

# SW 10TH ST. CONNECTOR

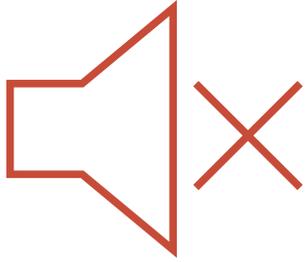
**FDOT DISTRICT 4**

**INDUSTRY FORUM**  
**August 8, 2022**

Vanita Saini, PE  
FDOT Project Manager



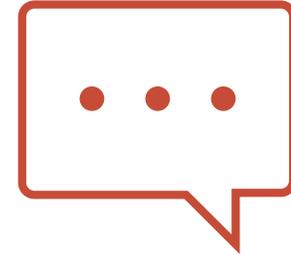
# Ground Rules



Please mute the microphone.



Hold all questions until end of the presentation.



Please submit all questions in the MS Teams Chat.

# Presentation Outline

- SW 10<sup>th</sup> Street Connector – Overall Program Summary
- SW 10<sup>th</sup> Street Connector / I-95 Interchange Project (436964-2)
  - Scope of Planned Improvements
- Procurement Process and Schedule
- DBE / SB Program
- Next Steps

# Current Situation

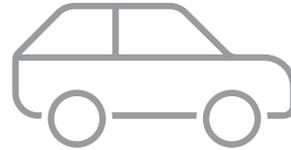
- Why SW 10<sup>th</sup> Street Connector?
  - Original design vs. today's use
  - Safety and mobility needs of local and regional users
  - Quality of life and accessibility impacts
  - Movement of goods and services impacted by current corridor



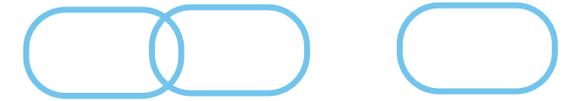
# Vision



**Safety, time, and quality of life** are priority

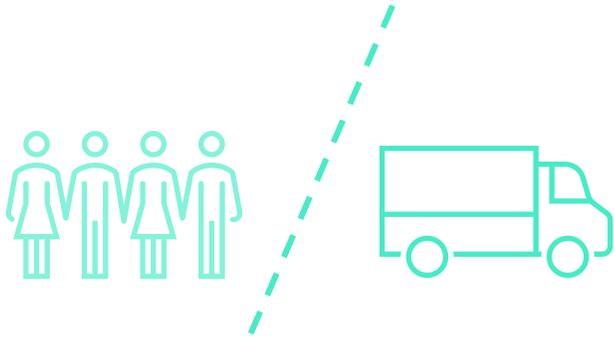


Providing residents, commercial traffic, and the region the **safe, efficient, and reliable transportation option** that has been promised for decades



**Complete the missing link** in the region's limited access and highway network

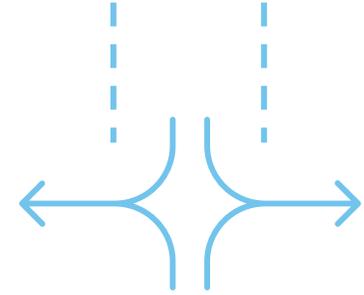
# Innovations with our community in mind



Separate the major highway throughput traffic from the local residential and commercial / business traffic

