitting a written request therefor after reviewing the staff report.

PUBLISH: February 15, 2001

Sun Sentinel
333 SW 12th Avenue
Deerfield Beach, FL 33442
Attn: Legal Ads

ATTACHMENT 2
sheet 2 of 2

4240
R100609
787.46

The Miami Herald

www.herald.com
www.elherald.com

PUBLISHED DAILY
MIAMI-DADE-FLORIDA

STATE OF FLORIDA
COUNTY OF DADE

Before the undersigned authority personally
appeared:

JEANNETTE MARTINEZ

who on oath says that he/she is

CUSTODIAN OF RECORDS

of The Miami Herald, a daily newspaper published at
Miami in Dade County, Florida; that the attached
copy of advertisement was published in said
newspaper in the issues of:

December 21, 2000

Affiant further says that the said The Miami Herald
is a newspaper published at Miami, in the said Dade
County, Florida and that the said newspaper has
heretofore been continuously published in said Dade
County, Florida each day and has been entered as
second class mail matter at the post office in Miami,
in said Dade County, Florida, for a period of one
year next preceding the first publication of the
attached copy of advertisement; and affiant further
says that he has neither paid nor promised any
person, firm or corporation any discount, rebate,
commission or refund for the purpose of securing
this advertisement for publication in the said
newspapers(s).

Jeannette Martinez
Sworn to and subscribed before me this
26th day of December, 2000

My Commission

Expires: May 12, 2002

Silvia Acosta

Notary

OFFICIAL NOTARY SEAL
SILVIA ACOSTA
NOTARY PUBLIC STATE OF FLORIDA
COMMISSION NO. CC717113
MY CO.

SOUTH FLORIDA WATER MANAGEMENT PUBLIC NOTICE OF APPLICATION

Notice is hereby given
that pursuant to Chapter
373, Florida Statutes, the
following application(s)
for permit have been
received for project (s) in
Miami-Dade County:

U.S. Air Force
(Homestead Air Reserve
Station) 29050 Coral Sea
Blvd., Box 88, Homestead,
FL 33039-1299, has
submitted an Application
for a Permit to install a
Public Water Supply to
service 3500 acres. The
project is located in
Sections 1, 2, 11-14/36/8, 7,
Townships 57/56 South,
Range 39/40 East.

Homestead Miami
Speedway LLC
(Homestead Motorsports
Complex Overflow
Parking Lot) One
Speedway Blvd.

Homestead, FL 33039,
has submitted Application
for a Permit to install an
Environmental
Resource Permit for 120
acres of recreational
lands. The water will be
removed via an
irrigation system and the
project is located in
Section 22, Township 57
South, Range 39 East.

M & H Homestead Ltd.
(Keys Gate) 13 SW 7th
Street, Miami, FL 33130,
has submitted Application

for a Permit to install
surface water
management of 865.63
acres of residential
lands. The water will be
removed via an
irrigation system and the
project is located in
Sections 15, 17, 19-21, 23, 29,
Township 57 South,
Range 39 East.

Interested persons may
comment upon the
application or submit a
written request for a
copy of the staff report
containing proposed
agency action regarding
the application by writing
to the South Florida
Water Management
District. Attn:
Environmental Resource
Regulation, P.O. Box
24580, West Palm
Beach, FL 33416-4580,
but such comments or
requests must be
received by 5:00 PM
within 21 days from the
date of publication.

No further public notice
will be provided
regarding this
application. A copy of
the staff report must be
requested in order to
remain advised of further
proceedings.
Substantially affected
persons are entitled to
request an
administrative hearing
regarding the proposed
agency action by
submitting a written
request therefor after
reviewing the staff
report.

PUBLISH:
December 21, 2000

ATTACHMENT 3

E-45

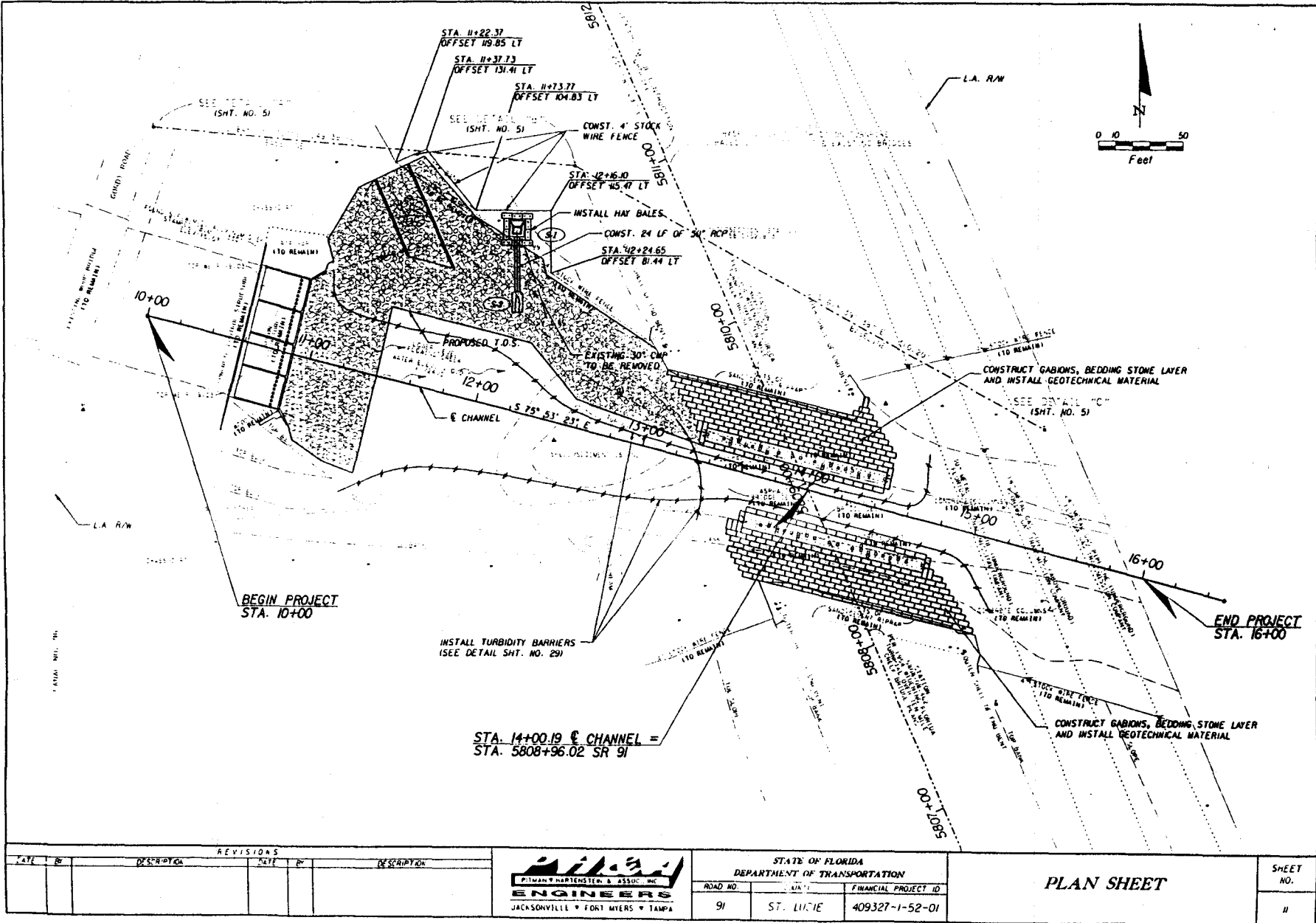
SCANNED

CONTRACT PLANS

TEN MILE CREEK - BRIDGE # 940072



SCANNED

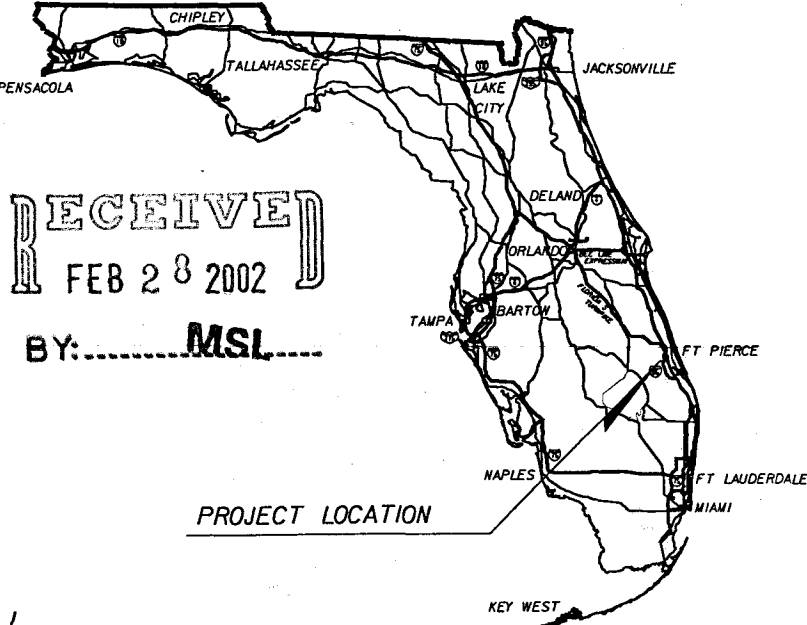


COMPONENTS OF CONTRACT PLANS SET
ROADWAY PLANS

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

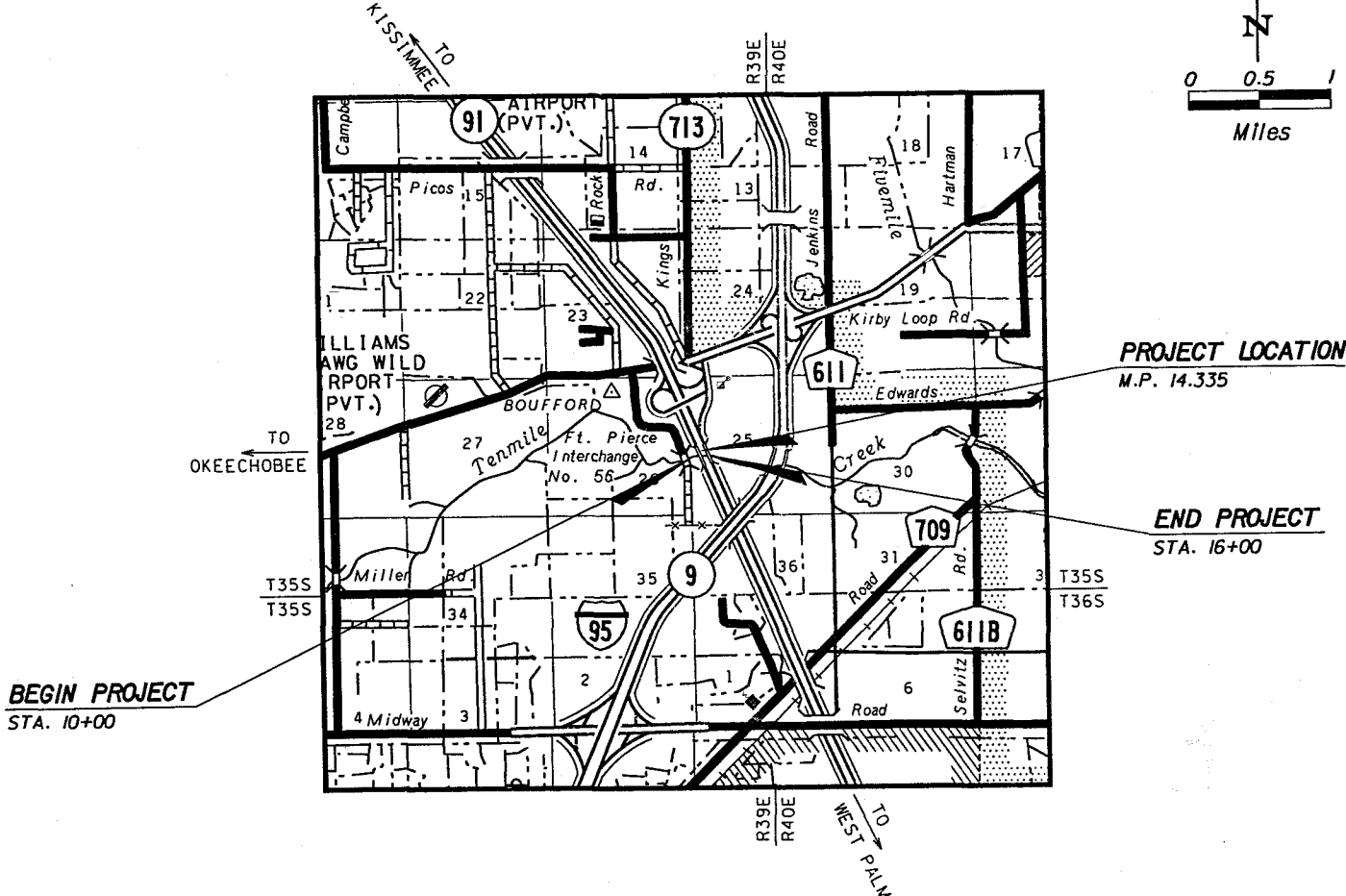
FINANCIAL PROJECT ID 409327-1-52-01
FLORIDA'S TURNPIKE
ST. LUCIE COUNTY (94470)
BRIDGE EMBANKMENT PROTECTION
AT
TEN MILE CREEK - BRIDGE # 940072



RECEIVED
FEB 28 2002
BY: MSL

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SUMMARY OF PAY ITEMS
3	SUMMARY OF QUANTITIES
4	SUMMARY OF DRAINAGE STRUCTURES
5	GENERAL NOTES & REFERENCE POINTS
6 - 9	TYPICAL SECTION AND DETAILS
10	DRAINAGE DETAILS
11	PLAN SHEET
12	DRAINAGE STRUCTURE SHEET
13	PROFILE
14 - 28	CROSS SECTIONS
29 - 31	EROSION CONTROL
32	TRAFFIC CONTROL SHEET



ROADWAY SHOP DRAWINGS
TO BE SUBMITTED TO:

ROBERT BERKOWITZ, P.E.
PITMAN HARTENSTEIN AND ASSOC., INC.
7820 ARLINGTON EXPWY, SUITE 640
JACKSONVILLE, FLORIDA 32211

PLANS PREPARED BY:

PITMAN HARTENSTEIN AND ASSOC., INC.
7820 ARLINGTON EXPWY, SUITE 640
JACKSONVILLE, FLORIDA 32211



VENDOR No. 59-2695553

NOTE: THE SCALE OF THESE PLANS
MAY HAVE CHANGED BY REPRODUCTION.

CONTRACT No. C-7799

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
ROADWAY AND TRAFFIC DESIGN STANDARDS
DATED JANUARY 2000, AND
STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE
CONSTRUCTION DATED 2000,
AS AMENDED BY CONTRACT DOCUMENTS.

REVISIONS

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY	N/A	N/A
BRIDGES	N/A	N/A
NET LENGTH OF PROJECT	600	0.11
EXCEPTIONS	N/A	N/A
GROSS LENGTH OF PROJECT	600	0.11

GEC PROJECT MANAGER: MIKE SASSER, PE
FDOT PROJECT MANAGER: WILLIAM F. SLOUP, PE

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

ROADWAY PLANS
ENGINEER OF RECORD: ROBERT BERKOWITZ, P.E.

P.E. NO. 39216

FISCAL YEAR	SHEET NO.	
03	1	E-48

100% SUBMITTAL

[illegible]

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE SECTIONS OF "FDOT STANDARD SPECIFICATIONS" (LATEST REVISION) AND ALL FDOT STANDARD DETAILS (LATEST REVISION)
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE PROJECT.
3. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE PROJECT ENGINEER SHOULD NOTIFY THE SURVEYOR WITHOUT DELAY BY TELEPHONE
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL/DISPOSAL OF ANY UNSUITABLE MATERIAL ENCOUNTERED DURING CONSTRUCTION, AND THE FURNISHING AND COMPACTING OF SUITABLE REPLACEMENT BACKFILL MATERIAL. COST TO BE INCLUDED WITH THE REGULAR EXCAVATION.
5. UTILITIES TO BE ADJUSTED BY OTHERS AS DIRECTED BY THE ENGINEER.
6. ALL EXISTING DRAINAGE STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION SHALL REMAIN UNLESS NOTED "TO REMOVED".
7. THE CONTRACTOR SHALL GIVE 48-HOURS NOTICE TO THE FT. PIERCE OFFICE AT 461-464-2831 PRIOR TO ANY WORK NEAR FGT FACILITIES.
THE LOCATION OF FGT'S FACILITIES SHOWN ON THE DRAWINGS IS APPROXIMATE.
A FIELD SURVEY MUST BE DONE TO DETERMINE THE ACTUAL LOCATION OF FGT'S FACILITIES.
A FGT REPRESENTATIVE MUST BE PRESENT WHEN ANY WORK IS DONE WITHIN 10" OF PHYSICALLY VERIFIED FGT FACILITY.
MACHINE EXCAVATION MAY NOT BE PERFORMED WITHIN 5" OF A PHYSICALLY VERIFIED FGT FACILITY.
A FGT REPRESENTATIVE WILL PERFORM THE PHYSICAL VERIFICATION
8. THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION TO ENSURE SAFE VEHICULAR OPERATIONS AS WELL AS TO PROHIBIT ANY UNDUE IMPACT TO OFF-SITE DRAINAGE OR OTHER ENVIRONMENTAL CONCERNS
9. IN CASE OF RAIN-OUTS AND/OR WASH-OUTS, THE CONTRACTOR SHALL REDO THE WORK AREA WITH FULL OBSERVANCE OF LAIDEN- RUNOFF AND EROSION CONTROL METHODS.
10. THE CONTRACTOR SHALL COVER ALL DISTURBED AREAS, IMMEDIATELY AFTER CONSTRUCTION, WITH THE PERMANENT COVERING TYPE SHOWN IN THE PLANS AT THAT LOCATION.

II. UTILITY OWNERS

BELL SOUTH - S.A. ROBERTS

AT&T - BILL HAM

FLORIDA GAS TRANSMISSION - JOE SANCHEZ

PHONE NUMBER

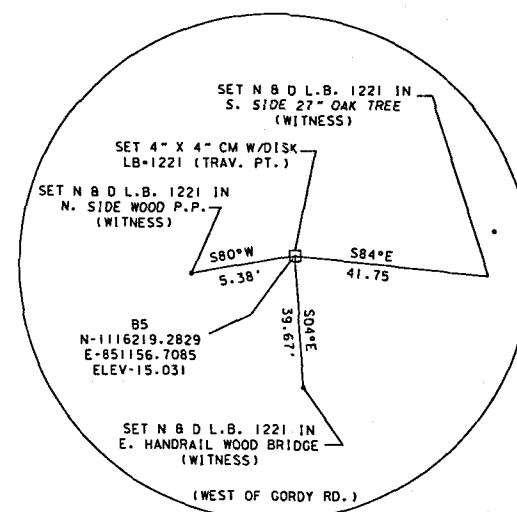
(561) 468-5513

(407)248-3445

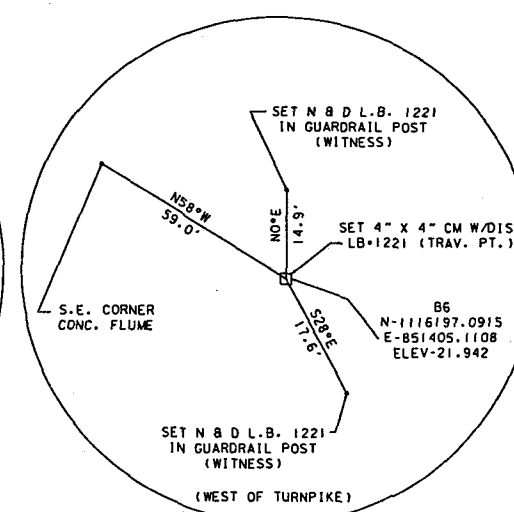
(407) 838-7171

12. CALL THE SUNDANCE STATE AT 1-800-432-4770, AND THE UTILITIES OWNERS 48 HOURS PRIOR BEGINNEIN WORK
13. IT IS THE RESPONSIBLTY OF THE CONTRACTOR TO ENSURE THAT THE CONSTRUCTION METHODS USED ON THE PROJECT AREA DOES NOT CAUSE ANY DISCHARGE OF TURBID WATER DOWNSTREAM OF THE PROJECT AREA. THE CONTRACTOR SHALL MAKE ANY PROVISIONS NECESSARY TO ENSURE COMPLIANCE WITH ENVIRONMENTAL AGENCY REQUIREMENTS. NO ADDITIONAL COMPENSATION BEYOND THOSE MEASURES INDICATED IN THE PLANS WILL BE MADE FOR COMPLIANCE WITH THESE REQUIREMENTS.
14. BURNING OF MATERIALS AND/OR DEBRIS AS MEANS OF DISPOSAL IS PROHIBITED WITHIN THE PROJECT LIMITS.CONTRACTOR SHALL DISPOSE OF ALL CLEARED AND GRUBBED MATERIAL OFF-SITE.
15. REMOVAL & DISPOSAL OF EXISTING FENCE TO BE INCLUDED IN THE COST OF SITE PREPARATION.
16. FENCE TO BE REPLACED SHOULD BE EQUAL TO EXISTING PROPERTY FENCE TYPE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PERSONAL PROPERTY DUE TO CONSTRUCTION ACTIVITIES AND SHALL PERFORM ANY AND ALL REPAIRS AT THE CONTRACTORS EXPENSE.
18. ALL SUITABLE EXCAVATED MATERIAL MAY BE UTILIZED AS BACKFILL WITH THE APPROVAL OF THE PROJECT ENGINEER.

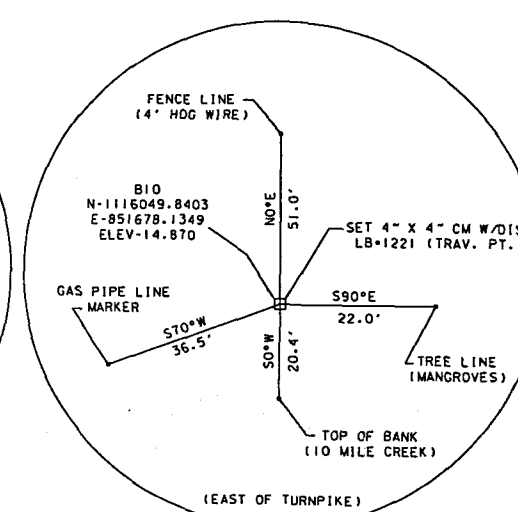
DETAIL "A"
N.T.S.



DETAIL "B"
N.T.S.



DETAIL "C"
N.T.S.



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.

COUNTY

FINANCIAL PROJECT ID

9/

ST. LUCIE

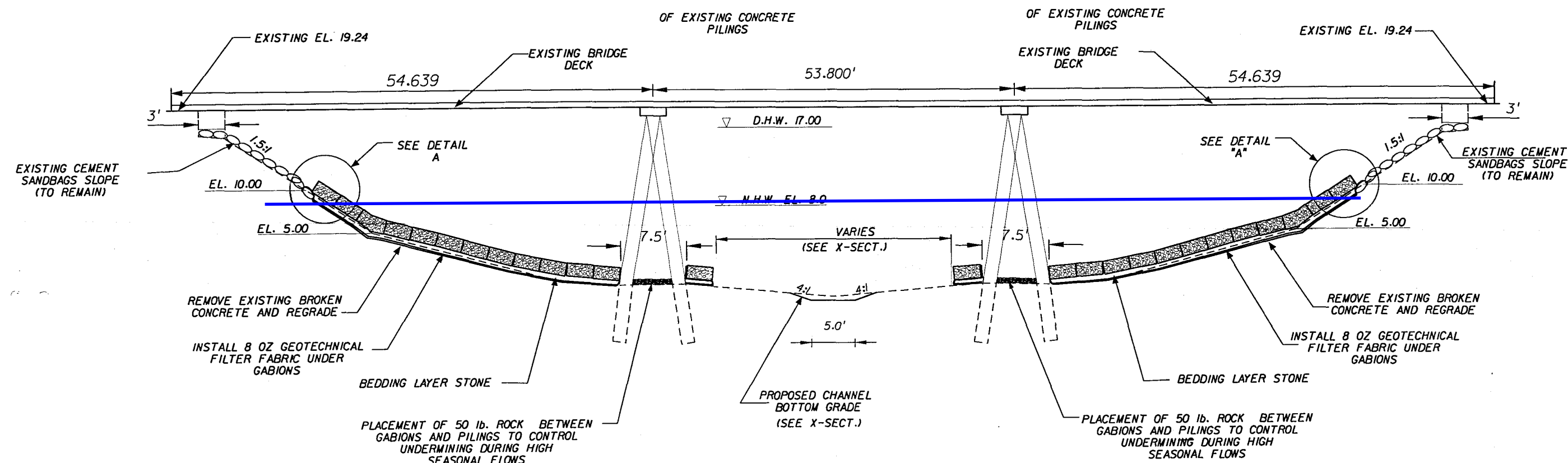
409327-1-52-01

**GENERAL NOTES &
SURVEY REFERENCE POINTS**

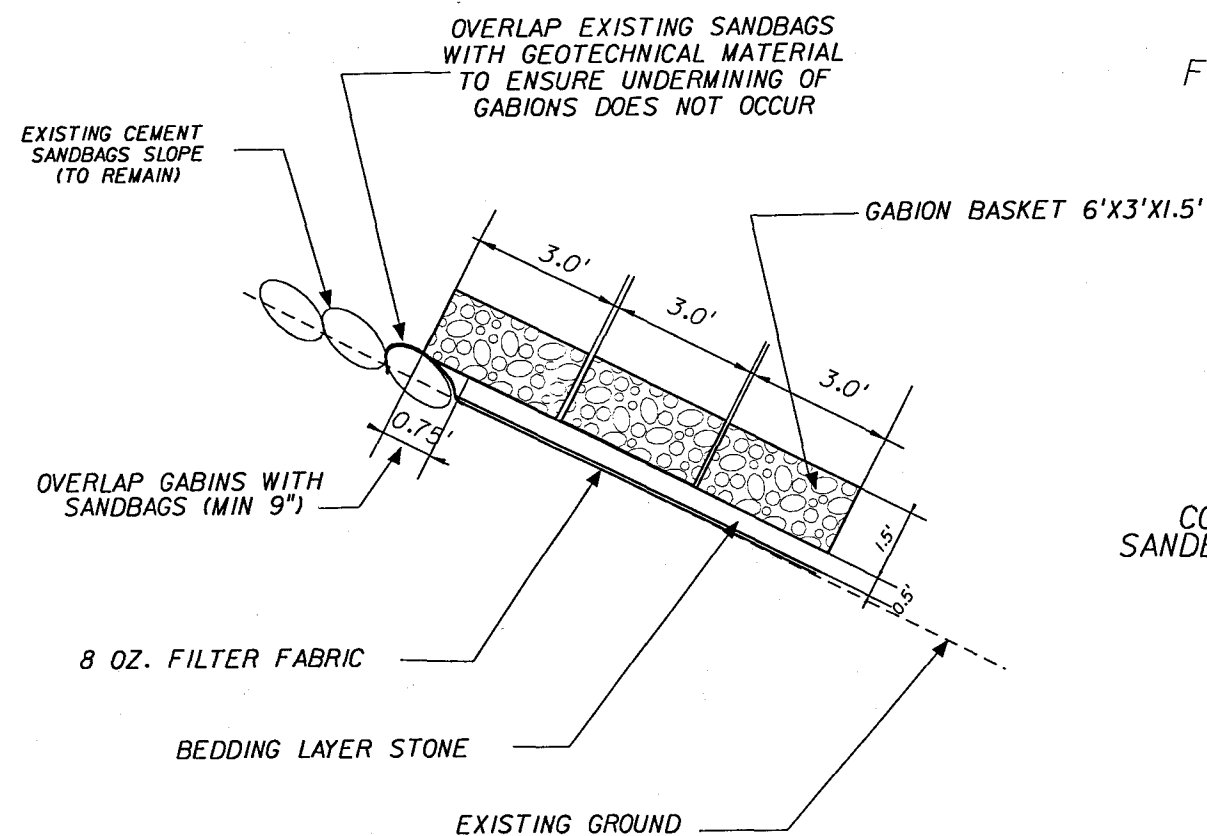
SHEET
NO.

5

E-50



CHANNEL TYPICAL SECTION
UNDER BRIDGE
FROM STA. 13+40 TO STA. 15+00
(N.T.S.)



DETAIL "A"
CONNECTION OF
SANDBAGS TO GABIONS
(N.T.S.)