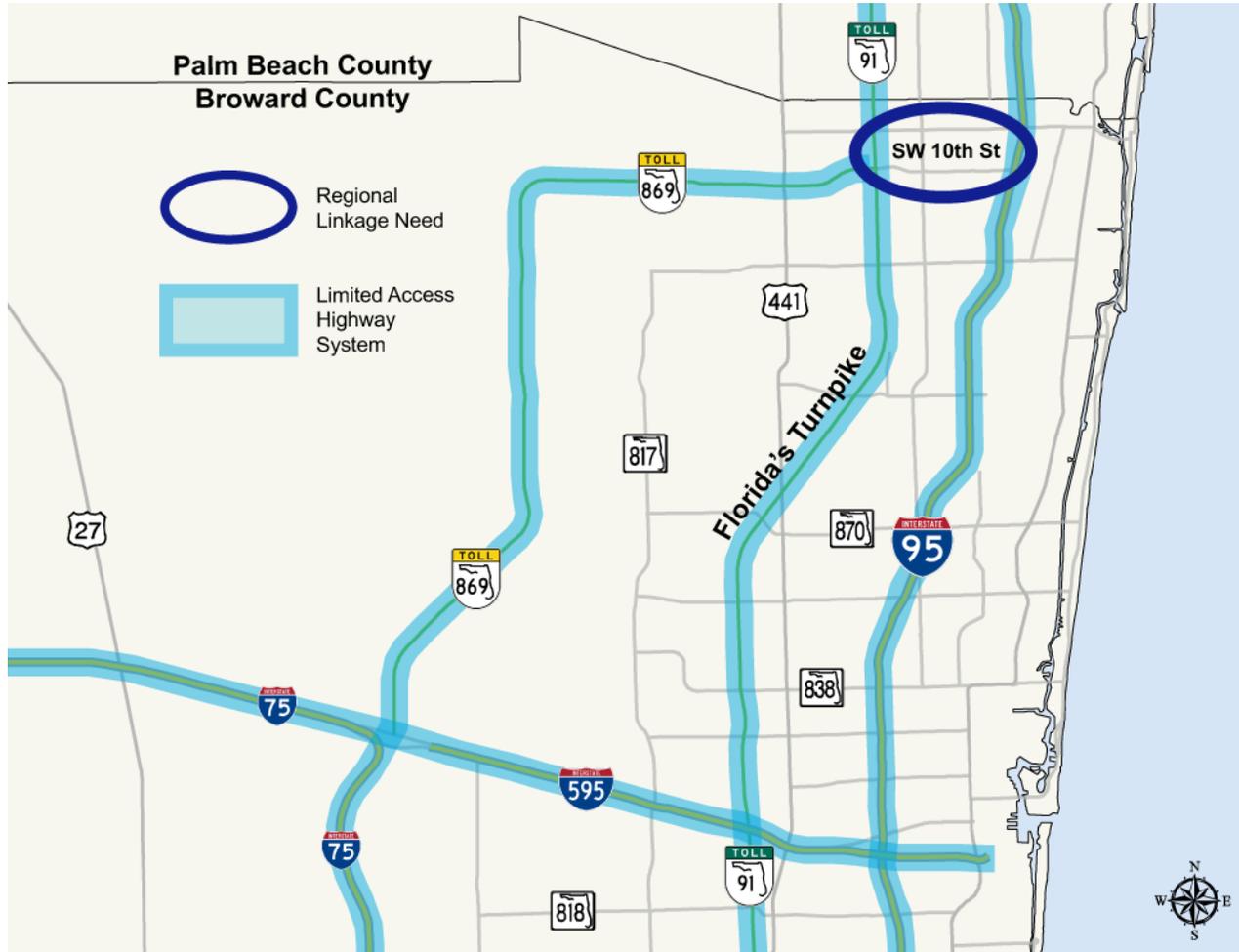


Allow freight and commuter traffic and other non-local traffic to bypass the residential areas