NOTE: THIS TYPICAL IS TAKEN ALONG
TURNPIKE BASE LINE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

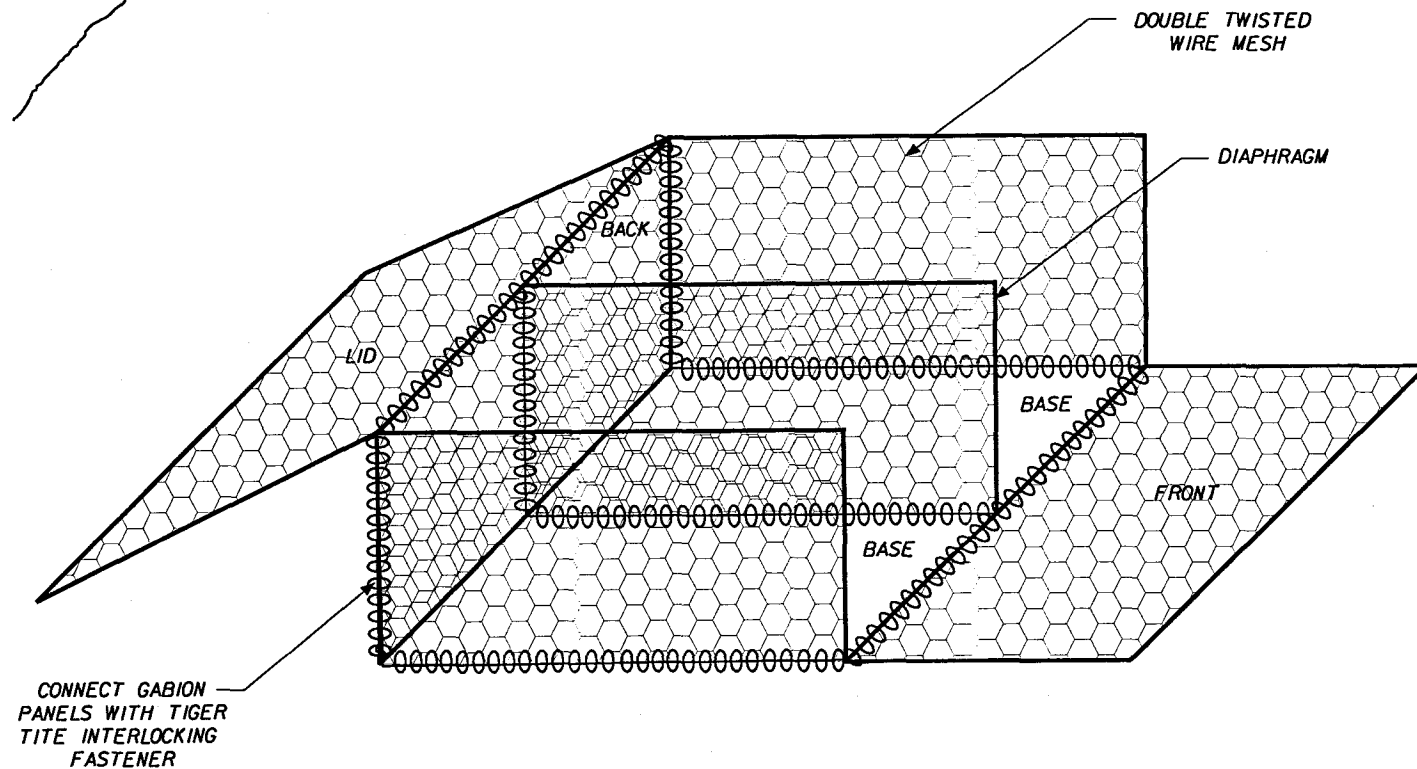
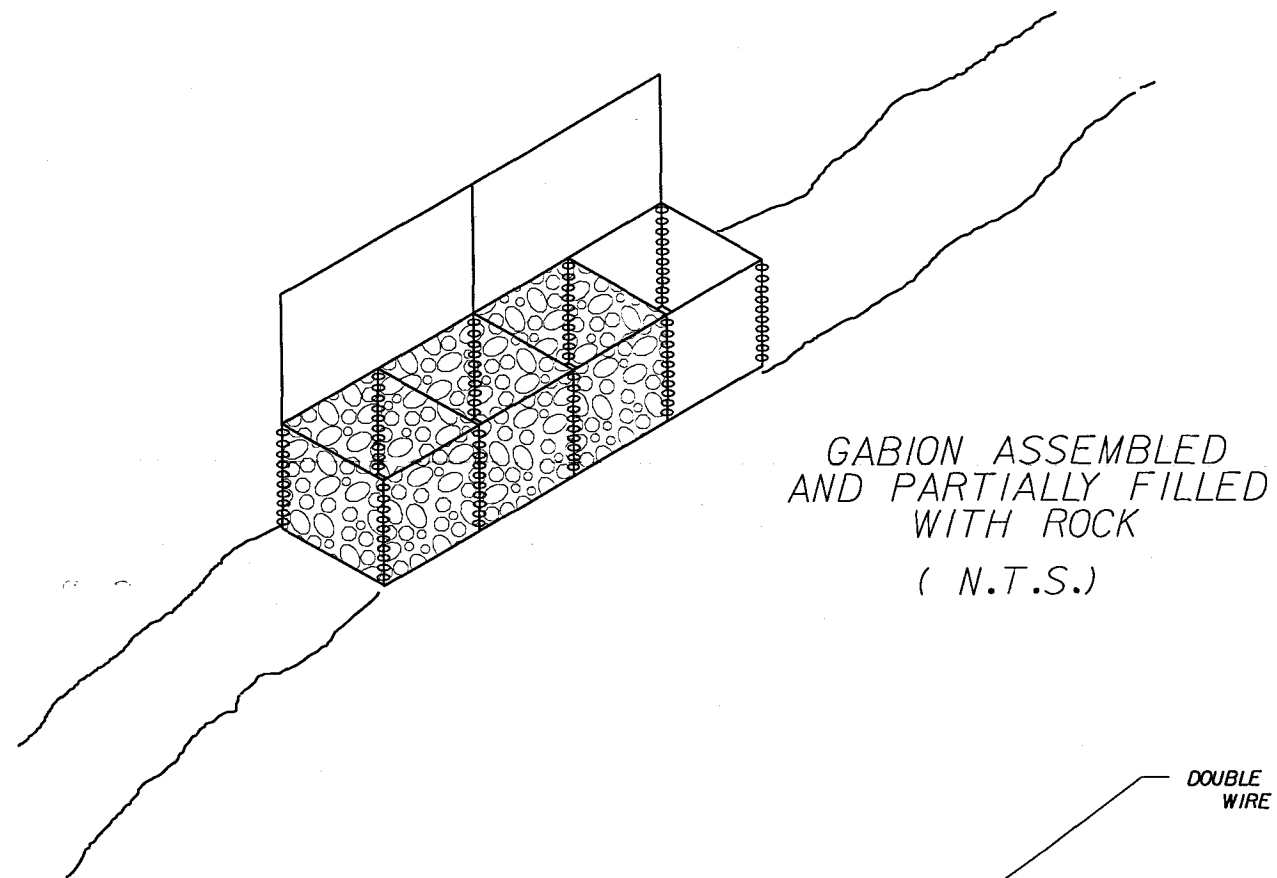
PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
JACKSONVILLE • FORT MYERS • TAMPA

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

TYPICAL BRIDGE SECTION
(EMBANKMENT PROTECTION)

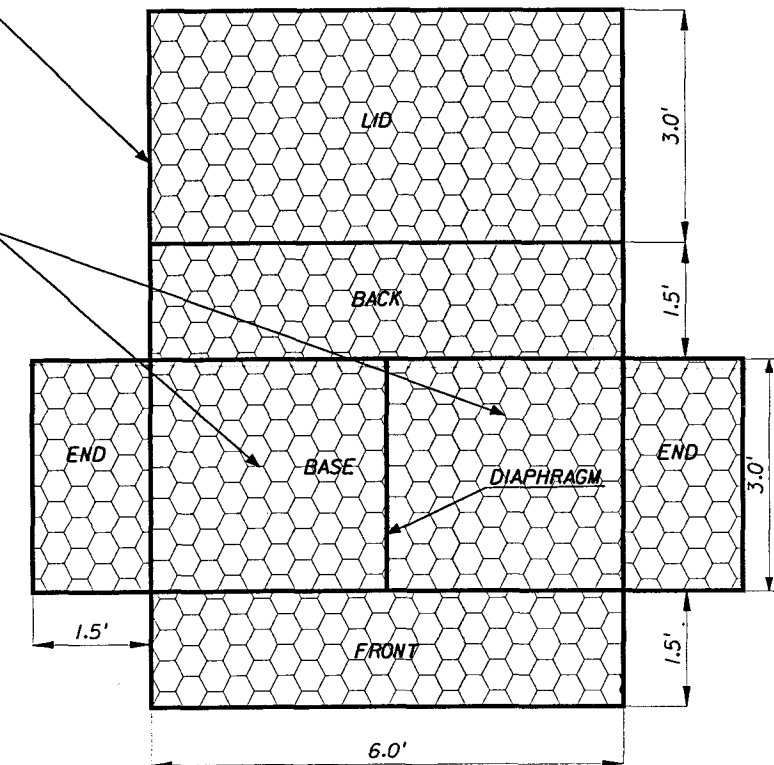
SHEET
NO.
6

E-51



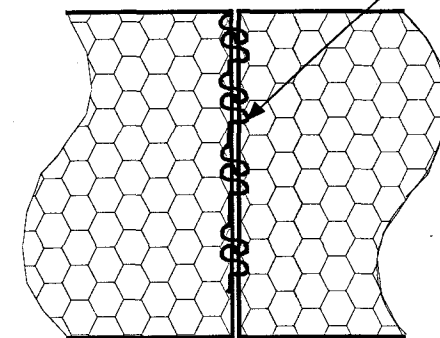
PVC COATED & GALVANIZED
STEEL WIRE MESH BASKET

GABIONS ARE 2 CELL
CONSTRUCTED



GABION UNASSEMBLED
(N.T.S.)

ALL BASKETS WILL BE CONNECTED WITH DOUBLE LOOP
AND CONSTRUCTED OF DOUBLE TWISTED WIRE
MESH AND CONNECTED IN ACCORDANCE WITH
MANUFACTURERS SPECIFICATIONS



BASKETS CONNECTION
DETAILS
(N.T.S.)

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

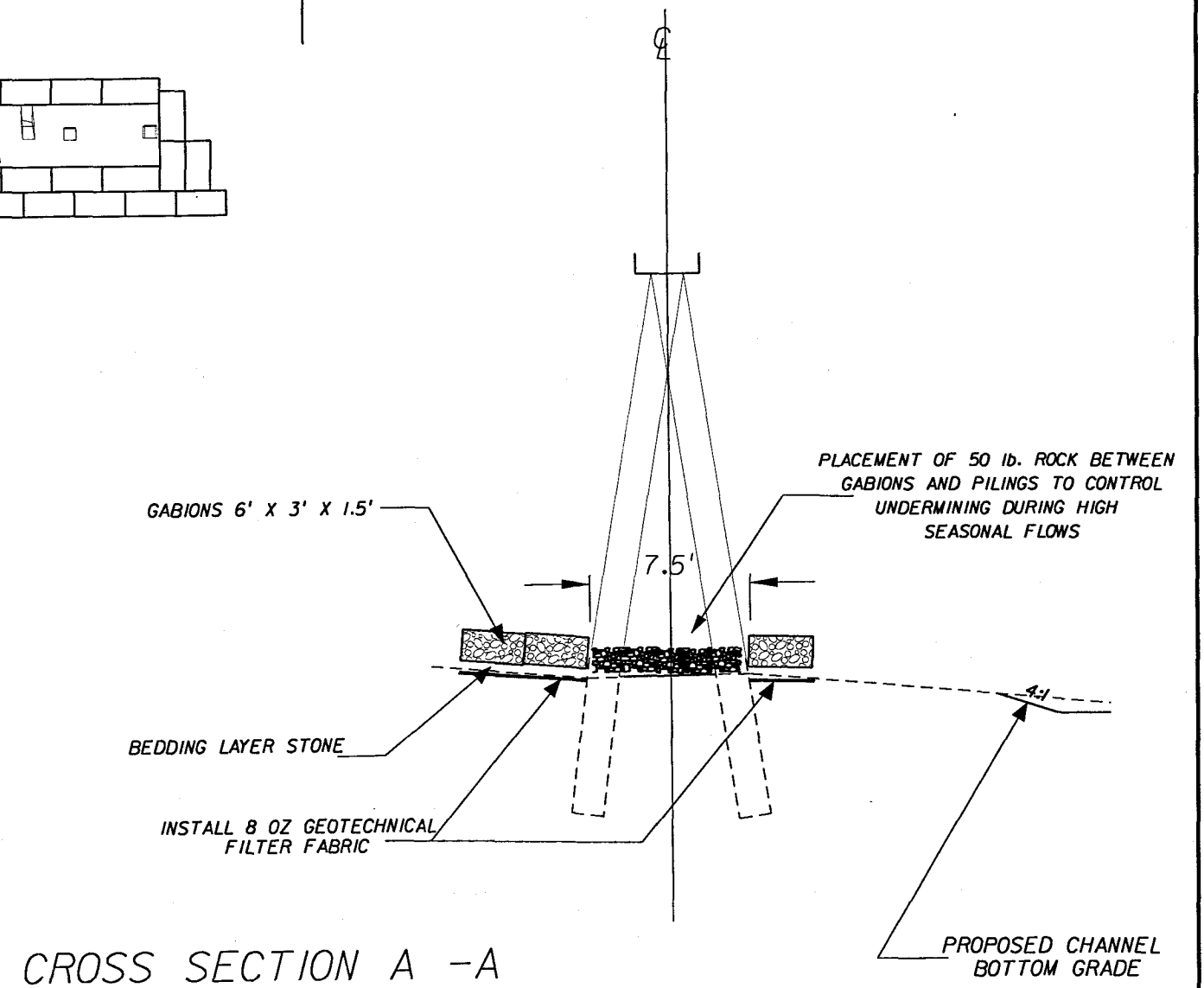
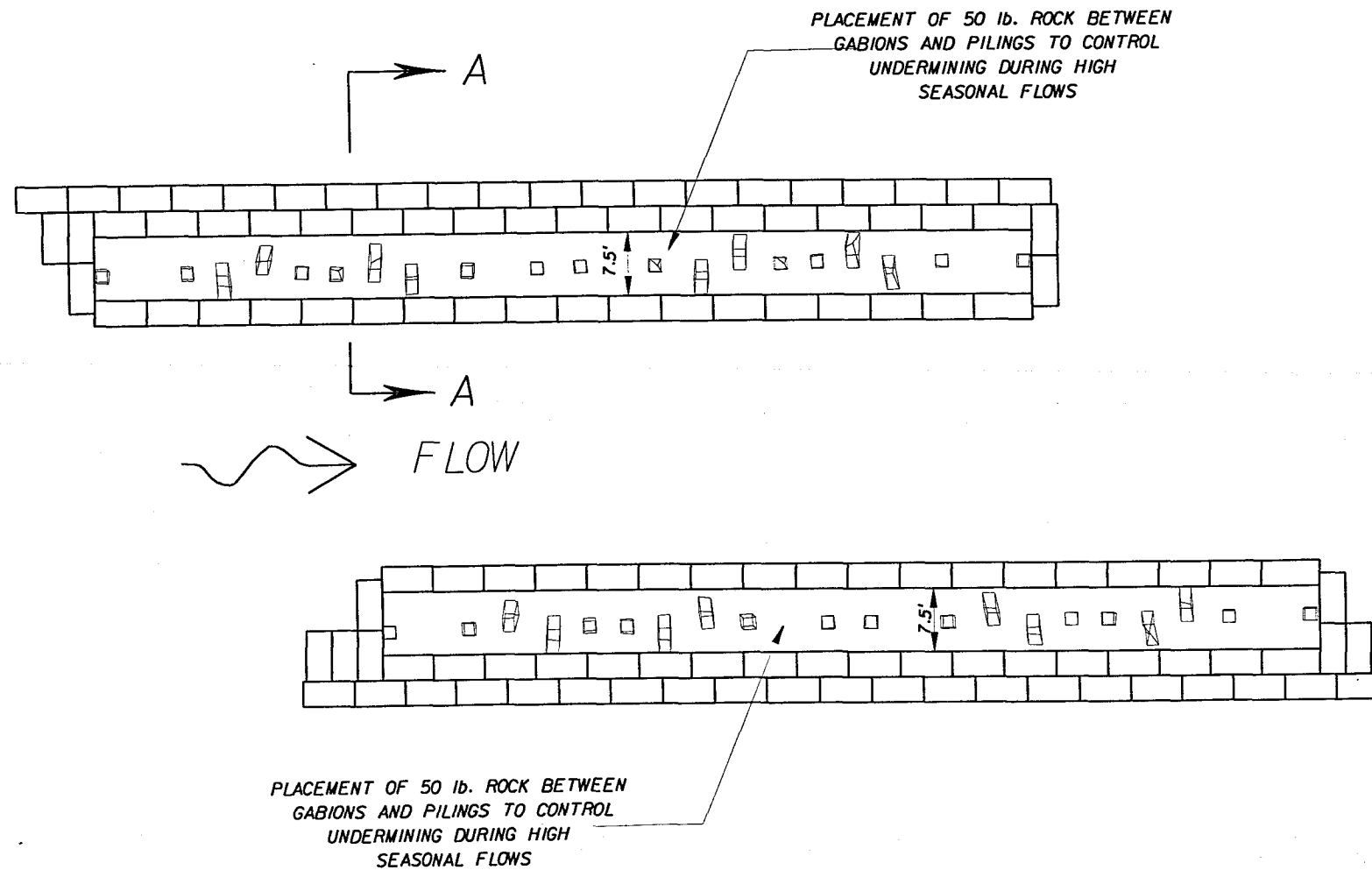


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

GABION ASSEMBLY DETAIL

SHEET
NO.
7

E-52



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

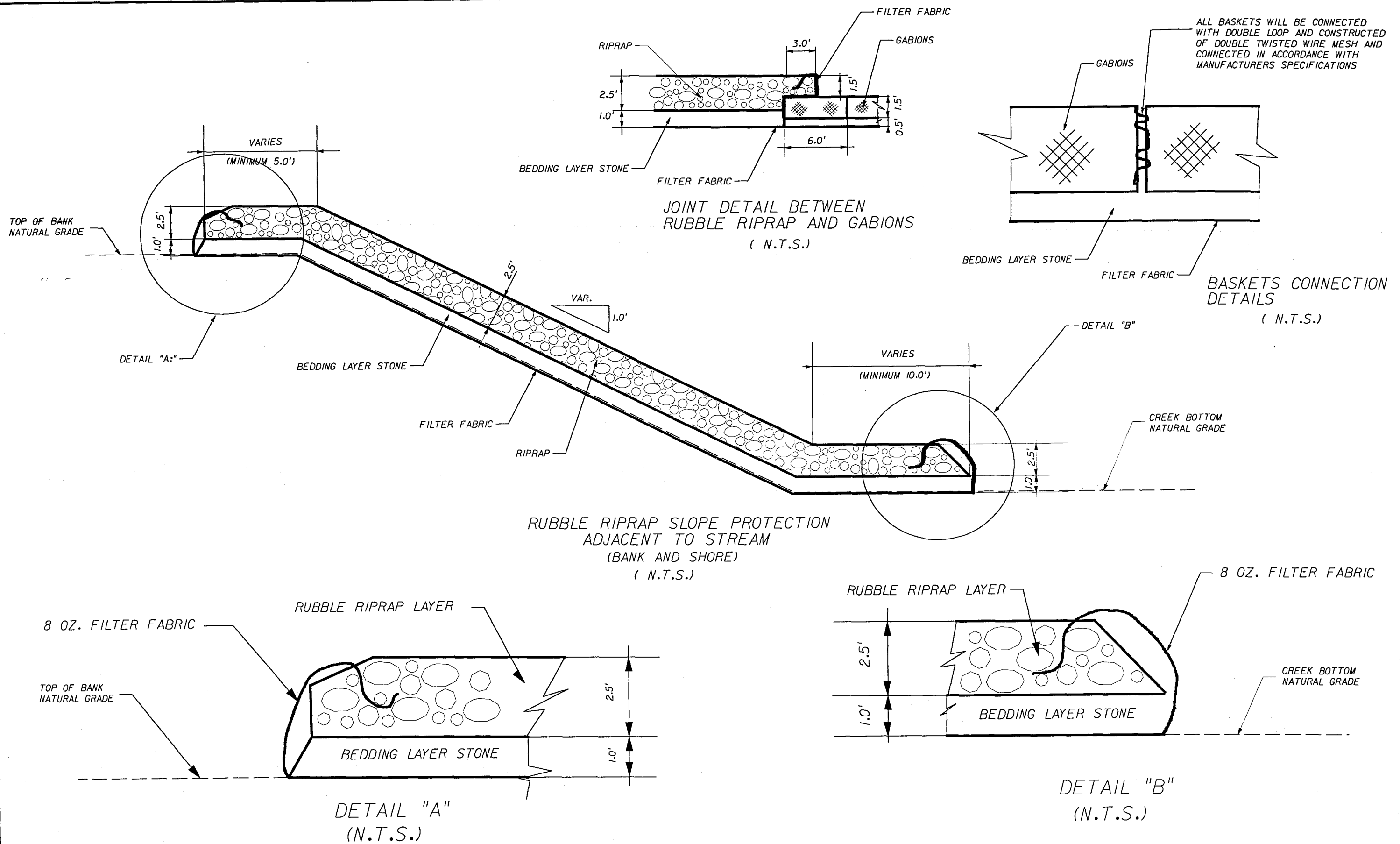


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

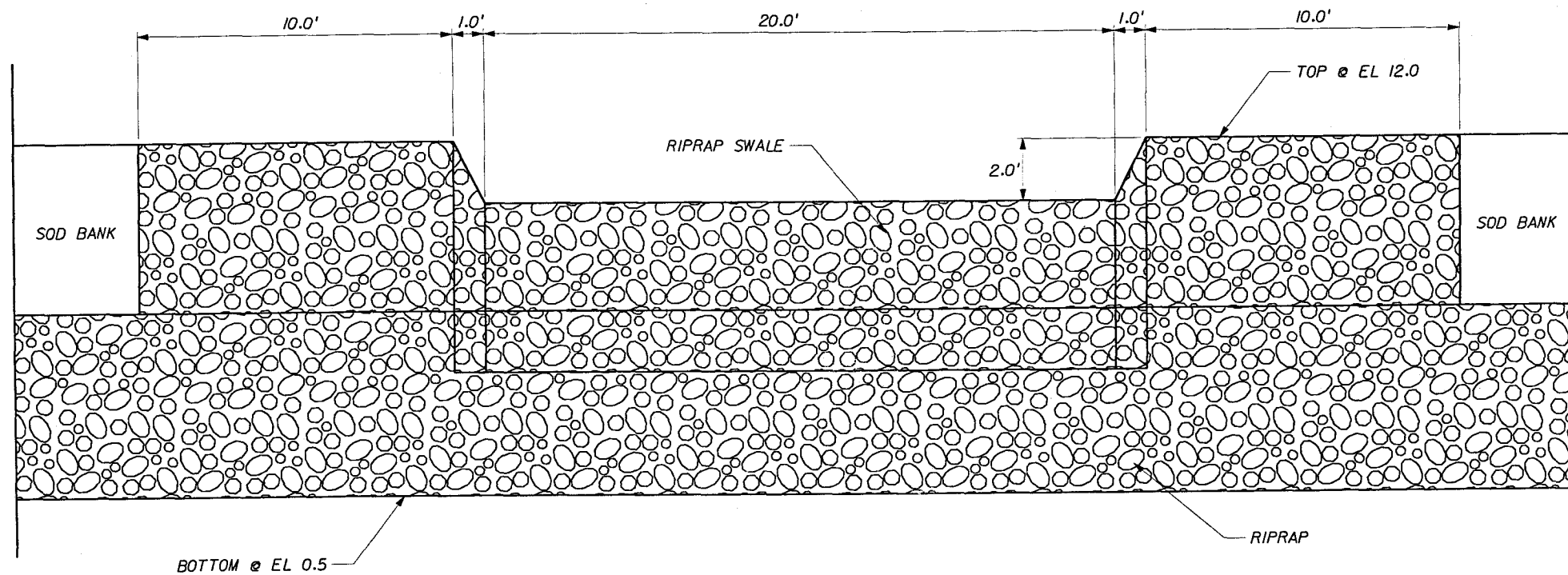
GABION PLACEMENT WITH PILINGS		SHEET NO.
		8

E-53

SCANNED



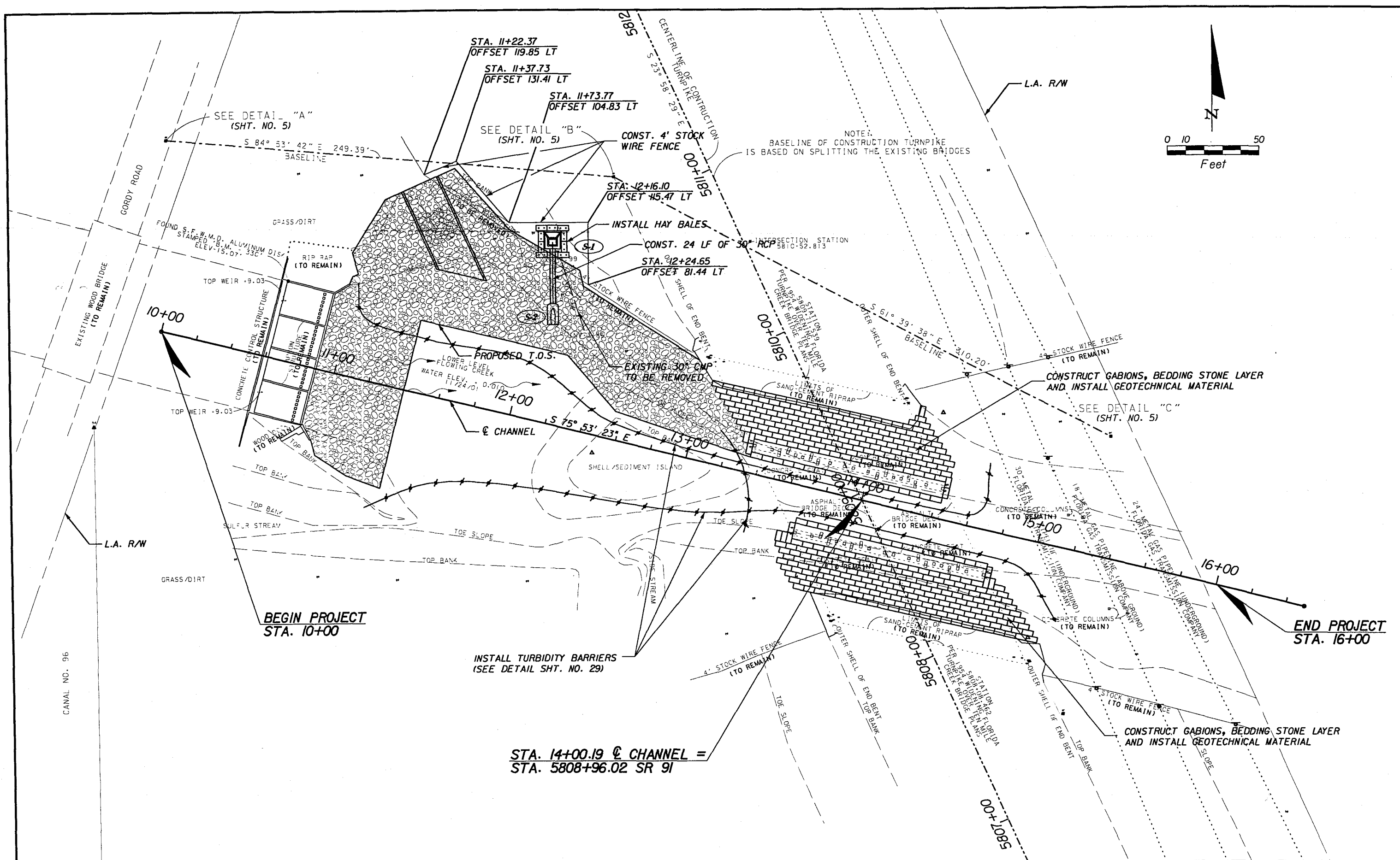
REVISIONS							STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			RUBBLE RIPRAP - DETAILS	SHEET NO. 9
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
							91	ST. LUCIE	409327-1-52-01		



ELEVATION VIEW OF BANK@
PROPOSED CANAL IMPROVEMENTS
N.T.S.

REVISIONS						STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			DRAINAGE DETAILS	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION					
						ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						91	ST. LUCIE	409327-1-52-01		10





REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
JACKSONVILLE FORT MYERS TAMPA

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

PLAN SHEET

SHEET NO. II

E-56

CHANNEL

S-1

STA. 11+99.80, 99.97 LT.
CONST. DBI TYPE D W/ TRAV. SLOT
GRATE EL. = 9.597
INV. EL. = 2.958
INDEX NO. 232

S-2

STA. 12+11.09, 55.05 LT.
CONST. MITERED END SECTION
FL. = 2.122
INDEX NO. 273

S-2

STA. 12+11.09, 55.05 LT.
CHANNEL

S-1

STA. 11+99.80, 99.97 LT.
CHANNEL

CONST. 29 LF OF 30" PIPE

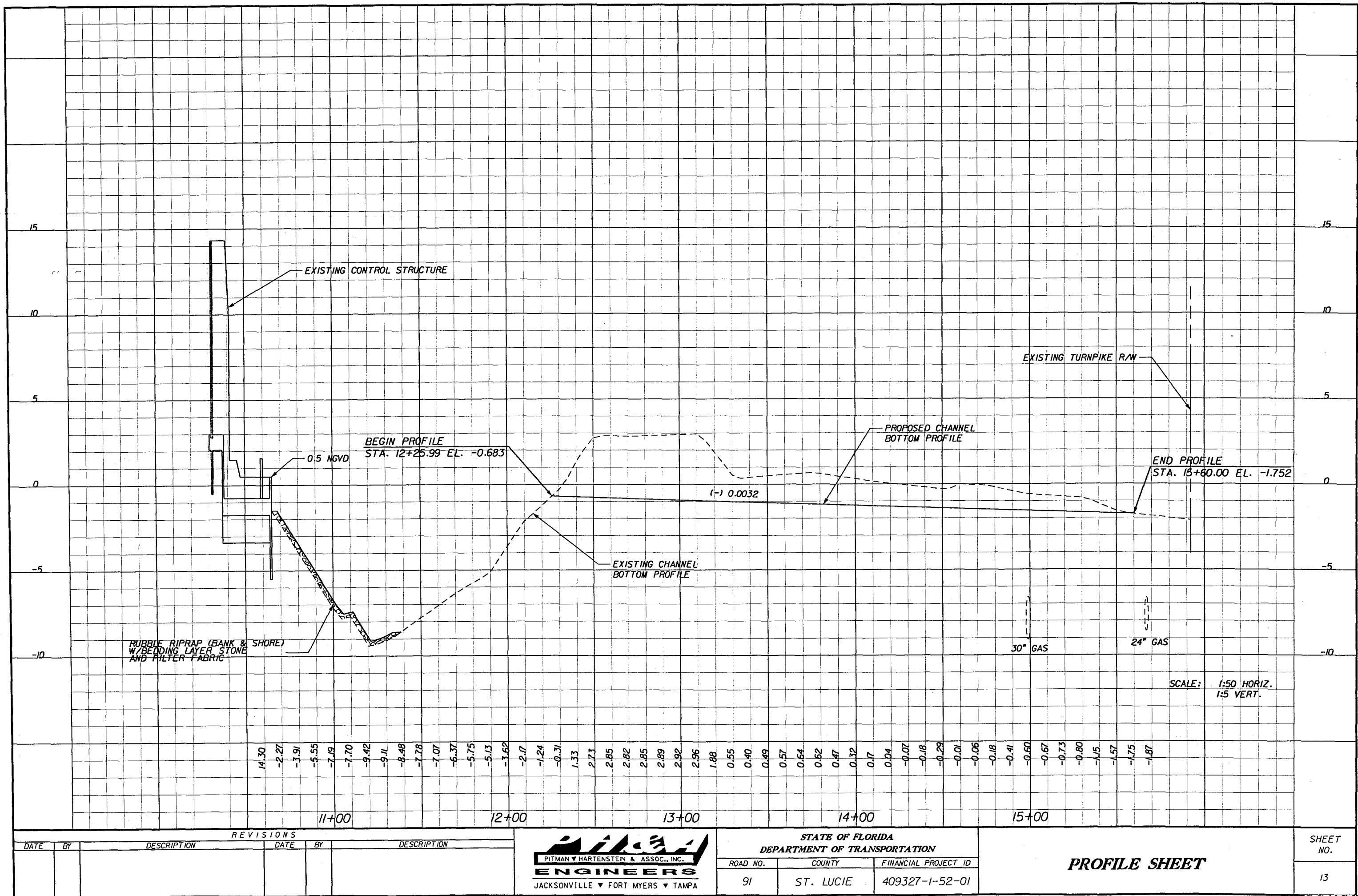
DATE		BY		DESCRIPTION		DATE		BY		DESCRIPTION	



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

DRAINAGE STRUCTURE SHEET

SHEET NO.	
12	E-57



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

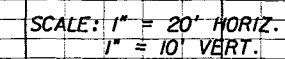


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

PROFILE SHEET

SHEET NO.
13
E-58

Regular Exc.		Embankment	
A	V	A	V

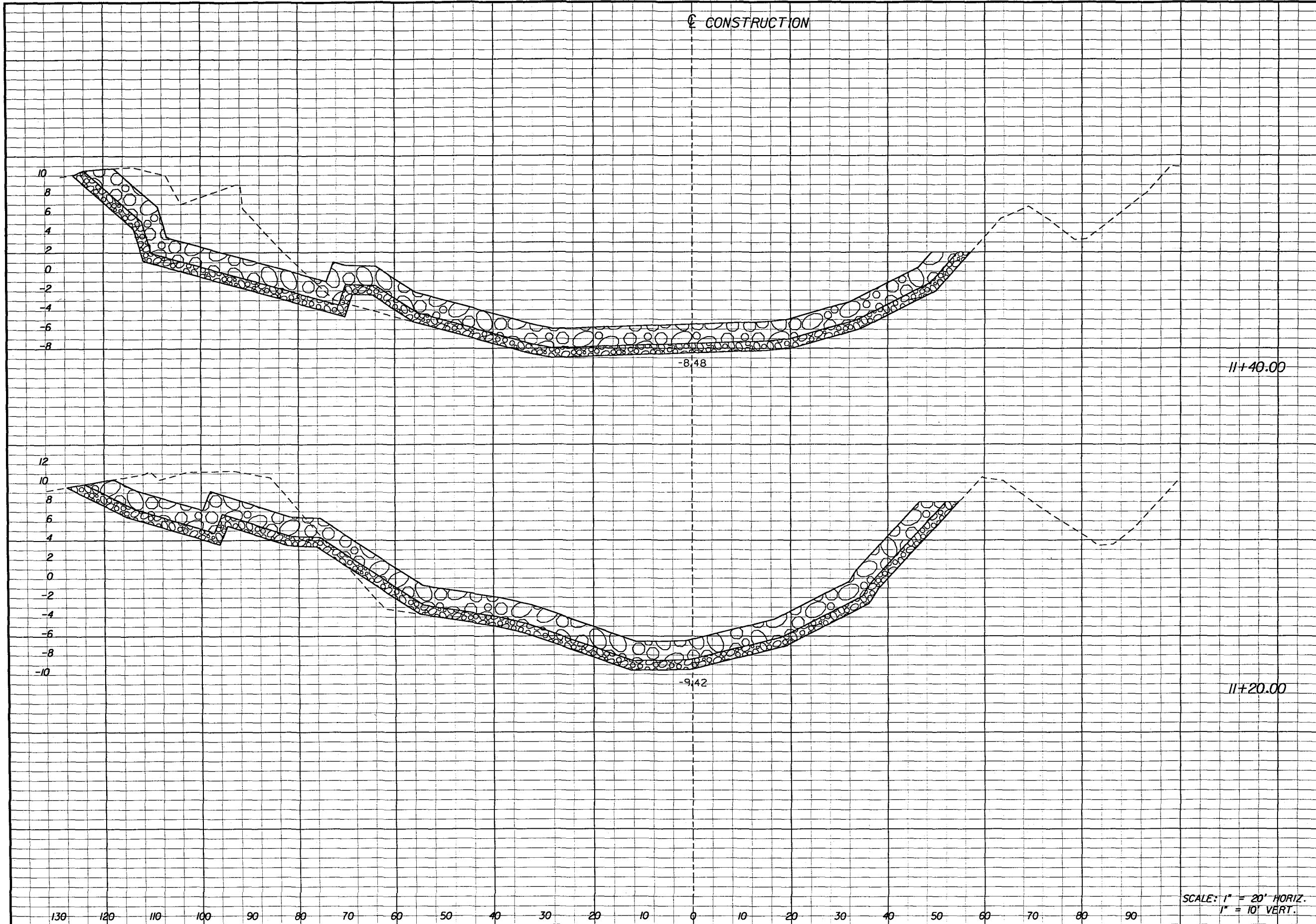


PITMAN ▾ HARTENSTEIN & ASSOC., INC.
ENGINEERS
 JACKSONVILLE ▾ FORT MYERS ▾ TAMPA

**CROSS SECTIONS
BRIDGE EMBANKMENT PROTECTION
TEN MILE CREEK**

14

SCANNED



Regular		Exc.	Embankment	
A		V	A	V
332			13	
		216		10
250			13	
		93		7

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

REVISIONS			
DATE	BY	DESCRIPTION	

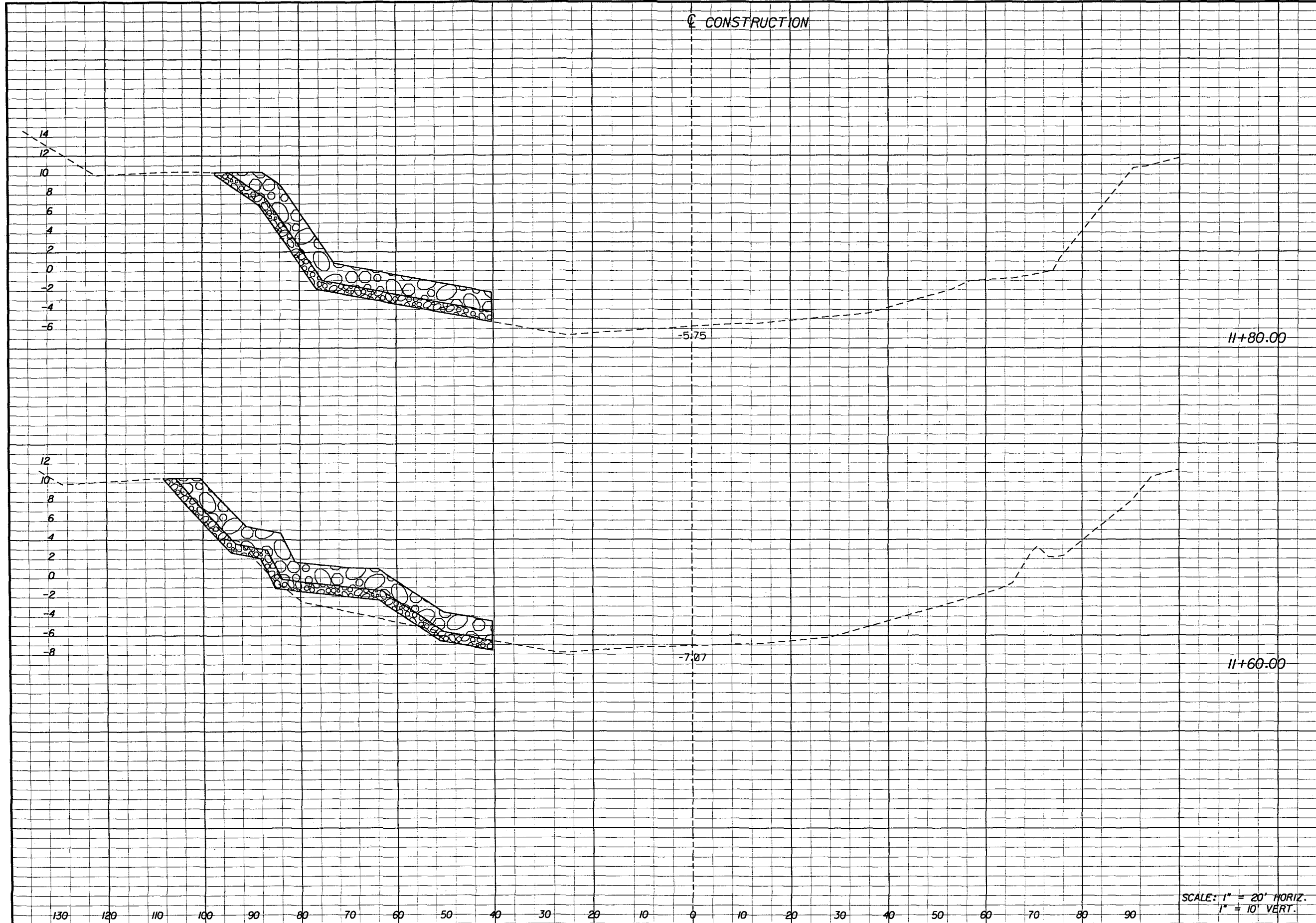


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

**CROSS SECTIONS
BRIDGE EMBANKMENT PROTECTION
TEN MILE CREEK**

SHEET NO.
15

E-60



Regular		Exc.	Embankment	
A	V	A	A	V
0			0	
	8			13
21		34		
	131			17

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

REVISIONS			
DATE	BY	DESCRIPTION	DATE

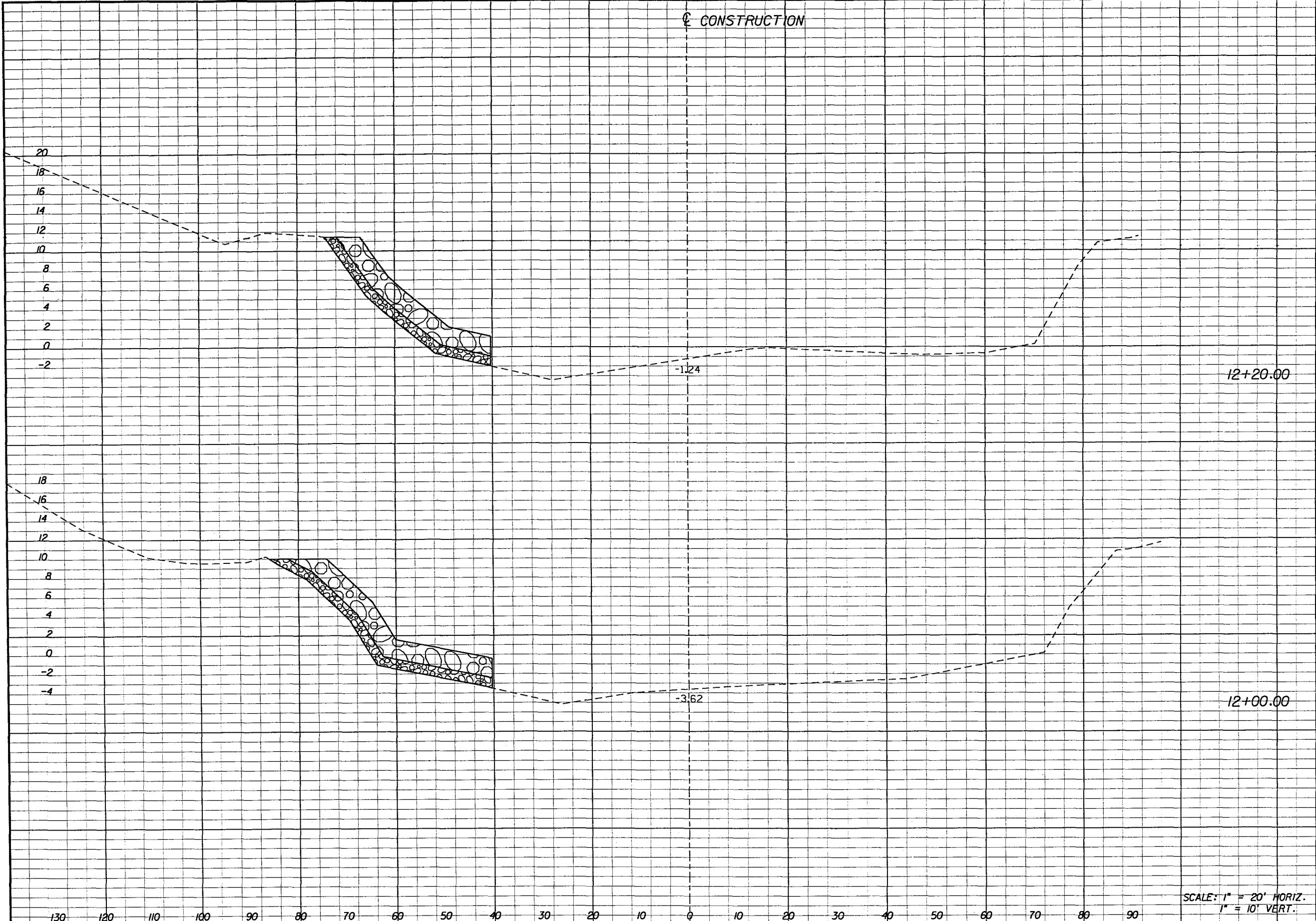


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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CROSS SECTIONS
BRIDGE EMBANKMENT PROTECTION
TEN MILE CREEK

SHEET NO.
16

E-61



Regular		Exc.		Embankment	
A	V	A	V	A	V
0				0	
		0			0
0				0	
		0			0

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

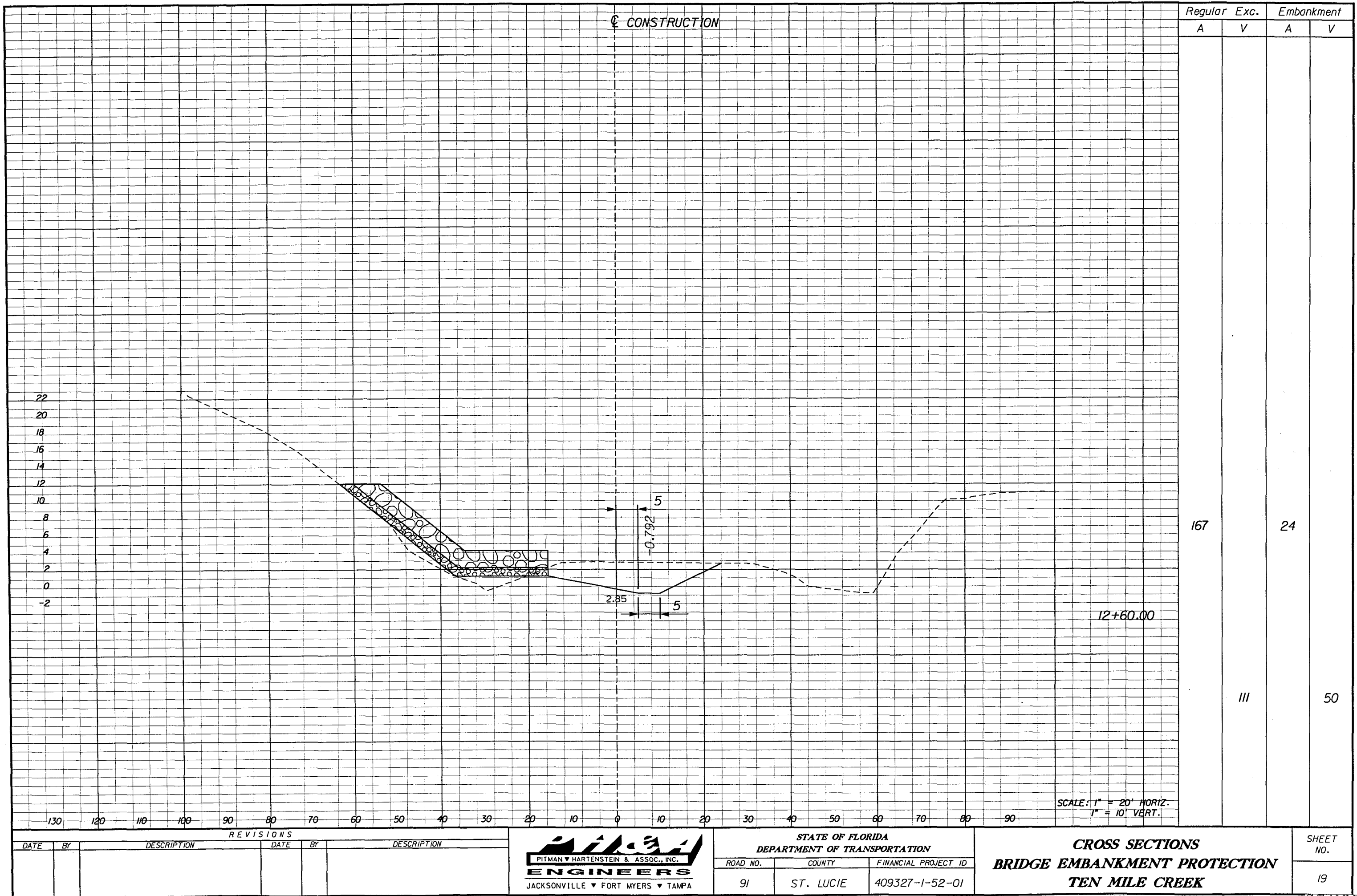


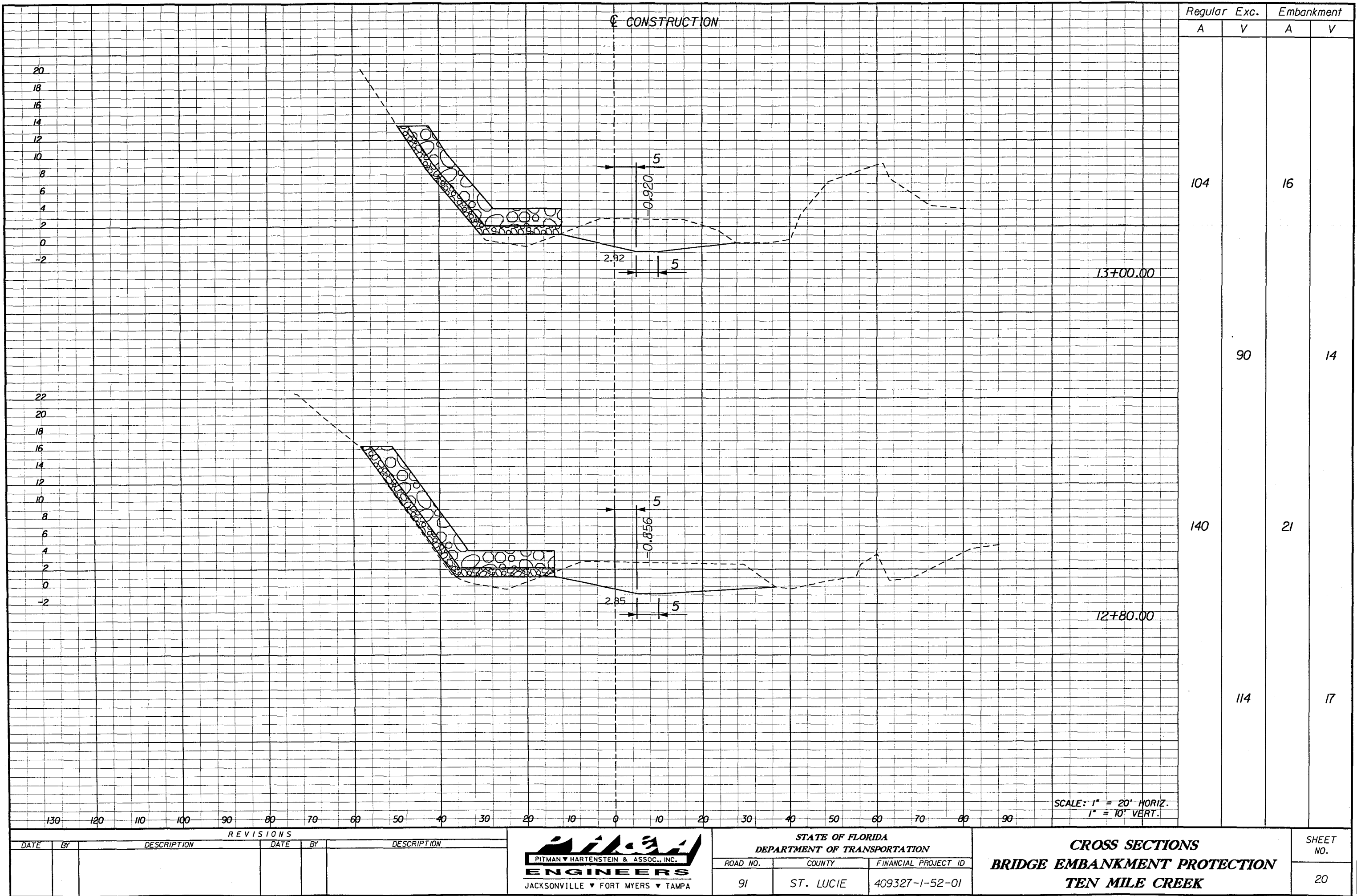
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

CROSS SECTIONS BRIDGE EMBANKMENT PROTECTION TEN MILE CREEK	
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SHEET NO.
17

E-62





Regular		Exc.	Embankment	
A	V	A	V	
104		16		
	90		14	
140		21		
	114		17	

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

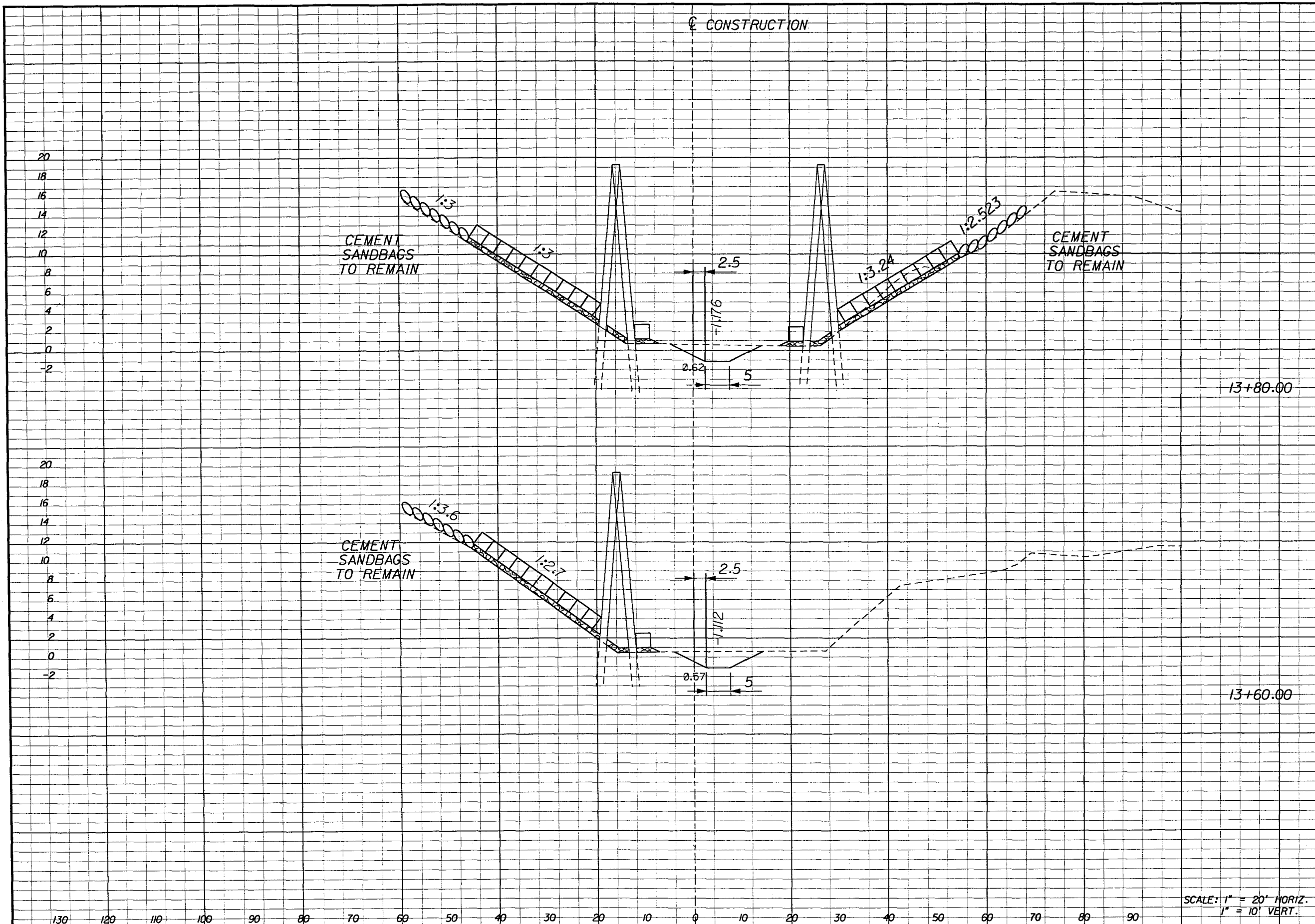


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

CROSS SECTIONS BRIDGE EMBANKMENT PROTECTION TEN MILE CREEK	
--	--

SHEET NO.
20

E-65



Regular		Exc.		Embankment	
A	V	A	V	A	V
42				0	
		23			0
20				0	
		13			0

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

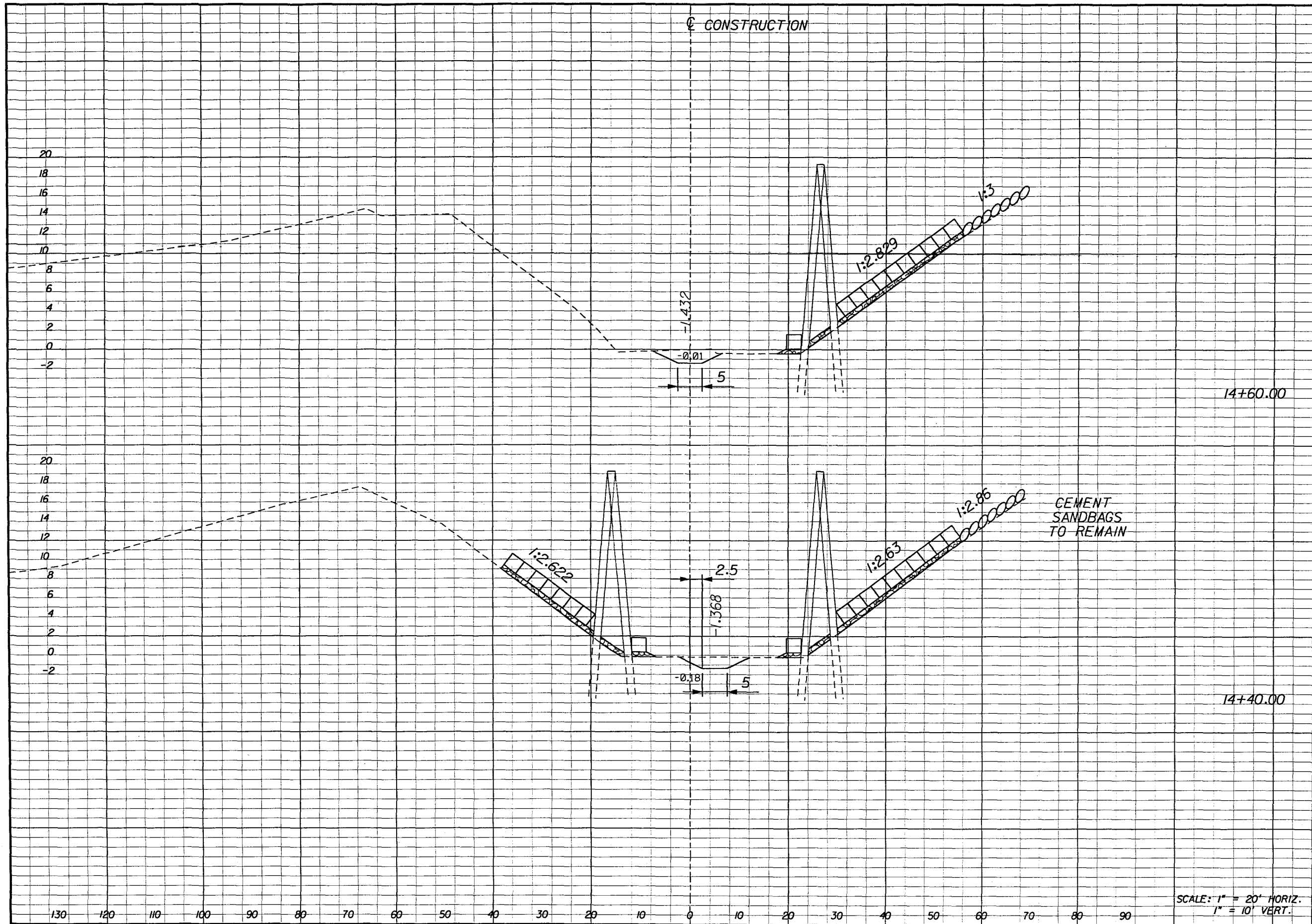


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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CROSS SECTIONS BRIDGE EMBANKMENT PROTECTION TEN MILE CREEK	
--	--

SHEET NO.
22

E-67



Regular A	Exc. V	Embankment	
		A	V
18		0	
	12		0
16		0	
	14		0

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

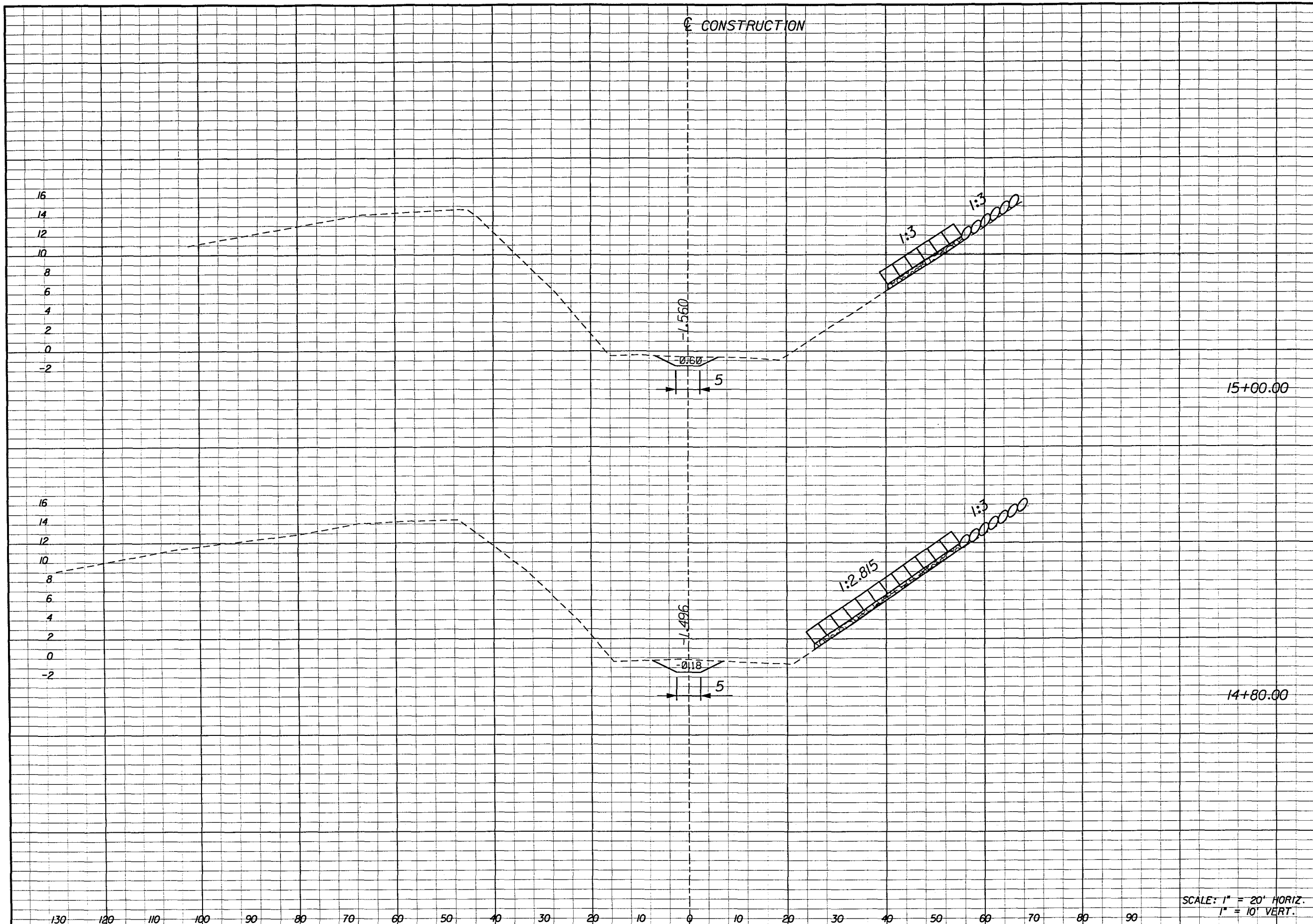


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

**CROSS SECTIONS
BRIDGE EMBANKMENT PROTECTION
TEN MILE CREEK**

SHEET NO.
24

E-69



Regular		Exc.		Embankment	
A	V	A	V	A	V
9				0	
		9			0
17				0	
		13			0

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

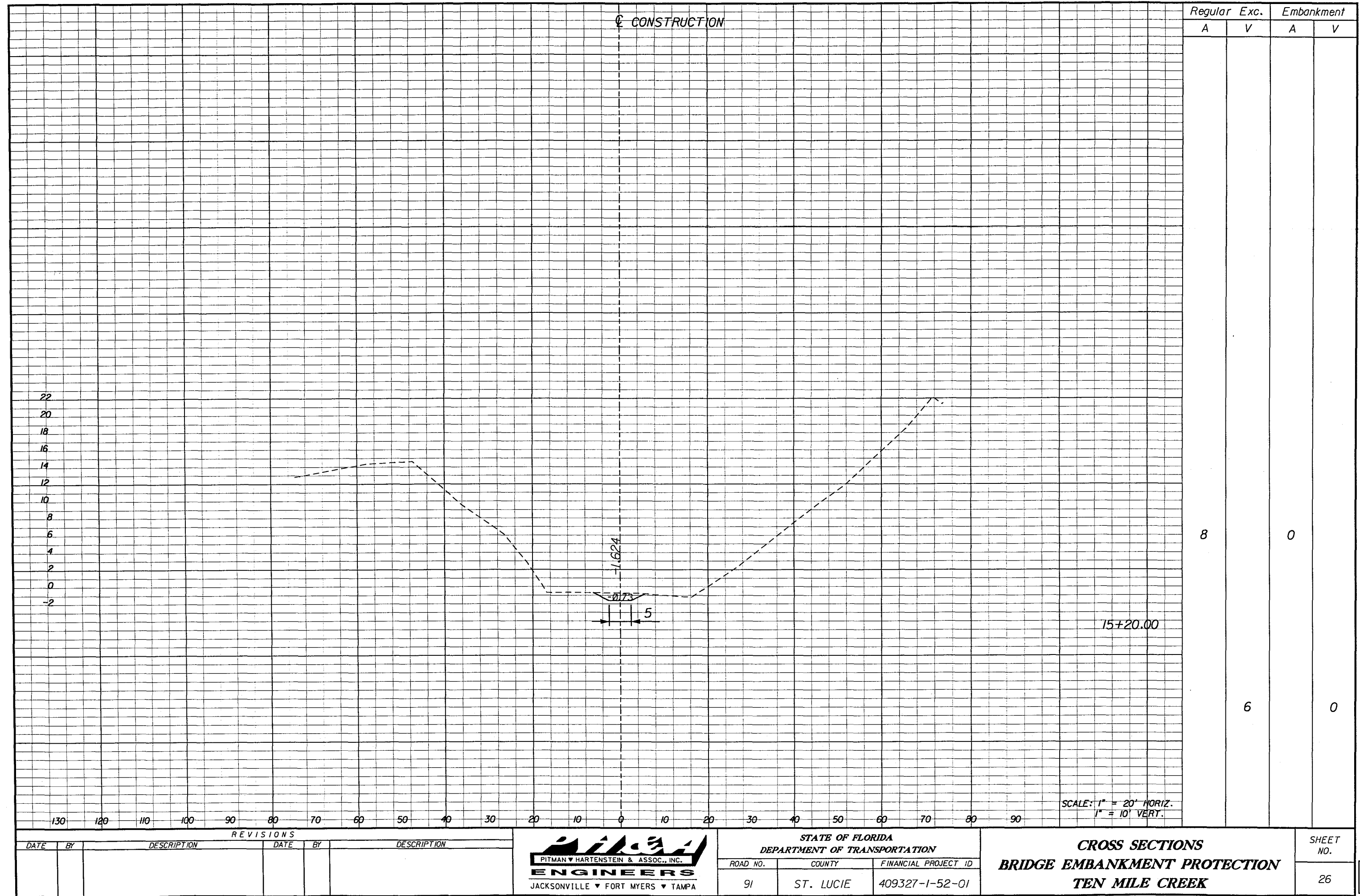


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

CROSS SECTIONS BRIDGE EMBANKMENT PROTECTION TEN MILE CREEK	
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SHEET NO.
25

E-70



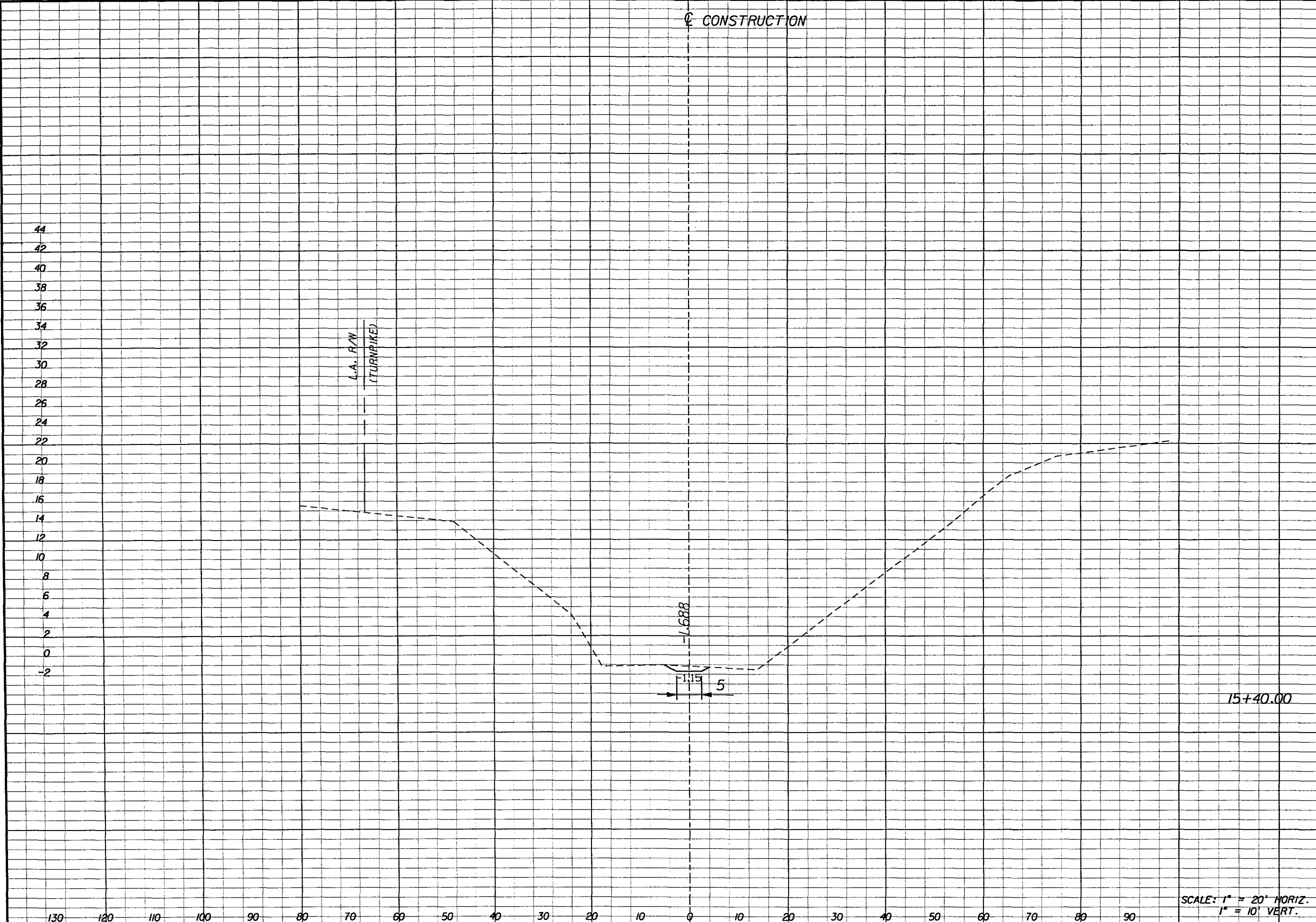
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

CROSS SECTIONS BRIDGE EMBANKMENT PROTECTION TEN MILE CREEK	
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SHEET NO.	26
E-71	



Regular		Exc.		Embankment	
A	V	A	V	A	V
4		0		0	

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

REVISIONS				DATE				BY				DESCRIPTION					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



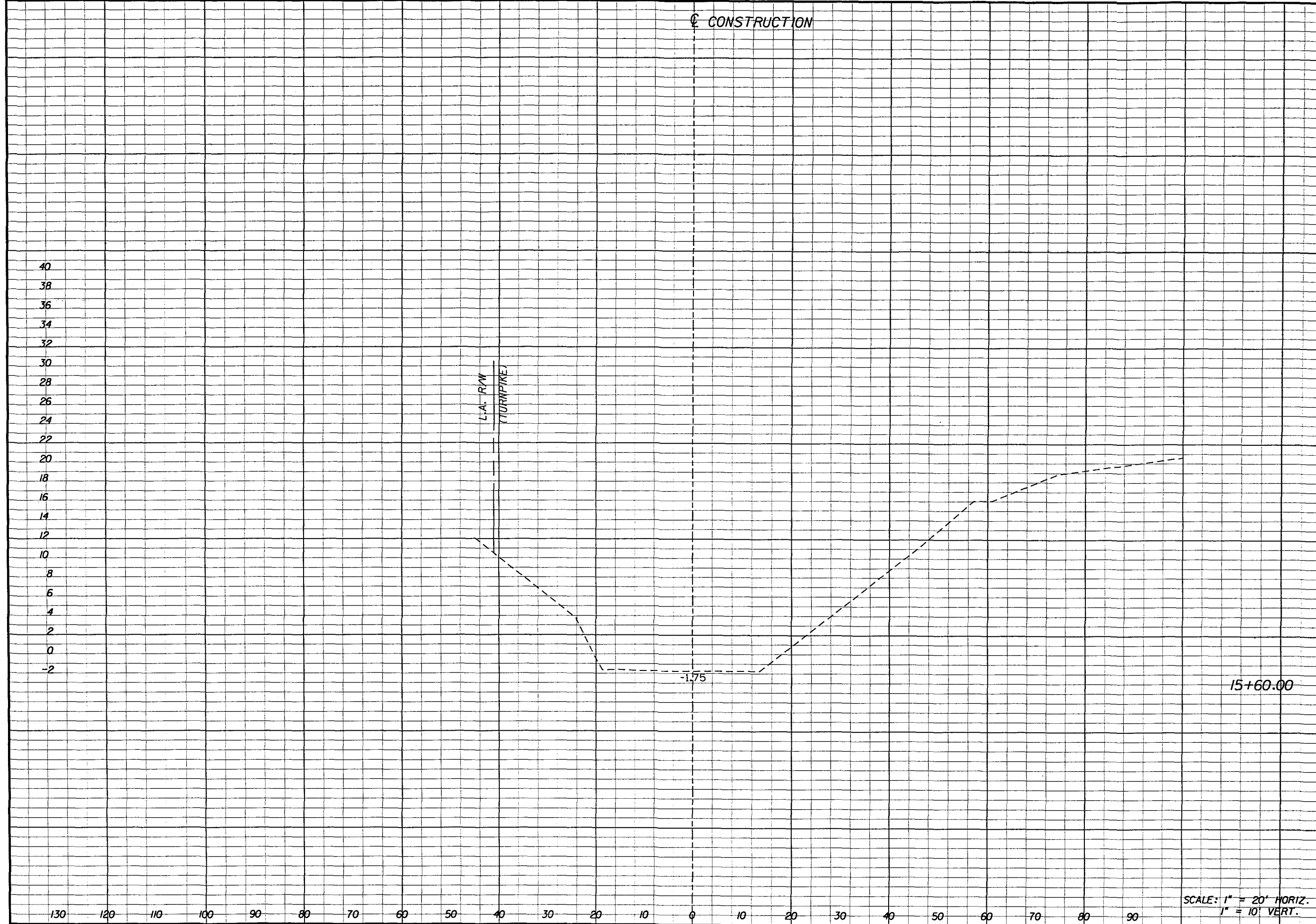
PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
JACKSONVILLE ▼ FORT MYERS ▼ TAMPA

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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CROSS SECTIONS
BRIDGE EMBANKMENT PROTECTION
TEN MILE CREEK

SHEET NO.	27
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E-72



Regular		Exc.	Embankment	
A	V	A	V	
0		0		
	2		0	

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

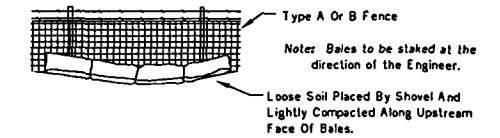
CROSS SECTIONS
BRIDGE EMBANKMENT PROTECTION
TEN MILE CREEK

SHEET NO.
28

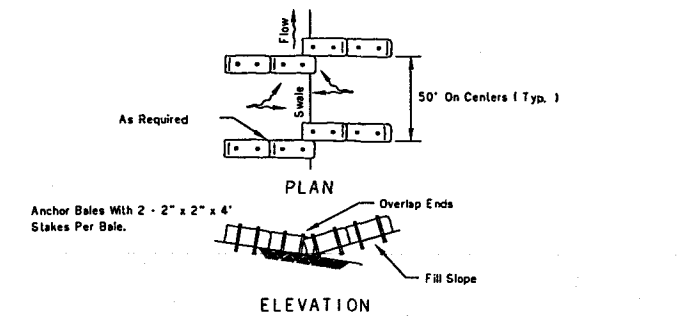
E-73

EROSION AND SEDIMENT CONTROL NOTES

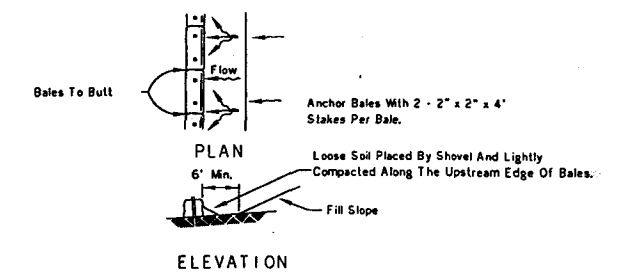
1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDITIONAL PROTECTION - ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
6. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 8 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
7. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
8. LOOSE STRAW SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
9. STRAW BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
10. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
11. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
12. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND COVER WITH THE PERMANENT COVERING TYPE SHOWN IN THE PLANS AT THE LOCATION.
13. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
14. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
15. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
16. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND COVER WITH THE PERMANENT COVERING TYPE SHOWN IN THE PLANS AT THAT LOCATION.
17. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
18. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT SPECIFICATIONS AND CRITERIA.
19. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL - A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (F.D.E.R.) CHAPTER 6.
20. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAIL SHEET FOR TYPICAL CONSTRUCTION.
21. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL THE PERMANENT COVERING TYPE SHOWN IN THE PLANS AT THE LOCATION CAN BE COMPLETED.
22. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
23. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
24. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
25. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN AREAS HAVE STABILIZED.
26. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
27. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SJRWMD FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.



BALES BACKED BY FENCE

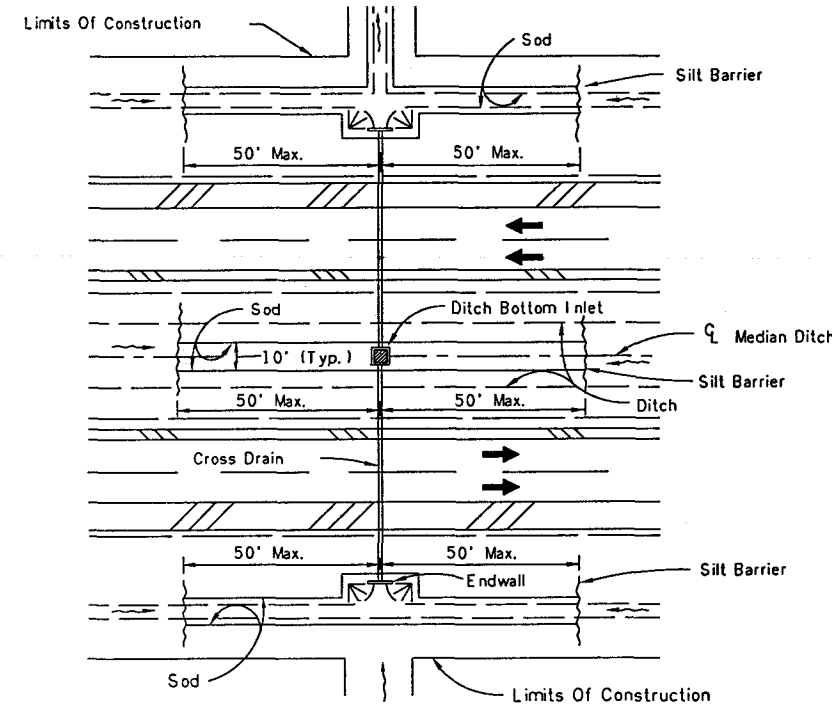


TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE



TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES AWAY FROM THE TOE OF SLOPE

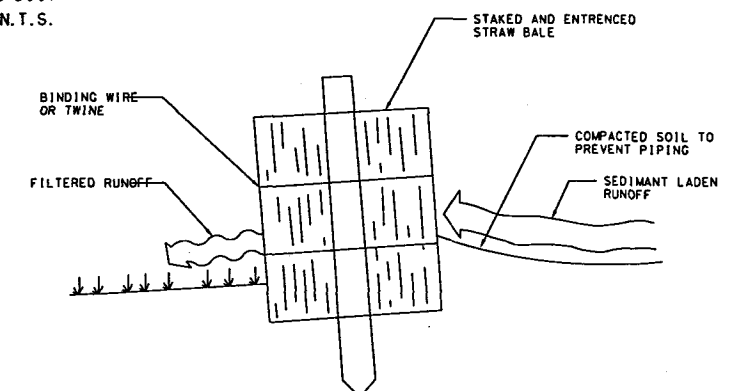
BARRIERS FOR FILL SLOPES



DITCH INSTALLATIONS AT DRAINAGE STRUCTURES

HAY BALE LOCATION

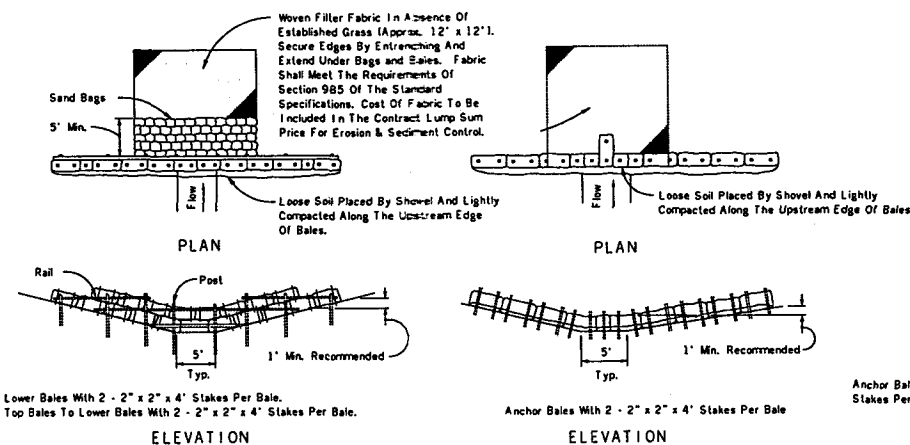
(D-901)
N.T.S.



CROSS-SECTION OF A PROPERLY INSTALLED STRAW BALE

STAKED HAY BALE

(D-911)
N.T.S.

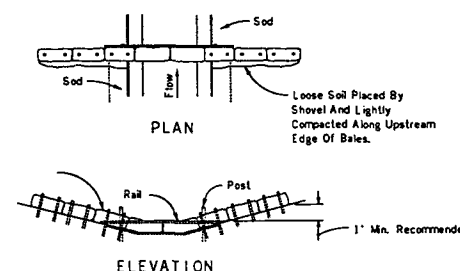


Application and Spacing: The use of Types I & II bale barriers should be limited to the conditions outlined in Chart C, Sheet 1 of 3, Index No. 102

TYPE II

TYPE I

BARRIER FOR UNPAVED DITCHES



Spacing: Bale barriers for paved ditches should be spaced in accordance with Chart C, Sheet 1 of 3, Index No. 102

BARRIER FOR PAVED DITCH

HAY BALE BARRIERS TYPE I & II

(D-912)
N.T.S.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



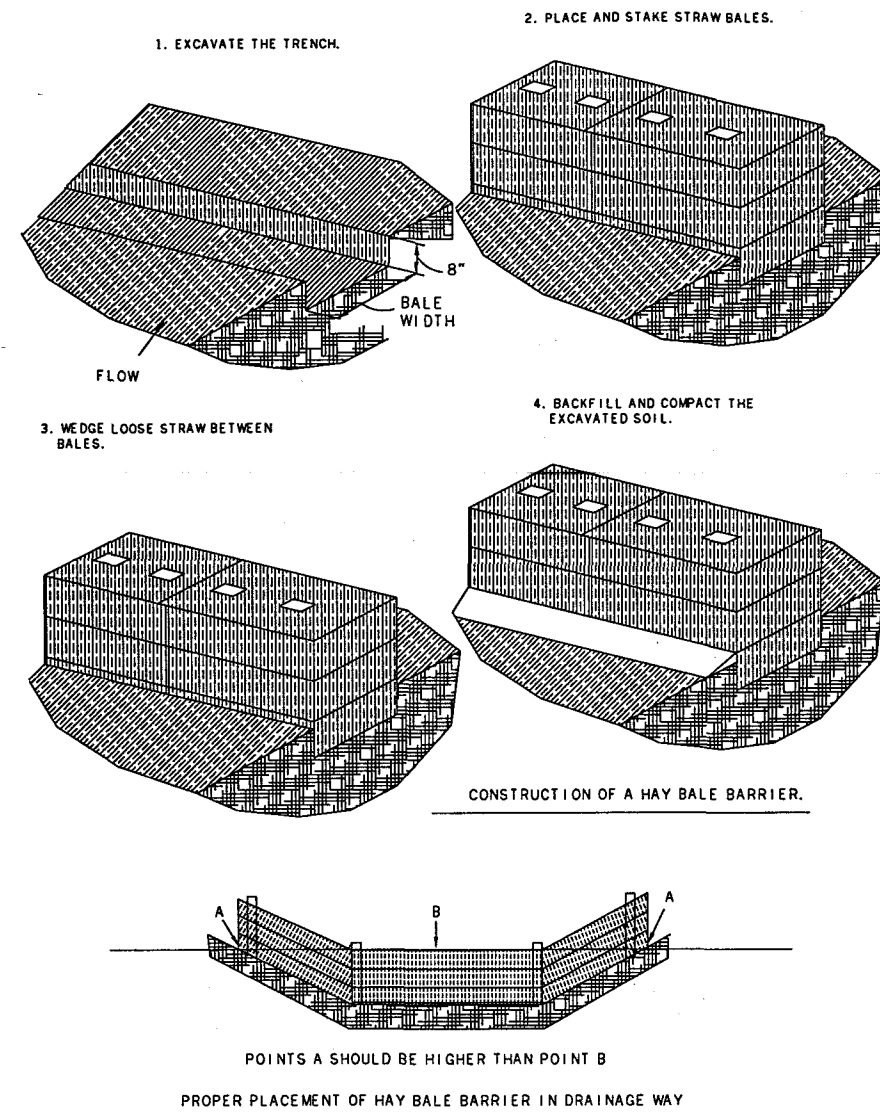
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

EROSION CONTROL
STORM WATER POLLUTION PREVENTION PLAN

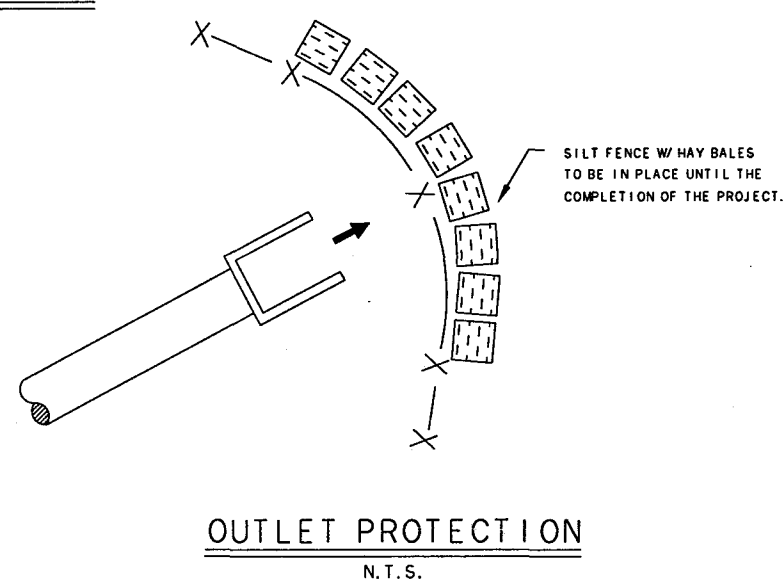
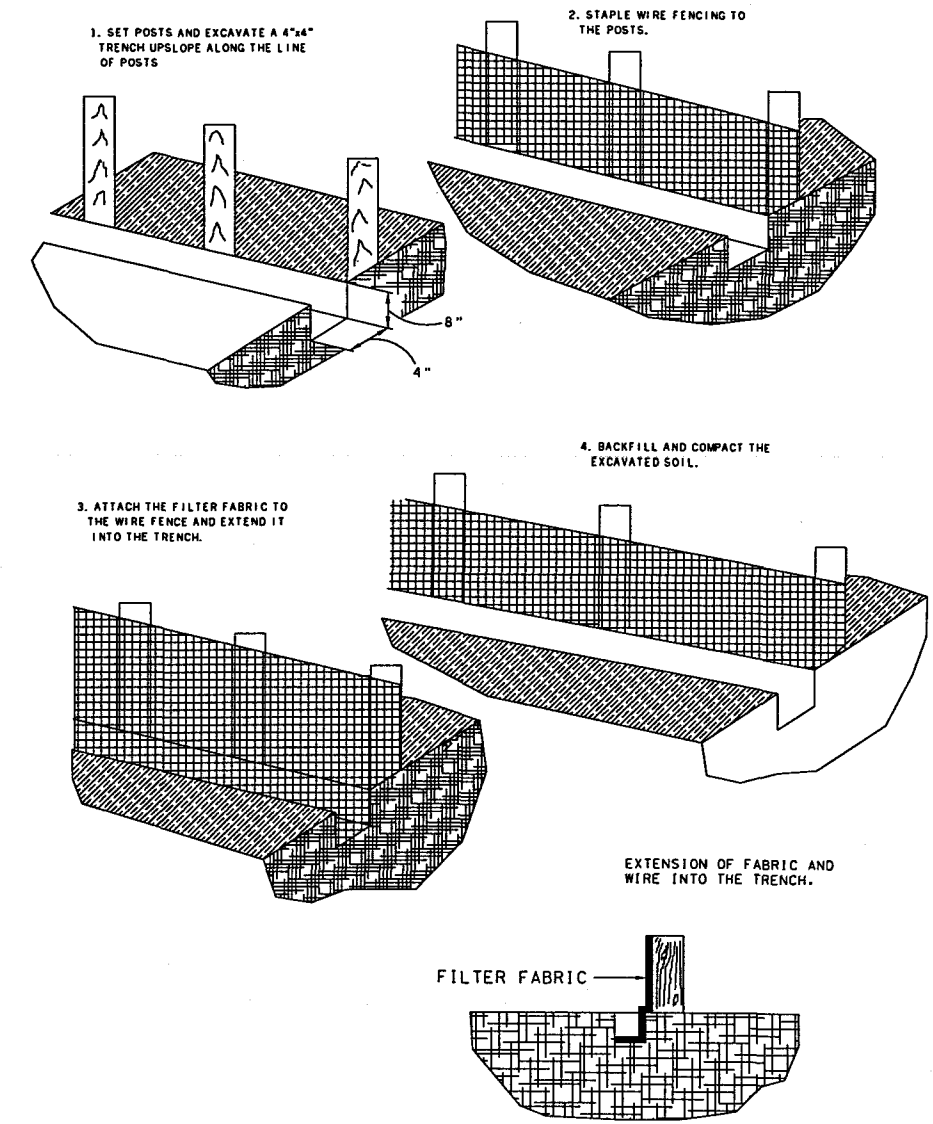
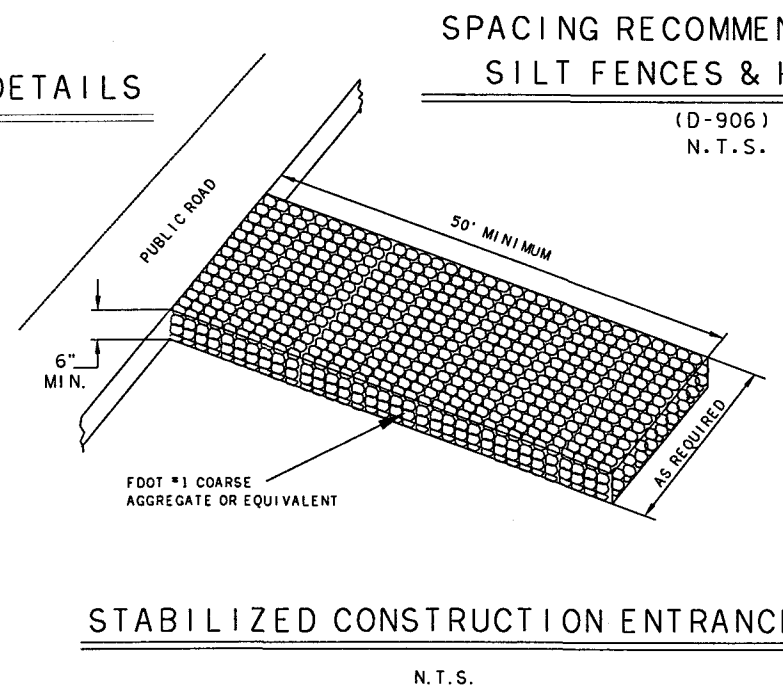
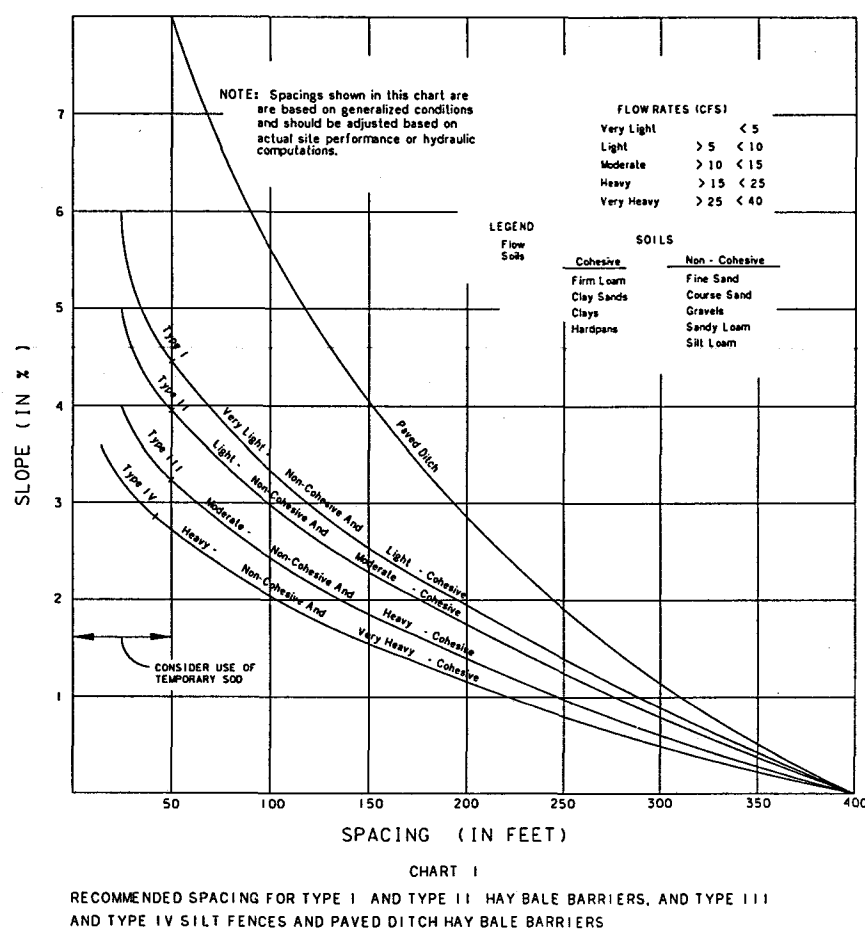
SHEET NO.

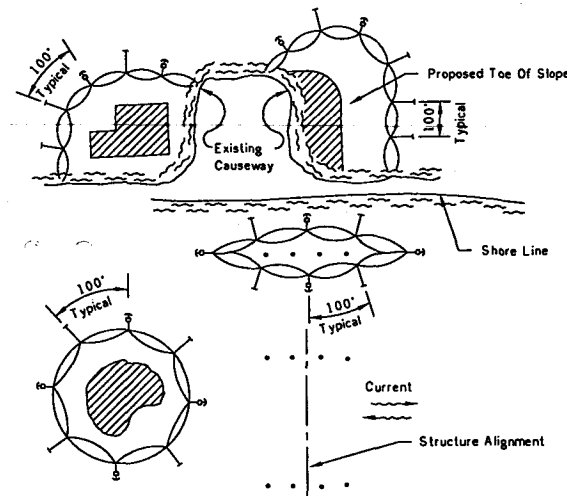
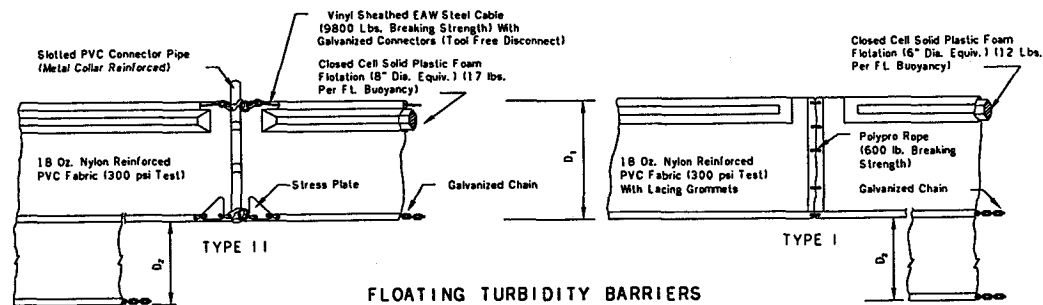
29

E-74



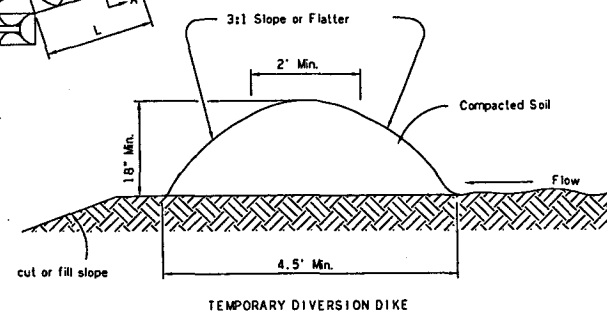
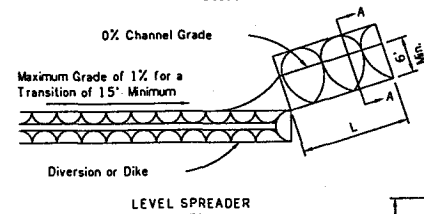
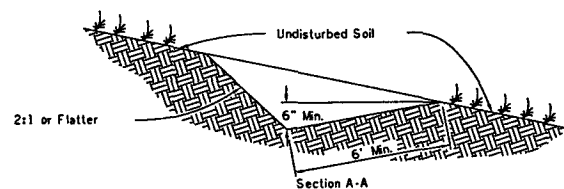
HAY BALE BARRIER CONSTRUCTION DETAILS
(D-913)
N.T.S.





- NOTES:**
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
 2. Number and spacing of anchors dependent on current velocities.
 3. Deployment of barrier around pile locations may vary to accommodate construction operations.
 4. Navigation may require segmenting barrier during construction operations.
 5. For additional information see Section 104 of the FDOT Standard Specifications.

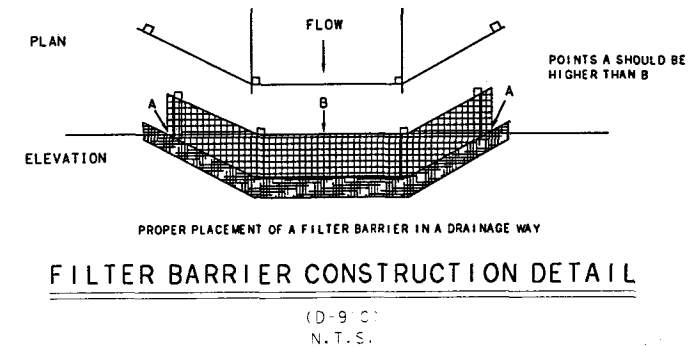
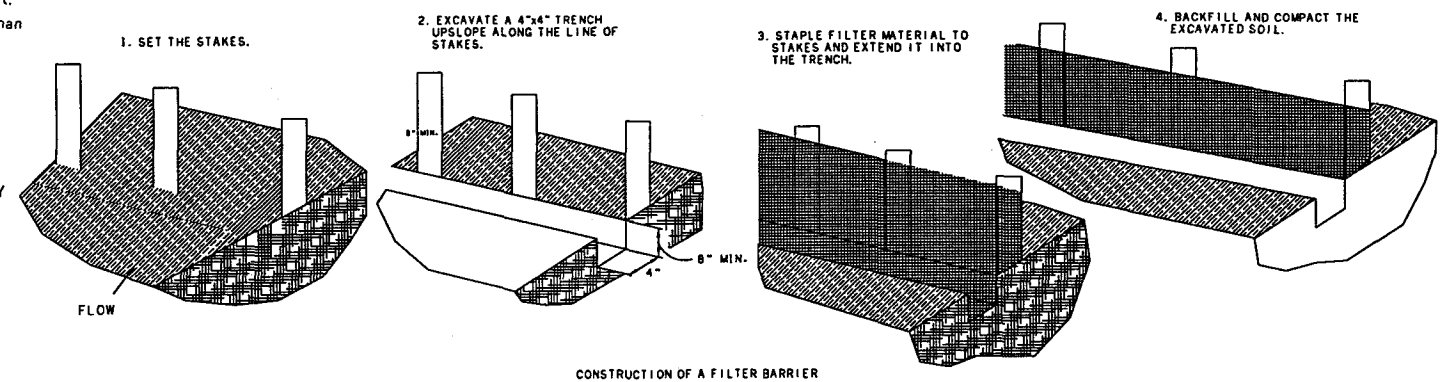
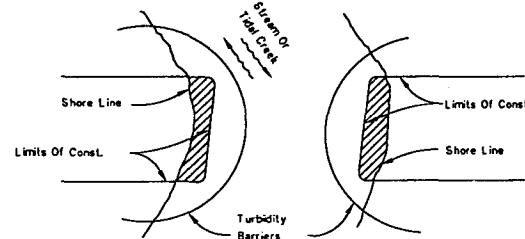
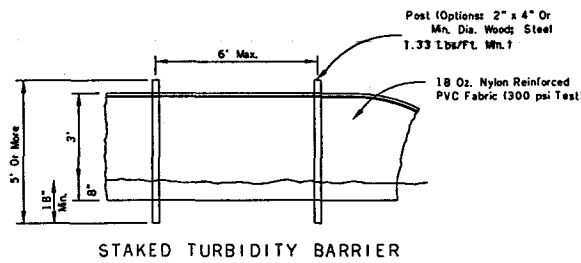
TURBIDITY BARRIER APPLICATIONS



DIVERSION DIKE
(D-914)
N.T.S.

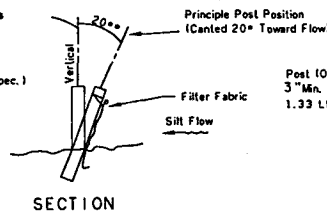
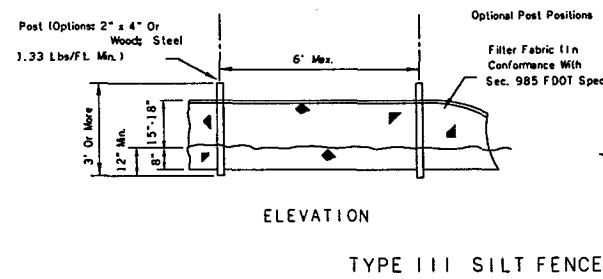
D₁=5' Std. (Single Panel For Depths 5' or Less).
D₂=5' Std. (Additional Panel For Depths >5').
Curtain To Reach Bottom Up To Depths Of 10 Feet.
Two (2) Panels To Be Used For Depths Greater Than 10 Feet Unless Special Depth Curtains Specifically Called For In The Plans Or As Determined By The Engineer

NOTICE:
COMPONENTS OF TYPES I & TYPE II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

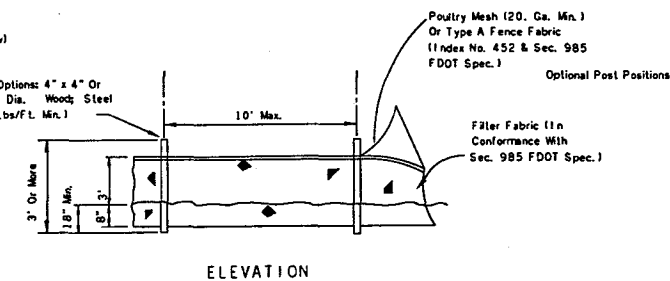


TURBIDITY BARRIERS

(D-907)
N.T.S.

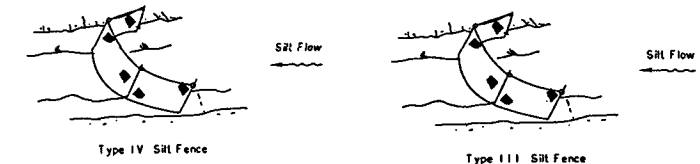
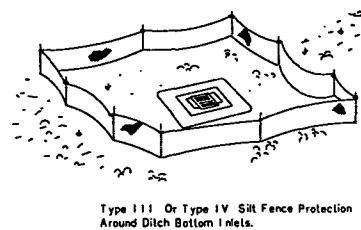
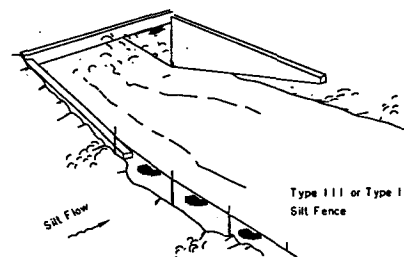


TYPE III SILT FENCE



TYPE IV SILT FENCE

Notes: Silt Fence to be paid for under the contract lump sum price for Erosion and Sediment Control.



Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS

SILT FENCE TYPE III & IV

(D-908)
N.T.S.

Notes: Spacing for Type III & TYPE IV Fence to be in accordance with Chart 1, Sheet 1 of 3, FDOT Index No. 102 and ditch installations at drainage structures Sheet 2 of 3, FDOT Index No. 102.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
JACKSONVILLE • FORT MYERS • TAMPA

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

EROSION CONTROL
STORM WATER POLLUTION PREVENTION PLAN

SHEET NO.
31

E-76

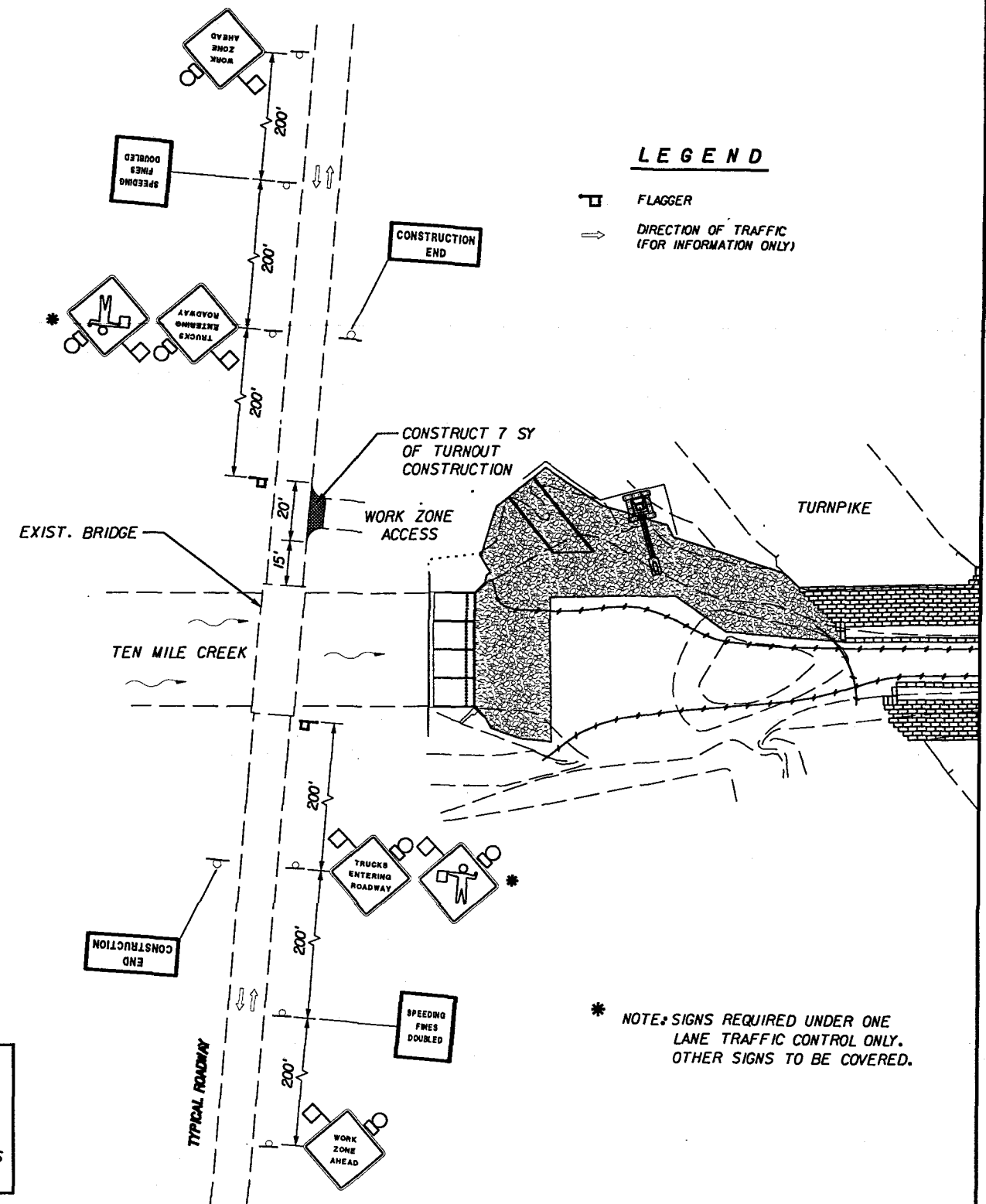
GENERAL NOTES

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH F.D.O.T. ROADWAY TRAFFIC STANDARDS, INDEX 600 SERIES.
2. SPEED FOR THIS MOT PLAN IS 35 MPH.
3. ONE LANE CLOSURES SHALL NOT BE ALLOWED BETWEEN THE HOURS OF 5:30 AM TO 9:00 AM AND 3:30 PM TO 7:00 PM.
4. CONTRACTOR SHALL KEEP ALL TRAFFIC BOUND ROADS FREE OF MUD AND DEBRIS TRACKED ON BY EQUIPMENT AND TRUCKS. COST SHALL BE INCLUDED IN THE UNIT PRICE FOR MAINTENANCE OF TRAFFIC L.S. PAY ITEM 102-1. IF CONTRACTOR FAILS TO KEEP ROADS REASONABLY CLEAN THE ENGINEER MAY REQUIRE CONTRACTOR TO INSTALL SOIL TRACKING DEVICES AT NO ADDITIONAL COST TO THE PROJECT.
5. IF ONE LANE CLOSURES ARE ANTICIPATED OR REQUIRED THE COST FOR SUCH OPERATIONS SHALL INCLUDE BUT IS NOT LIMITED TO SIGNS, EQUIPMENT, TWO-WAY RADIOS, FLAGS ETC. AND SHALL BE INCLUDED IN THE UNIT PRICE FOR MAINTENANCE OF TRAFFIC L.S. ITEM 102-1.
6. IF TRAFFIC CONTROL DEVICES ARE USED IN CONJUNCTION WITH FLAGGERS NO LIGHTS ARE REQUIRED. HOWEVER, IF USED UNDER ANY OTHER CONDITIONS, TYPE "C" STEADY BURNING LIGHTS SHALL BE REQUIRED ON EACH DEVICE AS SHOWN IN THE STANDARD INDEX. FLAGGERS MUST BE PRESENT OR THE MOT REMOVED AND TRAFFIC RESTORED
7. ALL SIDE ROADS WITHIN 200 FEET (200') OF THE CONSTRUCTION ZONE SHALL RECEIVE "ROAD WORK AHEAD" & "END CONSTRUCTION" SIGNS AS DIRECTED BY THE ENGINEER.
8. ANTICIPATED QUANTITIES HAVE BEEN INCLUDED IN THE UNIT PRICE BIDS FOR ALL ITEMS SHOWN AND NOT SHOWN ON THE TYPICAL DETAIL PLAN. HOWEVER, THIS SHOULD NOT BE PERCEIVED AS ALL INCLUSIVE AND THE CONTRACTOR SHALL DETERMINE THE FINAL QUANTITIES NECESSARY TO COMPLETE THE MOT PLAN FOR INCLUSION IN HIS FINAL BID FOR ALL ITEMS REQUIRED.
9. NO MAINLINE CLOSURES WILL BE ALLOWED FRIDAY AND SUNDAY AFTERNOONS AND EVENINGS (NOON TO 10:00 PM).

PHASING PLAN

1. PRIOR TO ANY CONSTRUCTION, CONTRACTOR SHALL DEVELOP AND HAVE APPROVED A CONSTRUCTION SCHEDULE. THIS SCHEDULE SHOULD OUTLINE HIS CONSTRUCTION OPERATIONS AND PHASING OF WORK AND BE APPROVED BY THE ENGINEER.
2. UPON APPROVAL OF THE CONSTRUCTION SCHEDULE ADVANCE SIGNING SHALL BE PLACED ON ALL ROADWAY CROSSINGS AS SHOWN ON THE TYPICAL (THIS SHEET). SOME ADJUSTMENT MAY BE REQUIRED IN THE SPACING OF SIGNS IN HOUSING DEVELOPMENTS UPON THE APPROVAL OF THE ENGINEER.
3. CONSTRUCTION OF DRAINAGE AND GRADING FOR ACCESS INTO WORK ZONE MAY BEGIN AT ANY TIME. CONTRACTOR SHOULD REFER TO GENERAL NOTES PERTAINING TO MUD ON THE ROADWAYS.
4. FLAGGERS MAY BE REQUIRED AT VARIOUS TIMES DURING THE PROJECT. ONE LANE ROAD AHEAD AND FLAGGER SIGNS MAY BE PLACED OVER THE ADVANCE WARNING SIGNS AS SHOWN ON THE TYPICAL THIS SHEET, HOWEVER SHOULD BE REMOVED WHEN NO LONGER REQUIRED AND THE ORIGINAL SIGNS EXPOSED.
5. SIGNS SHALL REMAIN UNTIL WORK HAS BEEN COMPLETED.

NOTE: WHERE F.D.O.T. SPECIFICATIONS AND INDICES ARE REFERENCED, PLEASE REFER TO THE F.D.O.T. ROADWAY & TRAFFIC DESIGN STANDARDS AND THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.



TYPICAL TRAFFIC CONTROL

NOT TO SCALE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ST. LUCIE	409327-1-52-01

TRAFFIC CONTROL SHEET

SHEET NO.

32

E-77

FPID Number: 423374-1-22-01

Project Description: Turnpike Mainline (SR 91) Widening PD&E from Jupiter to Ft. Pierce

Meeting Name: North St. Lucie River Water Control District Coordination Meeting

Date: July 2, 2020 @ 1:00 PM

Location: [Join Microsoft Teams Meeting](#)

1. Introductions

- a. North St. Lucie River Water Control District
- b. Florida's Turnpike Enterprise (FTE) and GEC
- c. Lochner and PGA

2. Project Overview

- a. Evaluating the potential widening of the Turnpike Mainline (SR 91) from four to eight lanes from Indiantown Rd (SR 706) to Okeechobee Rd (SR 70)
- b. Evaluating potential interchange reconfigurations
- c. Identifying stormwater management and ROW needs to meet FDOT and permitting agency requirements
- d. Conducting Environmental Look Around efforts to identify joint-use and nonconventional stormwater opportunities
 - i. Florida Forever Lands
 - 1. Pepper Farms and Flow-Through Marsh
 - ii. Martin County Septic-to-Sewer Conversions

3. Proposed Design at Ten Mile Creek

- a. Proposed widening of bridge over Ten Mile Creek
 - i. Ten Mile Creek is a FEMA regulatory floodway and will require a FEMA No-Rise Certification
 - ii. Anticipate 6.8 acres of encroachment into the Ten Mile Creek FEMA floodplain

4. History of Erosion and Shoaling

- a. FTE Bridge Embankment Protection (FPID 409327-1) in 2003

5. Additional Discussion/Questions

Ashley Abdel-Hadi

From: Ashley Abdel-Hadi
Sent: Thursday, November 5, 2020 5:07 PM
To: Ashley Abdel-Hadi
Subject: FW: Section 408 Authorization



Ashley Abdel-Hadi
Senior Environmental Scientist/Project Manager
Email: AAbdel-Hadi@kcaeng.com
Work: 813.871.5331
201 N. Franklin St. Suite 400, Tampa, FL 33602

From: Swartz, Teri <tswartz@sfwmd.gov>
Sent: Friday, July 17, 2020 10:34 AM
To: Robert Whitman Jr. <RWhitman@kcaeng.com>
Subject: RE: Section 408 Authorization

Good morning Mr. Whitman,

Yes, I am the District's Section 408 coordinator, so I would handle making approval requests to USACE for projects within our ROW limits. I don't work in ROW, so specific questions about ROW permitting would need to be directed to staff in that section.

For the Turnpike Widening project:

- C-44/St. Lucie Canal is under USACE jurisdiction, so I don't believe we do any ROW permitting there. Section 408 approval should be coordinated directly with USACE.
- C-23 Canal – this crossing requires ROW permitting (modify existing) and Section 408 authorization (to be handled by SFWMD).
- C-24 Canal – this crossing requires ROW permitting (modify existing), but since it is located downstream of the coastal water control structure, we typically do not submit Section 408 approval requests there.

The Ft. Denaud Bridge crosses the C-43/Caloosahatchee River, which is under USACE jurisdiction. I don't believe we do any ROW permitting there, so Section 408 approval should be coordinated directly with USACE.

I'm not familiar with the SFWMD report you're referencing. But hopefully the information above is helpful to you.

Teri

Teri Swartz, P.E.
Lead Engineer, Project Management Section
Engineering and Construction Bureau
South Florida Water Management District
(561)682-2505



From: Robert Whitman Jr. <RWhitman@kcaeng.com>
Sent: Monday, July 13, 2020 8:02 AM
To: Swartz, Teri <tswartz@sfwmd.gov>
Subject: Section 408 Authorization

[Please remember, this is an external email]

Good morning Ms. Swartz, I am working on two projects which may require Section 408 Authorization initiated through the SFWMD. I understand that you are the District's 408 Coordinator and want to discuss these projects with you. I gave you a call and your message indicated that you were best reached by email. We would like to confirm which project crossings would require a SFWMD Right of Way Occupancy Permit and a Section 408 Authorization. These projects include:

The Project Development and Environment (PD&E) study for widening Florida's Turnpike from north of SR 706 (Indiantown Road) near Jupiter, to the SR 70 Interchange in Ft. Pierce.

The Repair and Rehabilitation of the Ft. Denaud Bridge, which crosses the Okeechobee Waterway approximately 5.2 miles west of La Belle.

The Project Development and Environment (PD&E) study for widening Florida's Turnpike from north of SR 706 (Indiantown Road) near Jupiter, to the SR 70 Interchange in Ft. Pierce. This is a 37-mile project and crosses several regional flood protection facilities, including the St. Lucie Canal, the County Line Canal, and the Rim Ditch. The project crosses the Loxahatchee River, but the C-18 Canal, located farther south, is not within our project area. I have included a project location map with the waterway crossings identified (below) to assist with your review. I would like to confirm which of these crossings will require a SFWMD Right of Way Occupancy Permit and Section 408 Authorization. Also, I've noticed some inconsistencies in the canal nomenclature within the project correspondence, and want to get some clarity on this item. Note that the nomenclature in the graphic below was taken from a SFWMD Technical Report (reference below), but is not consistent with some of the other project correspondence and documents. We are revising the documents for consistency and wanted some clarification.

St. Lucie Canal – The Turnpike crosses the St. Lucie Canal downstream of control structure S-80; the reference document identifies this as the C-44A Canal; however other correspondence identifies this as the C-44 Canal (the reference document identifies the C-44 Canal as upstream of S-80).

County Line Canal – C-23 Canal (consistent nomenclature).

Rim Ditch – The Turnpike crosses the Rim Ditch downstream of control structure S-49; the reference document identifies this as the C-23A Canal; however other correspondence commonly identifies this canal as the C-24 Canal (the reference document identifies the C-24 Canal as upstream of S-49).

SFWMD Document Reference:

South Florida Water Management District, 2010. *Canals In South Florida: A Technical Support Document*. West Palm Beach, Florida.

Appendix C – Description of SFWMD Primary Water Management Features



The Repair and Rehabilitation of the Ft. Denaud Bridge, which crosses the Okeechobee Waterway approximately 5.2 miles west of La Belle. The project will involve repair of bridge structural elements and replacing the fender system, but may also include stabilization of the banks of the waterway. The extend of the shoreline stabilization has not yet been designed, but is anticipated to stay within the roadway right of way, and could extend below the Ordinary High Water

Line. Please let me know if this project would require a SWFWMD Right of Way Occupancy Permit and a Section 408 Authorization.

I have permitted several projects requiring Section 408 authorization within the SWFWMD and worked closely with Jeff Hagberg, SWFWMD's 408 Coordinator, and recognize that early coordination is important to this process. Any information that you could provide would be valuable. I'm available to discuss at your convenience, and feel free to call if that would be easier for you. Thank you in advance for your assistance. Best regards, Bob



Robert Whitman Jr.
Chief Environmental Scientist/Sr. Project Manager
Email: RWhitman@kcaeng.com
Work: 813.871.5331 ext 4167
Cell: 813.391.4773
201 N. Franklin St., Suite 400, Tampa, FL 33602

CONFIDENTIALITY NOTE: This communication may be privileged and confidential. It should not be disseminated to others. If received in error, please immediately reply that you have received this communication in error and then delete it. Thank you.

National Park Service Meeting #01

Turnpike Mainline (SR 91)
Widening PD&E Study from
Jupiter to Fort Pierce

PROJECT: Florida's Turnpike (SR 91) Widening PD&E Study from Jupiter (Indiantown Road) to Okeechobee Road (SR 70) (FPID#: 423374-1-22-01)

Palm Beach, Martin and St. Lucie Counties

MEETING DATE: February 15, 2018

MEETING TIME: 10:30 AM to 11:30 AM

LOCATION: Teleconference

GO TO MEETING LINK <https://global.gotomeeting.com/join/716488589>

CONFERENCE CALL NUMBER: (646) 749-3112

ACCESS CODE: 716-488-589

1. Introductions

2. Project Description

- a. Overall Project
- b. Loxahatchee River Crossing
 - a. Proposed Action
 - b. Constraints
 - i. FGT Gas Pipelines
 - ii. Interstate 95
 - iii. Public Lands
 - iv. Wetlands / Habitat

3. Section 7(a) Requirements

4. Open Discussion

5. Future Coordination

6. Action Items

ID#	Description	Responsible Person	Due Date	Completion Date	Status

National Park Service (NPS) Coordination Meeting

Turnpike Mainline (SR 91)
Widening PD&E Study from
Jupiter to Fort Pierce

PROJECT: **Florida's Turnpike (SR 91) Widening PD&E Study from Jupiter (Indiantown Rd/SR 706) to Ft. Pierce (Okeechobee Rd/SR 70) (FPID#: 423374-1-22-01)**

Palm Beach, Martin and St. Lucie Counties

MEETING DATE: September 25, 2020

FACILITATOR: Brian Ribaric *BRN*

1. Attendees

Jeff Duncan (NPS)
Jennifer Back (NPS)
Cesar Martinez, PE (FDOT, D-4)
Lynn Kelly (FDOT, D-4)
Henry Pinzon, PE (FTE)
Rax Jung, PhD, PE (FTE)
Philip Stein (FTE)

Annemarie Hammond (FTE)
Brian Ribaric, PE (Atkins/FTE)
Doug Zang (Atkins/FTE)
Fred Gaines, PWS (Atkins/FTE)
Bill Howell, PE (Lochner)
Mark Easley (H&H)

2. Background

- a. After introductions, Brian Ribaric narrated a PowerPoint presentation that provided an overview of the project to the attendees and stated that the PD&E Study limits are along Florida's Turnpike Mainline (SR 91) from Indiantown Road (SR 706) to Okeechobee Road (SR 70), MP 117 to MP 153.7. A copy of the agenda and PowerPoint presentation are attached to these meeting notes.
- b. Brian Ribaric stated that the project includes the widening of the mainline from two to four lanes in each direction and the replacement/widening of the existing bridge over the Loxahatchee River.
- c. Brian Ribaric stated that the bridge over the Loxahatchee is within a Scenic segment of the river and that the existing vegetation includes the river channel, cypress dominated river swamp, drainage ditches adjacent to the existing roadway, and flatwoods landward of existing wetlands. He also identified some of the federal and state listed species that are present.
- d. Brian Ribaric then discussed the existing Turnpike bridge over the Loxahatchee River and stressed that it had four spans approximately 45 feet in length, which resulted in piles in the middle of the river channel.
- e. Brian Ribaric identified design constraints including: limited right-of-way, I-95 to the east, centuries old cypress trees adjacent to the right-of-way, and three Florida Gas Transmission pipelines in the right-of-way. He also identified the need to meet the Wild & Scenic River Act requirements.
- f. Brian Ribaric then discussed the proposed bridge structure, that it would have four 12-foot lanes in each direction and that it would be a three-span bridge with the center span being 110 feet. This would allow for the removal of bridge piles from the river channel.

- g. With the proposed span arrangement for the new bridge, the piles are not anticipated to be in the water during normal stages but may be in the water at flood stage.
- h. Brian Ribaric also stated that new piles would line up with the piles of the existing I-95 structure and locate them farther away from the open water channel banks.
- i. Jeff Duncan asked if the old bridge piles would be removed. FTE discussed that piles may not be able to be removed due to engineering/site condition concerns. Sometimes removal of piles causes significant site disturbance. If piles are not removed completely, they will be cut off 2-feet below the mudline.
- j. Construction of the new bridge would close the gap between the Turnpike bridge and the I-95 bridges, and would widen to the west beginning immediately adjacent to the west side of the I-95 bridges, entirely within existing Turnpike right-of-way.

3. Loxahatchee River Wild & Scenic River Designation

- a. Brian Ribaric then discussed the Loxahatchee River Wild and Scenic River designation and stated that the project was within the upper scenic segment of the river at approximately river mile 12.9.
- b. Brian Ribaric stated that based on the river's 2010 Management Plan, within the existing right-of-way, the wild and scenic designations extend approximately 350 feet to the north and approximately 465 feet to the south of the river channel centerline. He also stated that based on these distances, there were approximately 1.11 acres of floodplain wetlands and 0.46 acres of upland buffer within the right-of-way.
- c. Brian Ribaric then went through the Outstandingly Remarkable Values (ORV) used in the designation of the river as Wild and Scenic, based on the National Park Service's (NPS) 1984 Environmental Impact Statement. These criteria included: ecological, fish and wildlife and recreational. He also identified the ORVs identified in the Wild and Scenic River Act.

4. Potential Project Impacts

- a. Brian Ribaric then went through each of the six ORVs identified in the Wild and Scenic River Act and discussed potential project related impacts and mitigating actions that the Turnpike will implement to minimize/minimize these impacts. These included:
 - i. Scenic Values –
 - 1. Potential impacts included visual and auditory.
 - 2. To offset these impacts, the Turnpike will use a longer bridge main-span to eliminate piles in the river channel and reduce noise (fewer bridge joints); maintain the existing vertical clearance; and limit lighting as much as possible in the area of the bridge.
 - 3. Jeff Duncan asked if the Turnpike has considered additional actions, such as painting/staining the bridge to better blend into the surrounding environment and soften visual features. Also, Jeff Duncan asked if the Turnpike would consider additional aesthetic design features such as railings, piles/piers/parapet designs such as those done for the Wekiva River crossing. While the Loxahatchee River may not provide the same aesthetic opportunities as the Wekiva River, Brian Ribaric stated that the additional aesthetic features mentioned are things that could be considered during the design phase.
 - ii. Recreational Values
 - 1. Potential impacts include visual and auditory.
 - 2. To offset these impacts, the Turnpike will maintain/enhance the paddling network in the area; use a longer bridge main-span to eliminate piles in the river channel (reduce obstacles in channel); and maintain the bridge vertical clearance.

3. NPS asked about paddle direction. The Turnpike responded west to east. NPS indicated that since the Turnpike bridge is first (upstream) seen, then aesthetics are very important. Lynn Kelly indicated that the river channel access is from River Bend Park (upstream) to Jonathan Dickinson State Park (downstream).
- iii. Historical/Cultural Values
 1. There should be no impacts to Historical/Cultural Values as a result of the project.
- iv. Free Flow Nature
 1. The project should enhance the free flow nature of the river due to the longer bridge main-span and removal of piles from the river channel.
- v. Water Quality/Quantity Values
 1. Potential impacts include increased pollutant loads due to increased impervious surface. No impact to quantity is anticipated. In order to offset these impacts, Jeff Duncan wanted to verify that the new bridge would not direct discharge into the river. The Turnpike will not directly discharge stormwater off of the bridge into the river (i.e., no scuppers will be placed on the new bridge). The stormwater from the new bridge would be carried off the bridge in the bridge shoulders and conveyed to stormwater treatment facilities prior to its discharge into the river.
 2. Jennifer Back asked if the Turnpike has modeled the river's flood flows. Brian Ribaric stated that this is something that is done during the project's design phase. Mark Easley added that there are multiple restoration plans, such as the Loxahatchee River Watershed Restoration Project, that were being implemented by state and federal agencies with the purpose of restoring the river's historic flows. Fred Gaines also pointed out that the Loxahatchee River was an Outstanding Florida Water (OFW), and as a result, additional stormwater treatment would be required over and above normal regulatory requirements.
- vi. Wildlife/Habitat Values
 1. Potential impacts include loss of habitat due to the conversion of wetlands/uplands to roadway.
 2. To offset these impacts, the Turnpike will keep construction activities within its existing right-of-way and enhance wildlife movement under the bridge by placing a wildlife path through the bridge rip-rap. The Turnpike is also open to assessing the addition of wildlife fencing to directing wildlife to the path. In addition, a site-specific clearing plan will be developed to minimize impacts to existing vegetation (i.e., removal and trimming).

5. Next Steps

- a. Brian Ribaric then discussed the next steps the Turnpike would use to further avoid and minimize impacts to the Wild & Scenic River segment. This included further analysis of the project and development of avoidance/minimization options, and further coordination with the Florida Department of Environmental Protection, South Florida Water Management District, and the Loxahatchee River Management Coordinating Council.
- b. Brian Ribaric then asked Jeff Duncan what the NPS would like to see from the Turnpike as the project moves forward.
- c. Jeff Duncan asked Brian Ribaric when the segment of the project containing the Loxahatchee River would be going to US Army Corps of Engineers (USACE) permitting. Brian Ribaric responded that the project is not in the current five-year work plan and that it would likely be closer to ten years before the project goes to permitting. Jeff Duncan stated that the Section 7(a) document (Analysis and Determination) would be in response to the USACE permit

application. At this point in the PD&E Study, the project meeting notes and a copy of the presentation for the file would be adequate.

- d. Jeff Duncan also stated that NPS appreciated the details on the proposed mitigation measures – removal of piles from the channel, wildlife path, and limited lighting. There would need to be more discussions about bridge aesthetics during the project design phase.
- e. NPS indicated that no actionable phase yet, but presentation and meeting minutes will start historical file of record for the project. FTE discussed that coordinating during the PD&E Study to allow for a complete environmental document and for a smooth transition for required aspects into design.
- f. Mark Easley stated that the Turnpike's primary concern is avoiding fatal flaws that may exist with the proposed bridge replacement. Jeff Duncan stated that he did not see any fatal flaws with the project as proposed, but there would be details that will need to be worked out during the permitting of the project. He also stated that the NPS mandate is to protect and enhance the river and that there can be no direct impacts as there is no way to mitigate direct impacts. Since there is a span there already, the Turnpike will only need to show improvements.

6. Project Schedule

- a. Brian then reviewed the project's Project Development & Environment (PD&E) schedule. At present, the Turnpike anticipates the project's PD&E phase to be complete by summer 2021.

Brian Ribaric provided Jeff Duncan with his contact information in case he had any additional comments or wished to discuss the project and proposed bridge crossing.

The meeting ended at approximately 1:50 pm.

END MEETING NOTES

National Park Service Coordination Meeting

Project Development and Environment (PD&E) Study
to Widen Florida's Turnpike (SR 91) from Jupiter (Indiantown Road)
to Okeechobee Road (SR 70)
Palm Beach, Martin, and St. Lucie Counties, FL

Financial Project ID #: 423374-1-22-01

ETDM #: 14295

September 25, 2020

1

PD&E Study Improvements

• Purpose

- Add capacity & interchange access to the Florida's Turnpike (SR 91)

• Proposed Improvements

- Widen SR 91 by adding lanes in each direction
- Widen/reconstruct bridges over Loxahatchee River & St. Lucie Canal
- Reconfigure 4 existing interchanges & construct 2 new interchanges



2

Existing Conditions at Loxahatchee River

• Florida's Turnpike

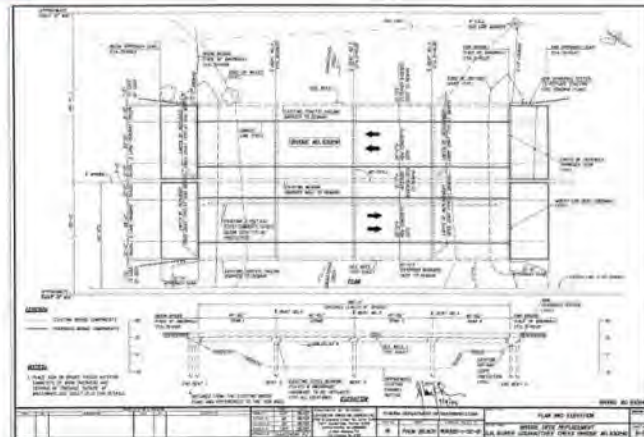
- Bridge in Scenic Segment of River
- Existing vegetation
 - River Channel
 - Cypress dominated river swamp
 - Additional species – maple, water hickory, water oak, red bay, cabbage palm
 - Drainage ditches
 - Slash Pine dominated pine flatwoods
 - Additional species – saw palmetto, wax myrtle, Lyonia
- Potential protected species
 - American alligator, snail kite, wood stork, indigo snake, gopher tortoise, SE American kestrel, wading birds



Existing Conditions at Loxahatchee River

• Existing Bridge Structure

- Bridge constructed in 1956
(deck reconstructed 1991)
- Bridge type is AASHTO Type II
 - Travel lanes – two 12-foot in each direction
 - Outside shoulders – 10 feet
 - Inside shoulders – 10 feet northbound, 8 feet southbound
 - Length - 180.4 feet
 - Width - 91 feet
 - Number of spans - four
 - Span length – 45.1 feet
 - Low member elevation – approx. 15.0 NAVD
 - Vertical clearance under bridge – approx. 9 feet



Existing Conditions at Loxahatchee River

• Design Constraints

- Limited right-of-way
- Florida Gas Transmission Pipeline (3 Lines)
- I-95 (current and ultimate)
- Wild & Scenic River Requirements
- Centuries Old Cypress Tree

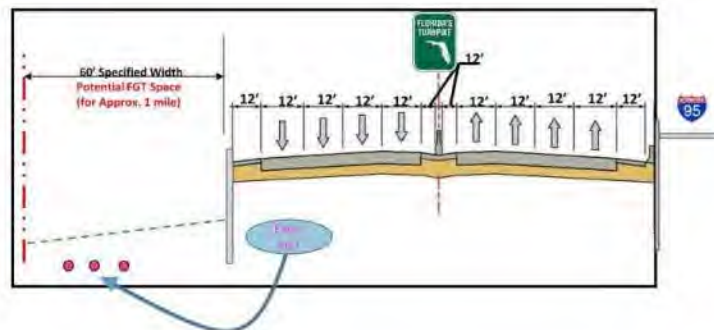


5

Proposed Loxahatchee River Bridge

• Proposed Typical Section

- Widening to west
 - I-95 on east
 - FGT pipeline on west
- Staying within existing right-of-way
- FGT 75' standard specified width reduced to 60'

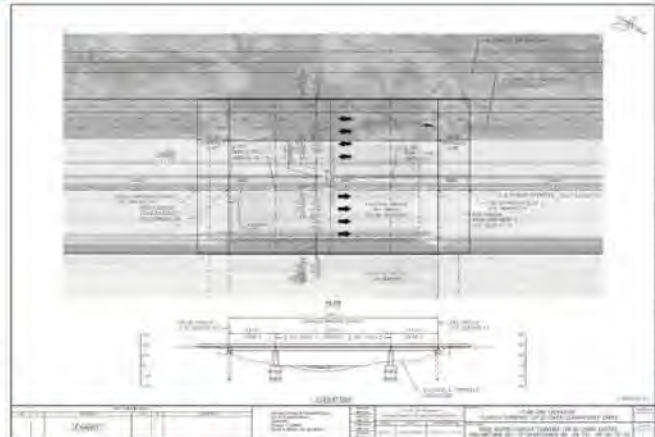


6

Proposed Loxahatchee River Bridge

• Proposed Bridge Structure

- Bridge type FIB 45
 - Travel lanes – four 12-foot lanes in each direction
 - Outside shoulders – 12 feet
 - Inside shoulders – 12 feet
 - Length - 200 feet
 - Width - 149 feet
 - Number of spans - three
 - Span length – 45 feet / 110 feet / 45 feet (Similar to I-95 bridge spans)
 - Low member elevation – match existing approx. 15' (NAVD)
 - Vertical clearance under bridge – approx. 9 feet



Loxahatchee River Wild & Scenic River Designation

• Wild & Scenic River Segment

- 2010 Management Plan
 - River mile 5.2 to river mile 15.5
 - 10.3 miles total
 - Differs from 1984 EIS which lists 7.5 miles
- Segment Designations (approximately)
 - Scenic - 5.2 to 10.5
 - Wild - 10.5 to 12.5
 - Scenic - 12.5 to 14.5
 - Recreational - 14.5 to 15.5
- Turnpike in Scenic segment of river (River Mile 12.9)

The Loxahatchee River Wild and Scenic Designation and Preservation Act delineates the boundaries of the designated portion of the Northwest Fork:

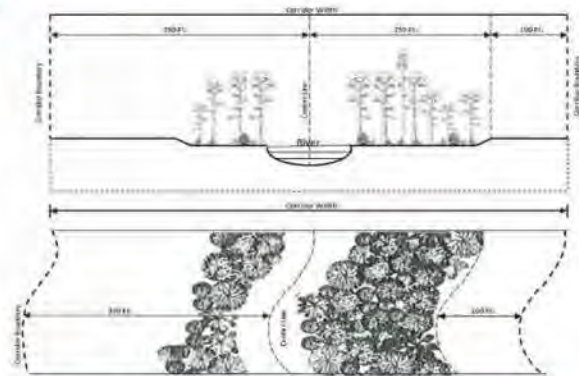
...described as that portion of the Northwest Fork downstream of the southern boundary of Riverbend Park (RM 15.5) located in Palm Beach County and upstream of an east-west line passing through a point where the southern boundary of Jonathan Dickinson State Park intersects the eastern shoreline of the river (RM 5.2).



Loxahatchee River Wild & Scenic River Designation

• Boundaries Within Project Area

- Limits from river centerline (2010 Management Plan)
 - The greater of:
 - Upland extent of floodplain wetlands + 100-foot buffer
 - 350 feet measured from center of main river channel
- Turnpike right-of-way (approximate)
 - North side
 - Floodplain wetlands 215' + upland buffer 135' = 350'
 - South side
 - Floodplain wetlands 365' + upland buffer 100' = 465'
- Area within right-of-way (approximate)
 - North side
 - Floodplain wetlands 0.44 acres; flatwoods 0.28 acres
 - South side
 - Floodplain wetlands 0.67 acres; flatwoods 0.18 acres



Loxahatchee River Wild & Scenic River Designation

• Outstandingly Remarkable Values (ORVs) (based on 1984 NPS EIS for Listing)

- Ecological
 - Best remaining example of SE Florida river swamp
 - Diverse plant community – tropical & temperate
 - Subtropical river-swamp system – unique to W&S river system
 - 300 to 500-year old cypress
- Fish and Wildlife
 - 267 species – 169 genera, 78 families
 - Temperate, tropical & pelagic gulf species*
 - Federal species – eagle, snail kite, indigo snake, manatee, red-cockaded woodpecker, alligator
- Recreational
 - Narrow meandering channel – challenging & interesting recreational experience
 - Diverse vegetation & habitats

* The 1984 EIS identified "pelagic gulf species" should have identified "pelagic south Atlantic species"



Loxahatchee River Wild & Scenic River Designation

• Outstandingly Remarkable Values (ORVs) (based on Criteria)

- Scenic
- Recreational
- Historical / Cultural
- Free Flow Nature
- Water Quality / Quantity
- Wildlife / Habitat



11

Potential Project Impacts

• Scenic Values

- Potential Impacts
 - Visual
 - Auditory
- Potential Mitigating Actions
 - Use of longer bridge main span
 - Removal of piles from river channel
 - Maintain vertical clearance
 - Limit lighting as feasible



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Potential Project Impacts

• Recreational Values

- Potential Impacts
 - Visual
 - Auditory
- Potential Mitigating Actions
 - Maintain/enhance paddle network in area
 - Use of longer bridge main span
 - Removal of piles from river channel
 - Maintain vertical clearance



Potential Project Impacts

• Historical / Cultural Values

- Potential Impacts
 - Impacts not anticipated
- Potential Mitigating Actions
 - None proposed



Potential Project Impacts

• Free Flow Nature

- Potential Impacts
 - Enhanced
- Potential Mitigating Actions
 - Use of longer bridge main span
 - Removal of piles from river channel
 - Maintain vertical clearance



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Potential Project Impacts

• Water Quality / Quantity Values

- Potential Impacts
 - Quality - Increased pollutant loading
 - Quantity – None anticipated
- Potential Mitigating Actions
 - No direct discharge of stormwater into river
 - Treatment of new impervious surfaces to OFW standards
 - Removal of piles from river channel (enhance flow)



16

Potential Project Impacts

• Wildlife / Habitat Values

- Potential Impacts
 - Loss of habitat
- Potential Mitigating Actions
 - Staying within existing right-of-way
 - Enhance wildlife movement under bridge / placement of wildlife path only through rip-rap
 - Wildlife fencing as appropriate
 - Site-specific clearing plan to minimize impacts
 - Minimize lighting as feasible



Next Steps

• Next Steps

- Analyze project information
- Identify project impacts
- Continued coordination
 - NPS
 - FDEP/SFWMD
 - LRMCC
- Develop avoidance/minimization options
- Identify mitigative actions
- Document findings (Analysis and Determination)





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Contact Information

Brian Ribaric, P.E.
 Project Manager for Florida's Turnpike Enterprise (Atkins)
 (407) 264-3095
Brian.Ribaric@dot.state.fl.us

The FDOT logo and 'Florida Department of Transportation' are in the bottom left, and the 'Florida's Turnpike' logo is in the bottom right.

20

Questions?



Florida Department of Transportation

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**FDOT, Florida's Turnpike Enterprise/Florida Fish and Wildlife Conservation
Commission Technical Assistance Meeting Notes**

**FPID 423374-1-22-01 (Turnpike)
Turnpike Mainline Widening from Jupiter to Fort Pierce**

Palm Beach, Martin, and St. Lucie Counties

Date: Friday, October 16, 2020
Time: 11:00 am – 12:00 pm
Venue: Microsoft TEAMS meeting
Facilitator: Brian Ribaric

BR

Note: The italicized text below in the meeting agenda are the notes for topics that were discussed during the meeting.

1. Introductions

- **FWC Staff – Brian Barnett**
- **FTE Environmental Administrator – Philip Stein**
- **FTE Permits Coordinator - Annemarie Hammond**
- **FTE Project Manager – Brian Ribaric, PE (Atkins)**
- **FTE Permits Coordinator – Fred Gaines, PWS (Atkins)**
- **Lochner Project Manager – William Howell, PE**
- **KCA Project Manager/Chief Environmental Scientist – Robert Whitman**
- **KCA Senior Environmental Scientist – Ashley Abdel-Hadi**

2. Project Overview (map provided)

- Current Alignment
 - Approx. 37-mile segment of proposed widening of existing 4-lane facility to 8-lanes primarily within existing right of way with 4 existing and 2 proposed interchanges
- ETDM No. 14295 published on May 19, 2017
 - FWC concerns included potential impacts to the following state listed species:
 - Florida sandhill crane (*Antigone canadensis pratensis*)
 - Florida burrowing owl (*Athene cunicularia floridana*)
 - Wading birds
 - Little blue heron (*Egretta caerulea*)
 - Tricolored heron (*Egretta tricolor*)
 - Roseate spoonbill (*Platalea ajaja*)
 - Southeastern American kestrel (*Falco sparverius paulus*)
 - Gopher tortoise (*Gopherus polyphemus*)
 - Florida pine snake (*Pituophis melanoleucus mugitus*)
 - Southern fox squirrel (*Sciurus niger niger*) – FWC species guidelines relative to fox squirrel nests
 - Least tern (*Sternula antillarum*)
 - State protected plants – coordination as required with FDACS
- 428.21 acres of wetland impacts anticipated with the preferred alternative (preliminary impacts - 62.67 acres of wetlands and 365.54 acres of surface waters)

Florida's Turnpike Enterprise (FTE) provided an overview of the project and interchanges. A background and current status of the project was provided, which included the project location and primary land uses within the proposed project area. FTE noted that the project proposes widening from the existing 4 lane typical section to an ultimate 8 lane section, and includes improvements to existing interchanges, as well as evaluation of two new interchanges. FTE indicated that the widening is proposed principally to the west, with a few exceptions (e.g. Loxahatchee River crossing), due to the location of the FGT gas lines. FTE indicated that the project construction was currently unfunded, and discussed potential interim 6-lane segment needs, in comparison with the ultimate 8-lane facility. FTE noted that FWC reviewed and provided comment on the project's ETDM Programming Screen, published in 2017.

FTE proceeded with a review of the project aerial photographic exhibits and discussed the riverine/canal systems that the project will be crossing, including Loxahatchee River (OFW, Wild and Scenic River), Cypress Creek, tributaries to the South Fork of the St. Lucie River, Roebuck Creek, St. Lucie Canal (C-44), Mapps Creek, Danforth Creek, Bessy Creek, County Line Canal (C-23) Canal, Winters Creek, Blakeslee Creek, Rim Ditch (C-24), Ten Mile Creek, and other unnamed tributaries. FTE indicated that preliminary wetland impact acreage includes areas within the existing ROW and proposed ROW of the preferred interchange alternatives. FTE then initiated a discussion of state-protected species.

3. Florida Sandhill Crane

FTE noted a Florida sandhill crane nest was documented during field reviews in the SW Martin Highway Interchange within 400 feet of the project area. FTE stated that surveys for the species would be conducted during design, disturbance would be avoided to all extent practicable, active nests would be avoided during construction (400-foot buffer), and an Incidental Take Permit would be submitted to FWC with suitable mitigation provided for unavoidable impacts.

FTE indicated that they would avoid the need to obtain an Incidental Take Permit for Florida sandhill cranes by avoiding active nests and proposed an effect determination of "no adverse effect anticipated" and FWC agreed. FWC noted that nest locations will likely change prior to construction and FTE stated that that surveys would be conducted during design and prior to construction.

4. Florida Burrowing Owl

FTE discussed the lack of Florida burrowing owl habitat and lack of documentation within the area. If additional surveys identify a burrowing owl burrow, it would be avoided to the greatest extent practicable and FTE would submit a Nest Removal Permit (Incidental Take Permit) for any nest.

FTE indicated that they would avoid the need for an Incidental Take Permit and proposed an effect determination of "no adverse effect anticipated" for the Florida burrowing owl and FWC agreed. FWC agreed that project area does not contain quality burrowing owl habitat and the species is more likely to be encountered further south along the project and noted that some burrowing owl habitat is located further east in St. Lucie County.

5. Wading Birds (Little Blue Heron, Tricolored Heron, and Roseate Spoonbill)

FTE explained that a non-listed wading bird rookery (varying historically in use by anhingas, night herons, cattle egrets, and great egrets) at the Okeechobee Road (SR 70) interchange that has been utilized annually for over 18 years. FTE discussed avoidance and minimization measures, including construction phasing during non-nesting season and no nighttime construction, if construction must occur during nesting season.

FTE requested FWC input regarding involvement of the non-listed colonial wading bird species that are utilizing the rookery. FWC noted that these birds are tolerant to disturbance and that a program could be developed that would minimize disturbance to these species, allow FTE to accommodate nesting, including seasonal adjustment to the construction schedule and restricting nighttime construction. FTE inquired if a permit would be necessary for construction activities around the rookery. FWC indicated that they do not think a permit would be required as the plan developed to minimize disturbance would be sufficient to avoid take, and the rookery is used by birds that are tolerant to disturbance. FWC noted that if take is avoided, FTE would not need a permit. FWC stated that the plan to minimize disturbance would be reviewed by their wading bird experts, who would also consult on the need for a permit.

FTE proposed an effect determination of “no adverse effect anticipated” at this time for the little blue heron, tricolored heron, and roseate spoonbill, and the FWC agreed.

6. Southeastern American Kestrel

FTE explained that they have not found documentation of kestrels within the project area; however, potential for utilization of the project area will be continually assessed in man-made (i.e., wooden utility poles) and natural structures.

FTE discussed the latest kestrel guidelines, which mention minor projects/existing facility impacts on kestrels, including potential for the need to coordinate with FWC for milling and resurfacing projects. FTE requested FWC input regarding kestrels in the project area and widening in existing ROW inquiring if, based on current guidance, FTE will be required to conduct surveys throughout the length of the corridor. FWC asked if FTE has contacted Jonathan Dickinson State Park to see if they have record of kestrel use of the park. FTE stated they would follow-up with the park. FWC indicated that the project area does not contain much suitable kestrel habitat; however, if surveys are conducted, they can be restricted to areas with good kestrel habitat and disregard cleared farmland with cleared ROW adjacent to it and the species will not likely be in suburban areas.

FTE stated they will put together a plan during design with areas proposed for survey for FWC review and agreement. FWC agreed with this approach and noted that by the time the project goes into construction, the project corridor may likely be more developed.

FTE proposed a determination of “no adverse effect anticipated” at this time for the Southeastern American kestrel and FWC agreed, recommending FTE contact Jonathan Dickinson State Park for documented occurrences.

7. Gopher Tortoise

FTE noted that gopher tortoise burrows had been documented within the project area and that current guidelines will be followed. A permit application will be submitted for burrows that cannot be avoided and tortoises relocated. FTE proposed an effect determination of “no adverse effect anticipated” for the gopher tortoise due to permitting process and mitigation, and FWC agreed.

8. Florida Pine Snake

FTE stated that there have been no known documented occurrences of pine snakes within 1 mile of the project area; however, gopher tortoise burrows are present. Surveys are not proposed for the pine snake and the species will be addressed as a commensal species with gopher tortoise permitting during design. FTE proposed an effect determination of “no adverse effect anticipated” for the Florida pine snake and FWC agreed.

9. Least Tern

FTE indicated that least terns have been documented nesting along the project area on flat roofed buildings, with the closest nesting location approximately 300 feet from the project.

FTE inquired on FWC's current approach regarding proximity to nesting and what qualifies as disturbance. FWC stated that rooftop colonies are accustomed to disturbance and buffer distances, other than required for the use of explosives, do not apply. FWC indicated that if 300 feet is the closest nesting activity, then they should not be of concern. FTE indicated that blasting was not currently being considered for project construction.

FTE inquired if additional surveys were warranted. FWC stated that they keep track of rooftop nesting terns internally and at this time surveys would not be required. Surveys would be warranted if work occurred adjacent to the project area (i.e., sand mine) that created nesting habitat, but currently there is no existing habitat other than rooftops. If nesting occurs within closer proximity to the project area, this would not be detrimental to the project if avoidance and minimization measures were implemented. FTE proposed an effect determination of “no adverse effect anticipated” for the least tern and FWC agreed.

10. State Protected Plants – Florida Department of Agriculture and Consumer Services (FDACS)

- Golden Leather Fern (*Acrostichum aureum*), Meadow Jointvetch (*Aeschynomene pratensis* var *pratensis*), Many-flowered Grass-pink (*Calopogon multiflorus*), Piedmont Joint Grass (*Coelorachis tuberculosa*), Cutthroat Grass (*Coleataenia abscissa*), Florida Tree Fern (*Ctenitis sloanei*), Cuplet Fern (*Dennstaedtia bipinnata*), Night-scented Orchid (*Epidendrum nocturnum*), Redberry Eugenia (*Eugenia confusa*), Coastal Vervain (*Glandularia maritima*), Spreading Pinweed (*Lechea divaricata*), Celestial Lily (*Nemastylis floridana*), Giant Sword Fern (*Nephrolepis biserrata*), Hand Fern (*Ophioglossum palmatum*), Scrub Bluestem (*Schizachyrium niveum*), Ray Fern (*Schizaea pennula*), Southern Ladies'-tresses (*Spiranthes torta*), Toothed Maiden Fern (*Thelypteris serrata*), Banded Wild-pine (*Tillandsia flexuosa*), Scentless Vanilla (*Vanilla mexicana*), and Redmargin Zephyrlily (*Zephyranthes simpsonii*) and others

FTE noted that they are cognizant of the potential for state protected plant species to occur along the project corridor and will coordinate with FDACS as required. FWC agreed that FTE should coordinate with the FDACS regarding state protected plants.

11. Federal Species

- USFWS/NMFS Technical Assistance Meeting with John Wrublik (USFWS) and Jennifer Schull (NMFS) scheduled for Monday 10/26/2020
- Species being addressed with coordination with USFWS include:
 - American alligator (*Alligator mississippiensis*)
 - Florida grasshopper sparrow (*Ammodramus savannarum floridanus*)
 - Florida scrub-jay (*Aphelocoma coerulescens*)
 - Audubon's crested caracara (*Caracara cheriway*)
 - Eastern indigo snake (*Drymarchon couperi*)

- Florida bonneted bat (*Eumops floridanus*)
- Bald eagle (*Haliaeetus leucocephalus*)
- Red-cockaded woodpecker (*Leuconotopicus borealis*)
- Wood stork (*Mycteria americana*)
- Everglade snail kite (*Rostrhamus sociabilis plumbeus*)
- West Indian manatee (*Trichechus manatus*)
- Federal listed plants
- NMFS Protected Species: Smalltooth sawfish (*Pristis pectinata*)

FTE provided an overview of the species to be discussed with USFWS and NMFS during a future Technical Assistance Meeting. FWC noted that FDEP will be assuming Section 404 review from the USACE and that the USFWS and FWC are currently working on agreements for review of project effects on federal protected species from Section 404 permit assumption. FWC indicated that they will eventually take over the role of commenting on effects to federal protected species resulting from Section 404 permit assumption. FWC anticipates that USFWS will continue to be involved on any FDEP assumed projects that result in a "jeopardy" determination.

FWC inquired about potential crested caracara involvement. FTE stated that a single caracara was documented within 1 mile of the proposed project; however, this documentation is from 1995. FWC stated that there was red-cockaded woodpecker habitat at Port St. Lucie that has since been cleared. FTE inquired if FWC would want to attend the USFWS/NMFS Technical Assistance Meeting or receive meeting minutes. FWC explained that they would wait until they are aware of their responsibilities after the Section 404 assumption was completed.

12. Wildlife Habitat Connectivity

FTE noted coordination efforts with the NPS regarding the Loxahatchee River crossing. The Loxahatchee River crossing has natural habitat on both sides and meets FDOT criteria for potential consideration of wildlife crossings and habitat connections. FTE indicated that they are considering adding a dry wildlife path underneath the bridge but noted that potential future constriction resulting from improvements to I-95 were unknown at this time. FTE inquired if there are other crossings FWC would want them to consider for wildlife habitat connectivity. FWC agreed the Loxahatchee River crossing is a good location and inquired if FTE was leaving the existing structure. FTE discussed that the current plan was to replace the existing FTE bridge with a similar design and pile arrangement to the abutting the I-95 bridge. The mainline widening at the Loxahatchee crossing would be to the west, noting that I-95 and FTE share ROW. FWC indicated they were concerned with habitat loss. FTE noted that they are intending to span the Loxahatchee River channel (from approx. OHWL to OHWL) and will be removing pilings from the middle of Loxahatchee River channel. This will keep the river channel open and the dry shelf will enable wildlife passage under the bridge.

FWC noted their concern with the potential need to take public conservations lands, which would need to be replaced. FTE indicated that they will be staying within the mainline ROW, especially in sensitive areas, and avoiding, to the maximum extent practicable, the taking of public conservation lands.

FWC inquired about the Cypress Creek bridge. FTE indicated that bridge is mostly over wetland, with minimal clearance for wildlife during dry season. FWC inquired if this was the same at the I-95 bridge. FWC recommended considering this area due to habitat on both sides and to see if clearance is sufficient for potential for wildlife crossing. FTE noted that they would review the potential for connectivity at the Cypress Creek bridge location to benefit to wildlife, noting the location of the adjacent I-95 bridge.

13. Roundtable/Questions/Comments



Florida Fish & Wildlife Conservation Commission Technical Assistance

**Project Development and Environment (PD&E) Study
for Florida's Turnpike from Jupiter (Indiantown Rd/SR 706)
to Ft. Pierce (Okeechobee Rd/SR 70)
Palm Beach, Martin and St. Lucie Counties, FL**

Financial Project ID #: 423374-1-22-01
October 16, 2020

1

Agenda



- Project Process & Overview
- Project Challenges
- Widening & Interchange Concepts
- Future Phases & Schedule



2

Project Process

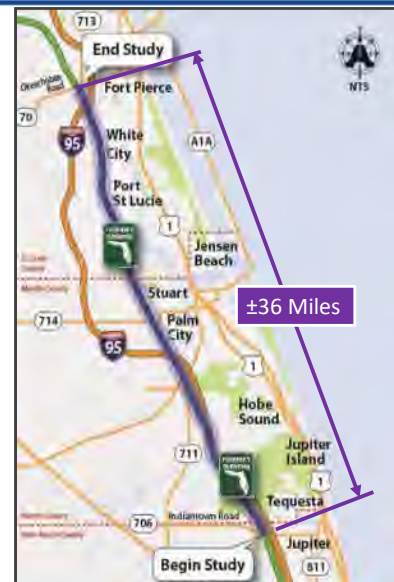
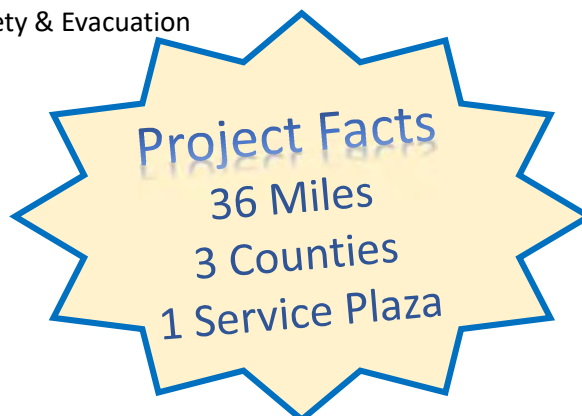


3

PD&E Study



- Jupiter (Indiantown Rd/SR 706) to Ft. Pierce (Okeechobee Rd/SR 70)
 - 2045 Traffic Demand
 - Improve Access
 - Enhance Safety & Evacuation



4

Project Challenges



- Florida Gas Transmission (FGT) within Right of Way
 - Primarily on East side
 - Three gas lines
- I-95 (FDOT District 4)
 - Master Plan
 - Shared Right of Way
- Loxahatchee River
 - Wild and Scenic
- Thomas B. Manuel Bridge
 - St. Lucie Canal



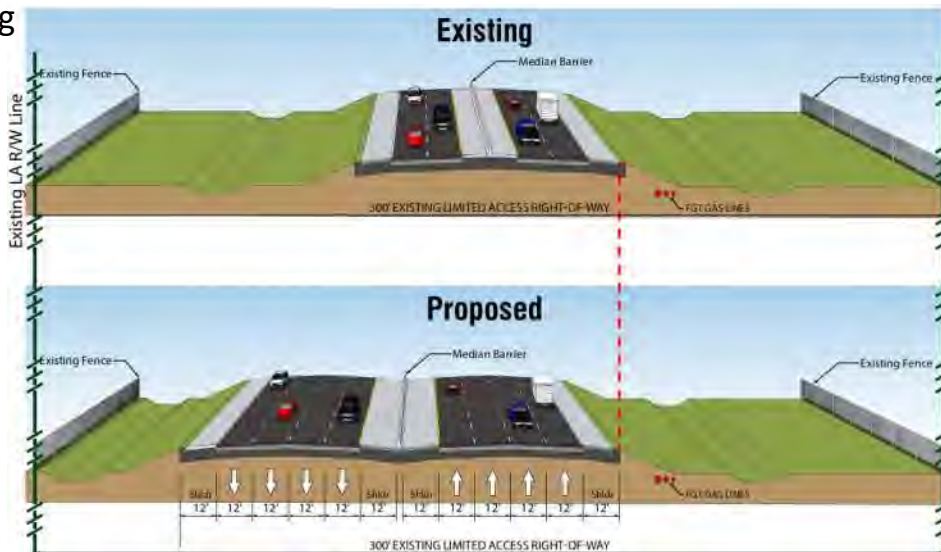
100 Year Old Tree at Loxahatchee River

5

Proposed Improvements



- Mainline Widening
 - 4 to 8 Lanes
 - FGT Constraints
 - Widen to West
- Interchanges
 - Modify Existing
 - New Interchanges



6

Interchanges

• Existing Interchange Modifications ♦

- SR 714 / SW Martin Hwy (Exit 133)
- Becker Road (Exit 138)
- Port St. Lucie Blvd. (Exit 142)
- SR 70 / Okeechobee Road (Exit 152)

• Potential Interchange Locations ♦

- I-95 Direct Connection
 - To be evaluated under a separate study (FPID 446975-1)
- Crosstown Pkwy (MP 145)
- Midway Road (MP 150)



7

Future Phases

- No Future Phases Programmed
- Unfunded Needs Ranking*
 - #15 – Widening Mainline from Indiantown Rd to SR 70 (through 2030)
 - #25 - Interchange SR 714 (through 2030)



* Source: 2019 Traffic Trends

8



Questions?



FDOT, Florida's Turnpike Enterprise/U.S. Coast Guard Technical Assistance Meeting Notes

FPID 423374-1-22-01 (Turnpike) Turnpike Mainline Widening from Jupiter to Fort Pierce

Palm Beach, Martin, and St. Lucie Counties

Date: Monday, October 19, 2020
Time: 11:00 am
Venue: Microsoft TEAMS meeting
Facilitator: Brian Ribaric

BRR

Note: The italicized text below in the meeting agenda are the notes for the topics that were discussed during the meeting.

1. Introductions

- **USCG, Director, District Bridge Program – Randall Overton, MPA**
- **USCG Bridge Management Specialist – Lisia Kowalczyk**
- **FTE Environmental Administrator – Philip Stein**
- **FTE Environmental Permits Coordinator - Annemarie Hammond**
- **FTE Project Manager – Brian Ribaric, PE (Atkins)**
- **FTE Permits Coordinator – Fred Gaines, PWS (Atkins)**
- **FTE Environmental Management Office – Douglas Zang, AICP (Atkins)**
- **Lochner Project Manager – William Howell, PE**
- **KCA Project Manager/Chief Environmental Scientist – Robert Whitman**

2. Project Overview (Refer to USCG Technical Assistance Meeting Attachments)

- **Current Alignment**
 - **Approx. 37-mile segment of proposed widening of existing 4-lane facility to 8-lanes within existing right of way with four existing and two proposed interchanges being studied.**
- **ETDM No. 14295 published on May 19, 2017**
 - **U.S. Coast Guard concerns included potential impacts to the St. Lucie Canal (C-44 Canal):**
 - **Existing U.S. Coast Guard Permit No. 9-01-7**
 - **Congressional Authorized Federal Navigation Project channel**
 - **Navigable Waters of the United States**

Name	Latitude	Longitude	Section	Township	Range
Loxahatchee River	26.9542020	-80.1655250	32	40S	42E
Unnamed Tributary to Cypress Creek	26.9666090	-80.1746990	30	40S	42E
Cypress Creek	26.9720150	-80.1784300	19	40S	42E
Unnamed Tributary to South Fork St. Lucie River #1	27.0773870	-80.2492590	16	39S	41E
Unnamed Tributary to South Fork St. Lucie River #2	27.0833930	-80.2519350	16	39S	41E
Roebuck Creek	27.1155760	-80.2733490	43	38S	41E
St. Lucie Canal (C-44; Permit No. 9-01-7)	27.1176300	-80.2748670	Not Available		
Unnamed Tributary to Mapps Creek	27.128227	-80.2822730	Not Available		
Mapps Creek	27.1345670	-80.2865330	Not Available		
Danforth Creek	27.1550590	-80.3005280	24	38S	40E
Unnamed Tributary to Bessy Creek	27.1741970	-80.3133330	14	38S	40E
Bessy Creek	27.1842820	-80.3202270	10	38S	40E
County Line Canal (C-23)	27.2054550	-80.3317800	3	38S	40E
Winters Creek	27.2269820	-80.3416500	28	37S	40E
Blakeslee Creek	27.2340600	-80.3434900	28	37S	40E
Rim Ditch (C-24)	27.2624260	-80.3523430	17	37S	40E
Tenmile Creek	27.4026050	-80.3979050	25	35S	39E

Florida's Turnpike Enterprise (FTE) provided an overview of the project and interchanges. A background and current status of the project was provided, which included the project location, and major waterway crossings including the Thomas B. Manuel Bridge across the St. Lucie Canal (C-44) and the Turnpike crossing of the Loxahatchee River, a National Wild and Scenic River (Turnpike crossing is a Scenic Segment). FTE acknowledged the existing USCG Bridge Permit (No. 9-01-7) for the Thomas B. Manuel Bridge crossing. FTE noted that the project proposes widening from the existing 4 lane typical section to an ultimate 8 lane section, and includes improvements to existing interchanges, as well as evaluation of two new interchanges. FTE indicated that the widening is proposed principally to the west, with a few exceptions, due to the location of the FGT gas lines. FTE indicated that the project construction was currently unfunded, and discussed potential interim 6-lane segment needs, in comparison with the ultimate 8-lane facility. FTE noted that USCG reviewed and provided comment on the project's ETDM Programming Screen, published in 2017.

USCG inquired if federal funds would be involved in order to determine the lead federal agency. FTE indicated that FTE operates on state funds and federal funds would likely not be involved with this project. USCG inquired if the US Army Corps of Engineers (USACE) had been contacted, and FTE acknowledged that a pre-application meeting had been held with the USACE and the South Florida Water Management District (SFWMD). FTE also informed the USCG of the upcoming technical assistance meeting with the US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). FTE assumes that the USACE will be the lead federal agency for the permitting of this project if it moves forward into design.

FTE indicated the project environmental document was being prepared as a State Environmental Impact Report (SEIR), which is consistent with the National Environmental Policy Act (NEPA). The differences between a SEIR and federal NEPA documents were discussed and focused on

Section 4(f) properties as the major difference. USCG indicated that they are not bound by Section 4(f) properties in their review of bridge permit applications and instructed FTE to follow the guidance provided in the USCG Bridge Permit Application Guide (BPAG) for their requirements. If FTE sends an email to USCG, they will forward a link to the USCG BPAG.

FTE indicated that the project is anticipated to be a Type 2 Categorical Exclusion (CE) if a federal document was being produced. FTE will send the supporting environmental documentation along with the SEIR when USCG Bridge Permit applications are submitted. USCG indicated that they only require the conclusion documentation resulting from technical assistance with cooperating federal agencies, such as concurrence with species effects determinations from USFWS and NMFS. FTE agreed with this approach.

FTE proceeded with a review of the project's waterway bridge crossings including the Loxahatchee River (OFW, Wild and Scenic River), Cypress Creek, tributaries to the South Fork of the St. Lucie River, Roebuck Creek, St. Lucie Canal (C-44), Mapps Creek, Danforth Creek, Bessy Creek, County Line Canal (C-23) Canal, Winters Creek, Blakeslee Creek, Rim Ditch (C-24), Tenmile Creek, and other unnamed tributaries. FTE continued with a discussion of the larger waterways aided by the aerial photographic exhibits. These crossings included the St. Lucie Canal (C-44 Canal), the Rim Ditch (C-24 Canal), Tenmile Creek, and the Loxahatchee River. FTE noted that the presence of a vertical weir in the County Line Canal (C-23 Canal) effectively excluded any marine navigation into the project area along this waterway.

3. St. Lucie Canal (C-44 Canal) – Thomas B. Manuel Bridge

- For new southbound replacement structure, maintain existing navigational horizontal and vertical clearances of newer northbound structure proposed for widening
- Modification of Existing USCG Permit No. 9-01-7 for new bridge construction activities
- Neighborhood southwest of bridge; noise will be a concern if bridge is widened closer to the neighborhood and should be evaluated
- NEPA documentation and approvals

The proposed improvements to the Thomas B. Manuel Bridge crossing of the St. Lucie Canal were discussed and aided by bridge concept drawings. The USCG indicated that a Permit Amendment to the existing USCG Bridge Permit (No. 9-01-7) would be required for the St. Lucie Canal (C-44 Canal) crossing.

USCG also indicated that the St. Lucie Canal is a federal channel administered by the USACE, and a Section 408 authorization from the USACE in Jacksonville would be required for this crossing. FTE acknowledged their understanding that Section 408 approval would be needed. Since this section of the St. Lucie Canal is not operated by SFWMD, USCG recommended that FTE contact the Section 408 reviewers directly to coordinate the proposed project during design. USCG indicated that they would only need the Section 408 approval letter for their permit file.

USCG indicated that the proposed design should not include additional encroachment into the existing navigational envelope and maintenance of the existing horizontal and vertical navigational clearances at the crossing at a minimum would address permit related criteria.

The existing bridge fender system was discussed. USCG indicated that if the existing fender system were evaluated and proposed for modification or removal, discussions about the fender system would be best held before the permit application was submitted.

FTE indicated the neighborhood adjacent to the bridge had raised concerns about additional noise and light due to additional traffic resulting from the widening. FTE indicated that studies to address these items would be performed to support the design of the bridge widening project. USCG agreed to the approach.

USCG discussed that their public notification process for projects that they are not the lead federal agency addresses navigation aspects only and is separate from the USACOE Section 404 permit process. The USCG process involves mailing a 1-page notice of availability of a Public Notice (PN) to nearby residents and marine interests with waterfront access within ½ mile of the bridge. Public navigation related comments received during the comment period (usually 30 days) are forwarded to the applicant for response through the USCG, all other comments are forwarded to the applicant for response directly to the commenter. USCG indicated that if the project moves into design, a bridge permit amendment would be issued by the USCG Miami District offices instead of a new bridge permit.

4. Rim Ditch (C-24 Canal)

- Discussion on potential USCG permitting requirements

The proposed improvements to the Turnpike crossing of the C-24 Canal (Rim Ditch) were discussed. The USCG indicated that a Bridge Permit would be required for the C-24 Canal crossing, and that this waterway would not qualify for an Advance Approval as the vessels appear to exceed the size for USCG advanced approval. FTE identified a water control structure located approx. 0.44 miles upstream that limited navigation. USCG recommended that FTE reach out to the residents west of the Turnpike bridge to discuss the proposed project prior to submitting an application. USCG indicated that no formal vessel survey would be required to document waterway usage, just a generalized characterization of the types of vessel using the C-24 Canal, both east and west of the Turnpike crossing. USCG requested that any downstream structures be identified as to their impact on navigation and specified the bridge at SE Oaklyn Street. FTE stated that coordination with the SFWMD resulted in identifying the requirement for a SFWMD ROW Occupancy Permit for crossing the C-24 Canal.

5. Tenmile Creek

- Discussion on potential USCG permitting requirements

The proposed improvements to the Turnpike crossing over Tenmile Creek were discussed. The USCG indicated that a Bridge Permit would not be required for the Tenmile Creek crossing due to the proximity of the upstream control structure to the bridge, and that no USCG coordination would be required for the proposed Turnpike improvements crossing Tenmile Creek. If FTE would like documentation of this for the file, then USCG can provide but not required by USCG.

6. Loxahatchee River Bridge

- No USCG Permit required based on previous coordination with USCG

The proposed improvements to the Turnpike crossing over the Loxahatchee River were discussed. The USCG indicated that a Bridge Permit would not be required for the Loxahatchee River crossing since only non-motorized river traffic is allowed at the crossing. FTE inquired about USCG involvement and coordination with the National Park Service (NPS) due to the river's classification as a National Wild and Scenic River. USCG indicated that they would only be concerned if a USCG Bridge Permit were required for this crossing; and it is not.

7. Other Waterway Crossings

- Determination of navigable waters of US and need for USCG Permit at each location

The proposed improvements to the Turnpike crossing over County Line Canal (C-23 Canal) were discussed. FTE reiterated the presence of a vertical weir in the County Line Canal (C-23 Canal) preventing navigation at the Turnpike crossing. The USCG indicated that a Bridge Permit would not be required for the C-23 Canal crossing, and that no USCG coordination would be required for the proposed Turnpike improvements crossing the C-23 Canal. The USCG did indicate that in some situations, that a portage can maintain navigability of a waterway and if there were signs of commercial waterway usage, but that was not the case at the C-23 Canal crossing.

A brief review of the other smaller waterway crossings resulted in the USCG acknowledging that no further USCG coordination would be required for these other crossings.



United States Coast Guard Technical Assistance

**Project Development and Environment (PD&E) Study
for Florida's Turnpike from Jupiter (Indiantown Rd/SR 706)
to Ft. Pierce (Okeechobee Rd/SR 70)
Palm Beach, Martin and St. Lucie Counties, FL**

Financial Project ID #: 423374-1-22-01
October 19, 2020

1

Agenda



- Project Process & Overview
- Project Challenges
- Widening & Interchange Concepts
- Future Phases & Schedule



2

Project Process

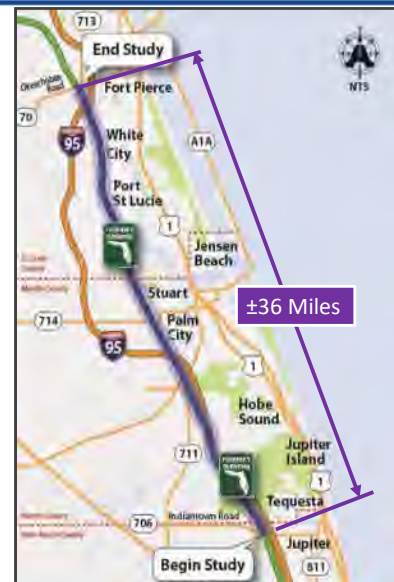


3

PD&E Study



- Jupiter (Indiantown Rd/SR 706) to Ft. Pierce (Okeechobee Rd/SR 70)
 - 2045 Traffic Demand
 - Improve Access
 - Enhance Safety & Evacuation



4

Project Challenges



- Florida Gas Transmission (FGT) within Right of Way
 - Primarily on East side
 - Three gas lines
- I-95 (FDOT District 4)
 - Master Plan
 - Shared Right of Way
- Loxahatchee River
 - Wild and Scenic
- Thomas B. Manuel Bridge
 - St. Lucie Canal



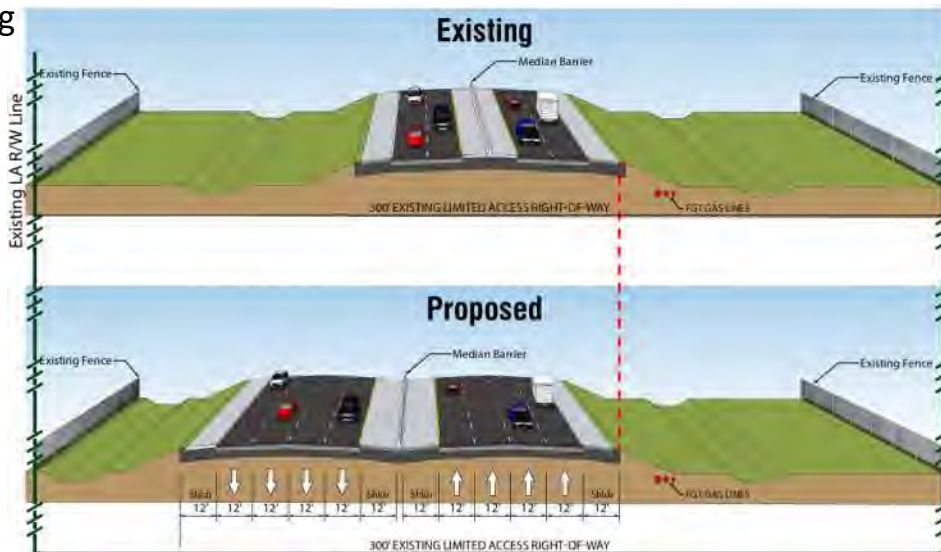
100 Year Old Tree at Loxahatchee River

5

Proposed Improvements



- Mainline Widening
 - 4 to 8 Lanes
 - FGT Constraints
 - Widen to West
- Interchanges
 - Modify Existing
 - New Interchanges



6

Interchanges

• Existing Interchange Modifications ♦

- SR 714 / SW Martin Hwy (Exit 133)
- Becker Road (Exit 138)
- Port St. Lucie Blvd. (Exit 142)
- SR 70 / Okeechobee Road (Exit 152)

• Potential Interchange Locations ♦

- I-95 Direct Connection
 - To be evaluated under a separate study (FPID 446975-1)
- Crosstown Pkwy (MP 145)
- Midway Road (MP 150)



7

Future Phases

- No Future Phases Programmed
- Unfunded Needs Ranking*
 - #15 – Widening Mainline from Indiantown Rd to SR 70 (through 2030)
 - #25 - Interchange SR 714 (through 2030)



* Source: 2019 Traffic Trends

8



Questions?



FDOT, Florida's Turnpike Enterprise/U.S. Fish and Wildlife Service/National Marine Fisheries Service Technical Assistance Meeting Notes

FPID 423374-1-22-01 (Turnpike) Turnpike Mainline Widening from Jupiter to Fort Pierce

Palm Beach, Martin, and St. Lucie Counties

Date: October 26, 2020

Time: 10:00-11:00 am

Venue: Microsoft TEAMS meeting

Facilitator: Brian Ribaric

BPR

Note: The italicized text below in the meeting agenda are the notes for topics that were discussed during the meeting.

1. Introductions

- USFWS Staff – John Wrublik
- NMFS Staff – Jennifer Schull
- FTE Environmental Administrator – Philip Stein
- FTE Environmental Permits Coordinator - Annemarie Hammond
- FTE Project Development Engineer - Rax Jung, PhD, PE
- FTE Project Manager – Brian Ribaric, PE (Atkins)
- FTE Permit Coordinator – Fred Gaines, PWS (Atkins)
- FTE Senior Environmental Scientist - Douglas Zang (Atkins)
- Lochner Project Manager – William Howell, PE
- KCA Project Manager/Chief Environmental Scientist – Robert Whitman
- KCA Senior Environmental Scientist – Ashley Abdel-Hadi

2. Project Overview (map provided)

Florida's Turnpike Enterprise (FTE) provided an overview of the project and interchanges. A background and current status of the project was provided, which included the project location and summary of primary land uses within the proposed project area. FTE noted that the 37-mile project proposes widening from the existing 4 lane typical section to an ultimate 8 lane section, and includes improvements to existing interchanges, as well as evaluation of two new interchanges. FTE indicated that the widening is proposed principally to the west, with a few exceptions, due to the location of the FGT gas lines. FTE discussed other important project details including the Loxahatchee River National Wild and Scenic River, the close proximity of I-95 (an FDOT District Four facility), and the Thomas B. Manuel Bridge crossing of the St. Lucie Canal (C-44). FTE stated that a related project, the I-95 Direct Connection Interchange, which will provide a direct connection between the Turnpike and I-95, will be evaluated under a separated study, in compliance with NEPA. FTE indicated that the project construction was currently unfunded, and discussed potential interim 6-lane segment needs, in comparison with the ultimate 8-lane facility.

NMFS inquired when permitting would occur, and if permitting would be for the 6-lane facility or 8-lane facility. FTE stated that the project would be divided into several design segments, and that these design segments were currently not included on the FTE 5-Year Work Program. FTE stated that the permitting time frame is uncertain at this time and that permitting will depend on how project segments are ultimately scheduled in the FTE work program. FTE noted that some segments are in greater need and may proceed directly to 8-lanes, while other segments may advance to 6-lanes first, before expanding to the ultimate 8-lane facility.

USFWS inquired if this project will have federal funding. FTE stated that it will not, and that the project will be funded through FTE toll revenue and other non-federal funds. USFWS stated that if the project requires a USACE permit that will be the federal nexus for their consultation.

FTE noted that meetings had been held with the USACE (and SFWMD), the NPS (National Park Service) regarding the Loxahatchee River (Wild and Scenic River) crossing, and the USCG regarding three of the bridge crossings. FTE indicated that the SEIR for this project will be prepared to be consistent with NEPA.

FTE proceeded with a review of the project aerial photographic exhibits and discussed the existing general land uses within the project corridor and the riverine/canal systems that the project will be crossing, including the Loxahatchee River (OFW, Wild and Scenic River), Cypress Creek, tributaries to the South Fork of the St. Lucie River, Roebuck Creek, St. Lucie Canal (C-44), Mapps Creek, Danforth Creek, Bessy Creek, County Line Canal (C-23) Canal, Winters Creek, Blakeslee Creek, Rim Ditch (C-24), Tenmile Creek, and other unnamed tributaries.

FTE summarized the USFWS and NMFS review comments included in the project's ETDM No. 14295 Programming Screen, published in May 2017. These comments related to federally protected species and Essential Fish Habitat for the white shrimp. FTE provided the preliminary wetland and surface water impact acreage of - 62.67 acres of wetlands and 365.54 acres of surface waters for a total of 428.21 acres and noted that these impacts include areas within the existing ROW and proposed ROW for the preferred interchange alternatives and involve many surfacewater ditches. FTE noted that these preliminary impacts were for the Build Alternative, and that the No-Build Alternative remains a viable project option. FTE then initiated a discussion of federally protected species.

3. American Alligator

FTE stated that the American alligator is listed as threatened due to similarity in appearance to the American crocodile; however, there is no habitat for the American crocodile and proposed determination of "no effect" on the American alligator.

USFWS agreed with the "no effect" determination and stated they would not consult on the species as they would for other federally protected species due to threatened by similarity of appearance.

4. Florida Grasshopper Sparrow

FTE stated that the project area is within the Florida Grasshopper Sparrow Consultation Area and there is dry prairie habitat near the St. Lucie interchanges. FTE noted that this area is not burned and does not meet the known habitat requirements for the species. FTE explained that some of the species requirements are met in pasturelands; however, these areas are not prime Florida grasshopper sparrow habitat and there is no known documentation of this species within 30 miles. FTE proposed an effect determination of "may affect, but is not likely to adversely affect", and proposed that no surveys would be performed for this species.

USFWS explained that the effect determination for this species could be changed to "no effect" if there is no habitat or evidence of Florida grasshopper sparrows. FTE inquired if a "no effect" determination could be based on lack of habitat and observations without surveys. USFWS noted that it is preferred to survey if there is potential habitat, though unlikely to encounter the species. USFWS further clarified that surveys could be conducted in appropriate habitat areas and then if the species was determined to be absent the effect determination could be changed to "no effect". FTE stated that the effect determination would be kept as "may affect, but is not likely to adversely affect" but inquired if surveys would be required. USFWS explained that they do not

anticipate Florida grasshopper sparrows within the project area and would likely not request surveys during design based on the location of the project.

5. Florida Scrub-jay

FTE indicated that the project is within the Florida Scrub-jay Consultation Area; however, there are no documented occurrences within 1 mile of the project. FTE explained that based on the habitat distribution map, there is some Type I and Type II habitat, but no historic occurrence of Florida scrub-jay families within 1 mile. FTE noted that there are Florida scrub-jays in Jonathan Dickinson State Park, approximately 4 miles northeast of project. FTE stated that surveys during design will be conducted in Type I, Type II and consider surveying Type III and adjacent habitats, if appropriate. FTE noted that, based on observations, potential Florida scrub-jay habitat within the project vicinity generally appeared to be of low quality and unmanaged for the species.

FTE is proposing a determination of “may affect” until surveys are conducted during design and will change to “may affect, but is not likely to adversely affect” if the species is determined to be absent from the project area. USFWS agreed with the proposed determination. FTE inquired if surveys of adjacent habitat to Jonathan Dickinson State Park will be necessary during design and USFWS stated that surveys should be conducted in suitable habitat with scrub oaks.

6. Audubon's Crested Caracara

FTE indicated that the project is within the Crested Caracara Consultation Area. The FTE noted that a single caracara was documented in 1995 within 1 mile of the project, based on the USFWS telemetry data, and that the project contains potential foraging and nesting habitat adjacent to the project area in large tracts of pastureland in the area near the C-23 Canal. FTE stated that they anticipate performing surveys for this species during design and are proposing a determination of “may affect” until survey results are known. The USFWS agreed with this determination and approach.

7. Eastern Indigo Snake

FTE stated that there are no known observations within 1 mile of the preferred alternative. FTE is currently relying on the Eastern Indigo Snake Programmatic Effect Determination Key. FTE explained that they are not proposing surveys for this species, but will implement the Standard Protection Measures for the Eastern Indigo Snake during project construction. FTE proposed an effect determination of “may affect, but is not likely to adversely affect” due to lack of observations within 1 mile and no real scrub habitat. USFWS agreed with this determination.

8. Florida Bonneted Bat

FTE noted that the project is within the Florida Bonneted Bat Consultation Area and there is potential roosting habitat and natural habitats proposed for impacts in the interchanges. FTE proposed hybrid presence/absence surveys during design in existing cleared right of way areas with minimal tree presence and full acoustic surveys in new right of way areas with natural vegetative communities (i.e., interchanges). USFWS agreed with the conceptual survey approach. FTE is proposing a determination of “may affect” until surveys are completed and USFWS agreed with this determination.

9. Red-cockaded Woodpecker

FTE indicated that there are no known red cockaded-woodpecker colonies within 1 mile of the project, but the project is within the Red-cockaded Woodpecker Consultation Area. FTE noted that pine flatwoods are present throughout project area, particularly near the Loxahatchee River, Bessy Creek, and Tenmile Creek. FTE discussed that the majority of existing flatwoods habitat is fire suppressed; however, flatwoods are managed in areas within and near Jonathan Dickinson State Park. FTE proposed conducting limited surveys during design for this species in areas of higher quality habitat. FTE is proposing a determination of “may affect” until surveys are conducted during design. The USFWS agreed with this effect determination and approach.

10. Wood Stork

FTE stated that the project is within the CFA of 5 wood stork colonies; however, none are within 1,500 feet of the project. FTE noted that wood stork foraging habitat will be addressed during design and surveys for the species are not proposed. FTE explained that they will follow the Wood Stork Effect Determination Key and propose mitigation as required. FTE proposed a determination of "may affect, but is not likely to adversely affect" and USFWS agreed with this determination.

11. Everglade Snail Kite

FTE explained that there is documented Everglade snail kite nesting in the reservoirs associated with and to the northwest of Tenmile Creek and the project is within the Everglade Snail Kite Consultation Area. FTE proposes limited survey areas during design adjacent to the project where the species has been observed or nesting documented, and not the remainder of project area. USFWS agreed with the approach. FTE proposed a determination of "may affect" until surveys are completed but noted that they are not anticipating impacts. The USFWS agreed with this effect determination.

12. West Indian Manatee

FTE discussed that they are not impacting critical manatee areas and will implement the Standard Manatee Conditions for In-water Work. FTE explained that Critical Habitat is within a 1-mile buffer surrounding the project area near the Loxahatchee River and Cypress Creek. FTE proposed an effect determination of "may affect, but is not likely to adversely affect" and USFWS agreed with the determination.

13. Federal Protected Plants

- Okeechobee Gourd (*Cucurbita okeechobeensis*)

FTE stated that there are no observations or documentation of federal protected plant species, including the Okeechobee gourd, within 1 mile of the project. FTE proposed a determination of "no effect" and USFWS agreed with the determination.

14. Bald Eagle

FTE explained that there are no bald eagle nests proposed to be impacted by the project and if there is work proposed within 660 feet on an eagle nest, FTE will seek technical assistance with the USFWS Bald Eagle group (Ulgonda Kirkpatrick).

USFWS agreed that no additional federal listed species needed to be included in the evaluation at this time.

15. NMFS Protected Species: Smalltooth Sawfish

FTE stated that there was the potential for involvement with the smalltooth sawfish at the C-24 Canal and St. Lucie Canal (C-44 Canal). FTE stated that the Sea Turtle and Smalltooth Sawfish Construction Conditions would be implemented during construction. FTE proposed an effect determination of "may affect, but is not likely to adversely affect", will implement the construction conditions and is not proposing surveys. NMFS agreed, stating that blasting is the only thing of concern. FTE noted that they are not proposing blasting currently, but design will have to confirm and that other unknowns include potential SFWMD requirements for channel deepening/dredging at Turnpike crossings. NMFS noted that the closest known smalltooth sawfish documentation was approximately 3 miles away. NMFS indicated that further coordination during design would involve informal consultation unless blasting was proposed, but agreed that the species should be included in the FTE's assessment.

FTE explained that they had previously coordinated with SFWMD and they anticipate that Section 408 coordination with the USACE will be required for the St. Lucie Canal crossing. FTE inquired if NMFS coordination would be required with USACE for Section 408 approval, or only under Section 404. NMFS anticipates that the S404 consultation should address S408 aspects as well but indicated they would investigate this further. NMFS indicated that the smalltooth sawfish could tolerate low salinities and they were interested if reasonable and appropriate habitat for the species was available within or nearby the project area. NMFS indicated that mangrove lined shorelines provide habitat for the smalltooth sawfish and would not consider anything upstream of salinity-control structures (barriers) to be habitat for this species. FTE stated that there is mangrove habitat along the St. Lucie Canal. NMFS agreed with the "may affect, but is not likely to adversely affect" determination for the smalltooth sawfish, and the implementation of the construction conditions.

16. Essential Fish Habitat

FTE discussed the existing GIS database sources of Essential Fish Habitat (EFH). EFH mapped along the Loxahatchee River and Cypress Creek crossings is outside of the project area and FTE is not proposing an EFH assessment of these locations. NMFS stated that the GIS databases are good sources but should not be relied on exclusively. NMFS explained that anything upstream of a salinity control structure would not be considered EFH, and that EFH must be tidally influenced and accessible by NOAA managed fisheries species. NMFS further explained that any tidal river or canal bottom would be considered EFH for penaeid shrimp (white shrimp) and other habitats they would be concerned with are mangroves and submerged aquatic vegetation (SAV; seagrasses) in tidally influenced areas.

FTE indicated that the existing water management dam structures along the Loxahatchee River are located upstream of the Loxahatchee River crossing. FTE inquired if structures located downstream of the Turnpike crossings would allow elimination of those areas from consideration for EFH involvement. NMFS referred to the discussion above and stated they would have to research this further in more detail. FTE referenced the ETDM comments (7 crossings listed in ETDM). FTE stated that a salinity control structure was located downstream of the Turnpike crossing at the C-23 Canal. NMFS agreed that no EFH involvement would be considered at the C-23 Canal crossing. FTE discussed the Tenmile Creek crossing, which has a water control structure located upstream of the Turnpike. NMFS indicated that this area would be considered EFH if it were tidal and accessible to NOAA managed fisheries species. NMFS and FTE discussed the potential for NMFS providing the locations of EFH involvement for Turnpike crossings, and if not readily available, FTE will reach out again during design permitting.

NMFS stated that they would require implementation of avoidance and minimization measures, but mitigation requirements for impacts to penaeid shrimp EFH (river and canal bottoms) would likely be minimal, if even required as these areas typically rebound quickly. NMFS explained that they are most concerned with impacts to mangroves and seagrasses. FTE explained that no seagrasses or SAV have been documented in the project area, thus far, but that they will look further into tidal regimes and SAV during project design and permitting.

FTE and NMFS further discussed the potential for EFH involvement at Turnpike crossings:

- Roebuck Creek – FTE stated this crossing is likely somewhat tidally influenced and will be assessed in more detail during design.
- St. Lucie Canal – FTE stated this crossing is tidally influenced and will be assessed during design.
- Unnamed tributary to Mapps Creek – EFH mapped within ½ mile and FTE will investigate if it is tidal during design.
- C-23 Canal – FTE stated there is a major structure upstream and weir downstream with water flowing west to east. NMFS agreed this would not be

considered EFH.

- *C-24 Canal – FTE noted this crossing is tidal and will address this crossing moving forward during design.*
- *Tenmile Creek – FTE stated there are some tidal gauges and will look further into it during design. NMFS stated this was on their list as tidal.*

FTE inquired if an EFH assessment is only required for major bridge crossings or if an assessment is also necessary for culverts and minor crossings. NMFS explained that this depends if culverts are receiving tidal water and accessible by NOAA fisheries trust resources. NMFS indicated that if these culverts have tidal water exchange, and they are considered accessible to NMFS species, then they should be considered as EFH for assessment. FTE inquired if utilizing the nearest appropriate tidal gauge would be sufficient in determining if a crossing was tidally influenced. NMFS agreed and stated that if flow is not impacted or restricted (i.e., culvert sizes/volumes were maintained or increased and associated extension minimal impacts) by the project, then NMFS would find that there were no impacts to EFH for these crossings.

NMFS noted that FTE will likely have mangrove impacts and mitigation will be challenging as limited mitigation banking options are currently available in the area. FTE stated they have not yet specifically quantified project impacts and inquired if mangroves growing in manmade areas (rip-rap, sand cement revetments) could be cut back, maintained, or potentially buried during replacement without requiring mitigation, as mangroves would likely recruit into the replaced rip rap after construction. NMFS explained that all mangroves are important and are considered EFH regardless if they are on manmade riprap or natural shorelines. FTE stated that they will propose a survey methodology to document mangrove impacts for NMFS early in the design process to avoid issues during permitting. NMFS agreed with the approach.

17. Wildlife Habitat Connectivity

FTE inquired if USFWS has concerns or issues with wildlife habitat connectivity. USFWS stated the project area is mostly developed and the project involves widening of an existing facility. FTE explained that they have coordinated with NPS regarding dry wildlife crossing (shelf) under the replaced Loxahatchee River Bridge. USFWS indicated that anything that could be done to improve or enhance wildlife connectivity would be appreciated, but that USFWS was not currently contemplating requirements for wildlife crossings for this project.

18. Roundtable/Questions/Comments

NMFS inquired on timeline and next steps. FTE explained that they are planning public hearings for early 2021 and completing the PD&E study. FTE stated the design for this project has not made it into the current 5-year work program. Some design segments of the overall project have the potential to be included within the next 10-year plan and that will be when the agencies are engaged again. NMFS inquired if this would be permitted in segments and FTE confirmed that design/construction of the overall project will be divided into segments.

FDOT, Florida's Turnpike Enterprise/U.S. Fish and Wildlife Service/National Marine Fisheries Service Technical Assistance Meeting Agenda

FPID 423374-1-22-01 (Turnpike) Turnpike Mainline Widening from Jupiter to Fort Pierce

Palm Beach, Martin, and St. Lucie Counties

Date: October 26, 2020

Time: 10:00-11:00 am

Venue: GoTo Meeting`

1. Introductions

2. Project Overview (map provided)

- Current Alignment
 - Approx. 37-mile segment of proposed widening of existing 4-lane facility to 8-lanes within existing right of way with four existing & 2 proposed interchanges being studied.
 - Loxahatchee River Wild and Scenic River designation - NPS
- ETDM No. 14295 published on May 19, 2017
 - USFWS concerns included potential impacts to the following federal listed species:
 - American alligator (*Alligator mississippiensis*)
 - Florida grasshopper sparrow (*Ammodramus savannarum floridanus*)
 - Florida scrub-jay (*Aphelocoma coerulescens*)
 - Audubon's crested caracara (*Caracara cheriway*)
 - Eastern indigo snake (*Drymarchon couperi*)
 - Florida bonneted bat (*Eumops floridanus*)
 - Red-cockaded woodpecker (*Leuconotopicus borealis*)
 - Wood stork (*Mycteria americana*)
 - Everglade snail kite (*Rostrhamus sociabilis plumbeus*)
 - West Indian manatee (*Trichechus manatus*)
 - Federal listed plants
 - Bald eagle (*Haliaeetus leucocephalus*)
 - NMFS Protected Species:
 - Smalltooth sawfish (*Pristis pectinata*)
 - Essential fish habitat
- 428.21 acres of wetland impacts anticipated with the preferred alternative (preliminary impacts - 62.67 acres of wetlands and 365.54 acres of surface waters)

3. American Alligator

4. Florida Grasshopper Sparrow

5. Florida Scrub-jay

6. Audubon's Crested Caracara

7. Eastern Indigo Snake

- 8. Florida Bonneted Bat**
- 9. Red-cockaded Woodpecker**
- 10. Wood Stork**
- 11. Everglade Snail Kite**
- 12. West Indian Manatee**
- 13. Federal Protected Plants**
 - Okeechobee Gourd (*Cucurbita okeechobeensis*)
- 14. Bald Eagle** – coordinate proposed impacts with USFWS Bald Eagle group
- 15. NMFS Protected Species:**
 - Smalltooth Sawfish
- 16. Essential Fish Habitat**
- 17. Wildlife Habitat Connectivity**
- 18. Roundtable/Questions/Comments**



USFWS & NMFS Technical Assistance

**Project Development and Environment (PD&E) Study
for Florida's Turnpike from Jupiter (Indiantown Rd/SR 706)
to Ft. Pierce (Okeechobee Rd/SR 70)
Palm Beach, Martin and St. Lucie Counties, FL**

Financial Project ID #: 423374-1-22-01
October 26, 2020

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Agenda



- Project Process & Overview
- Project Challenges
- Widening & Interchange Concepts
- Future Phases & Schedule



2

Project Process

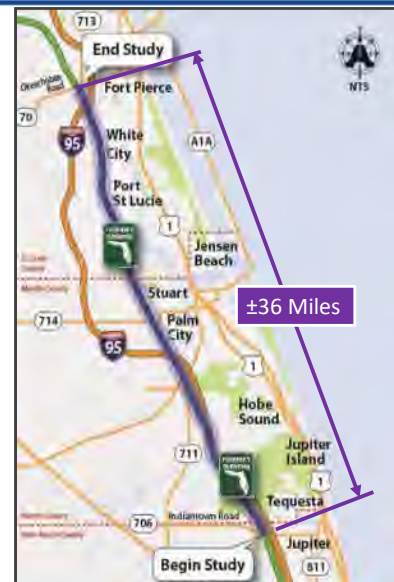


3

PD&E Study



- Jupiter (Indiantown Rd/SR 706) to Ft. Pierce (Okeechobee Rd/SR 70)
 - 2045 Traffic Demand
 - Improve Access
 - Enhance Safety & Evacuation



4

Project Challenges



- Florida Gas Transmission (FGT) within Right of Way
 - Primarily on East side
 - Three gas lines
- I-95 (FDOT District 4)
 - Master Plan
 - Shared Right of Way
- Loxahatchee River
 - Wild and Scenic
- Thomas B. Manuel Bridge
 - St. Lucie Canal



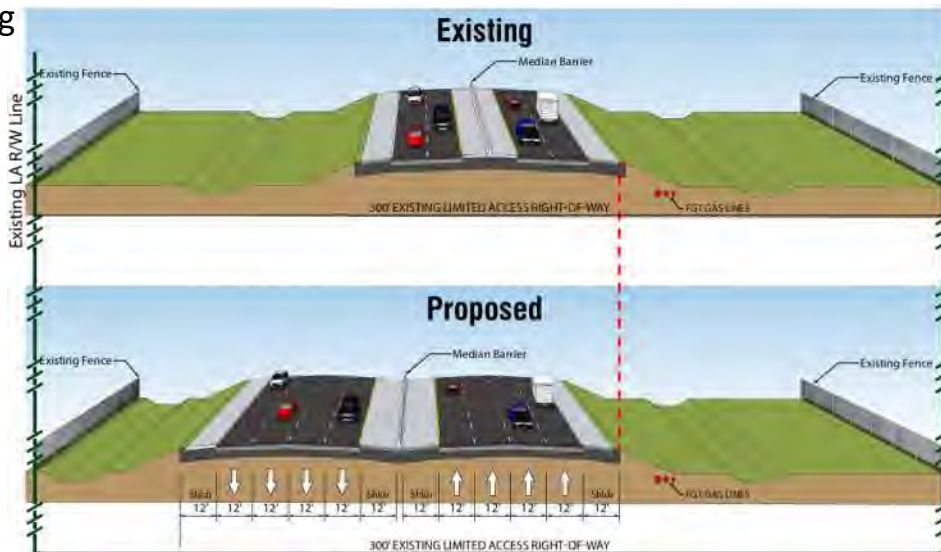
100 Year Old Tree at Loxahatchee River

5

Proposed Improvements



- Mainline Widening
 - 4 to 8 Lanes
 - FGT Constraints
 - Widen to West
- Interchanges
 - Modify Existing
 - New Interchanges



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Interchanges

• Existing Interchange Modifications ♦

- SR 714 / SW Martin Hwy (Exit 133)
- Becker Road (Exit 138)
- Port St. Lucie Blvd. (Exit 142)
- SR 70 / Okeechobee Road (Exit 152)

• Potential Interchange Locations ♦

- I-95 Direct Connection
 - To be evaluated under a separate study (FPID 446975-1)
- Crosstown Pkwy (MP 145)
- Midway Road (MP 150)



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Future Phases

- No Future Phases Programmed
- Unfunded Needs Ranking*
 - #15 – Widening Mainline from Indiantown Rd to SR 70 (through 2030)
 - #25 - Interchange SR 714 (through 2030)



* Source: 2019 Traffic Trends

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Questions?



Florida Department of Transportation

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10/26/20

APPENDIX F
Recreational Areas Map

FLORIDA'S TURNPIKE (SR 91) WIDENING

FROM JUPITER (INDIANTOWN ROAD/SR 706) TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)

PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY

Financial Project Identification (FPID) Number: 423374-1



RECREATIONAL AREAS MAP



Efficient Transportation Decision Making (ETDM) Number: 14295



FLORIDA'S TURNPIKE (SR 91) WIDENING

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