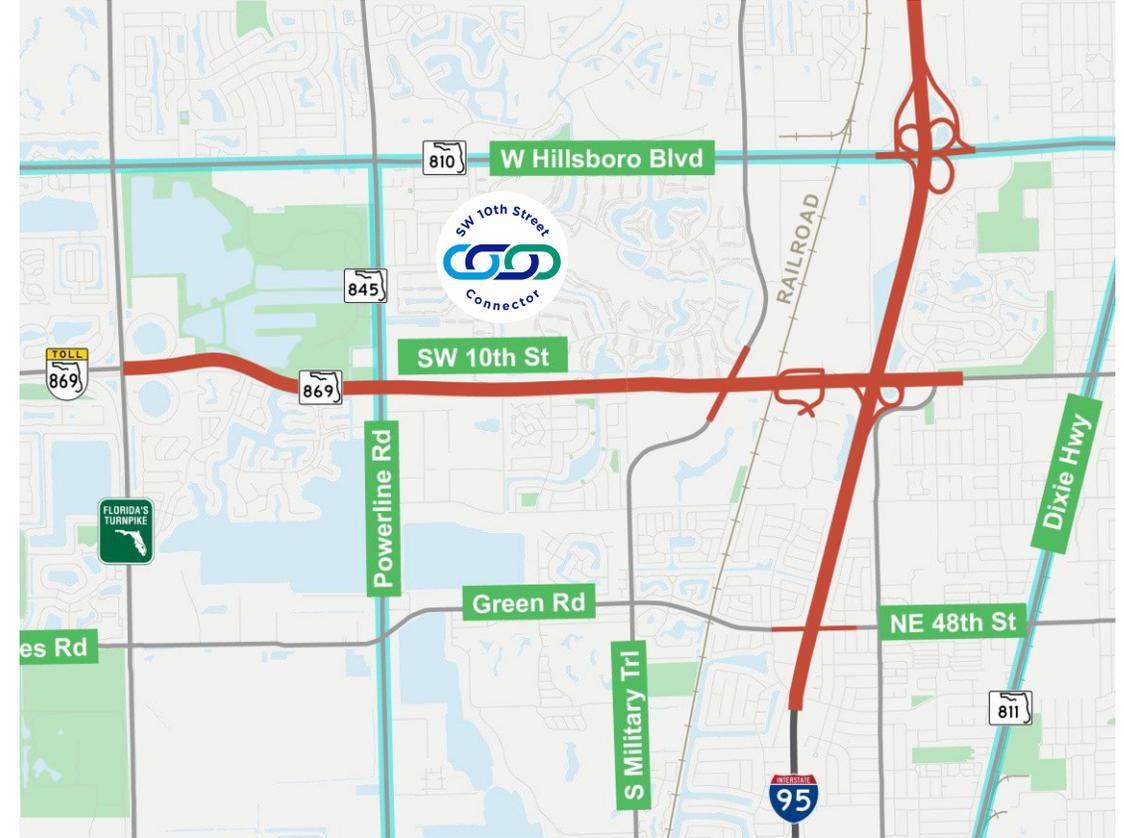


Innovatively improve several major cross-street arterial intersections

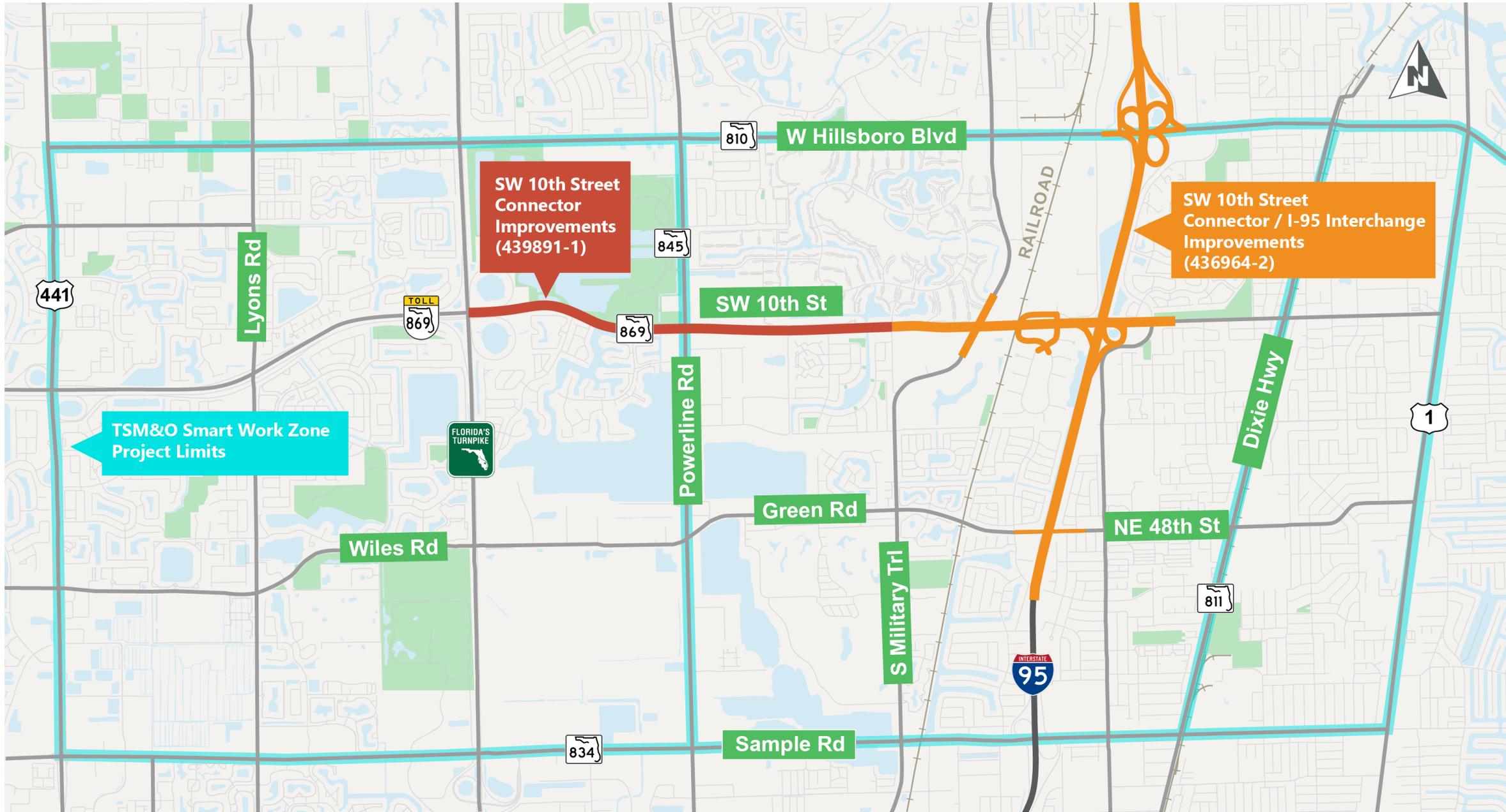
# Regional



# Combined Project Limits



# Overall Program Summary

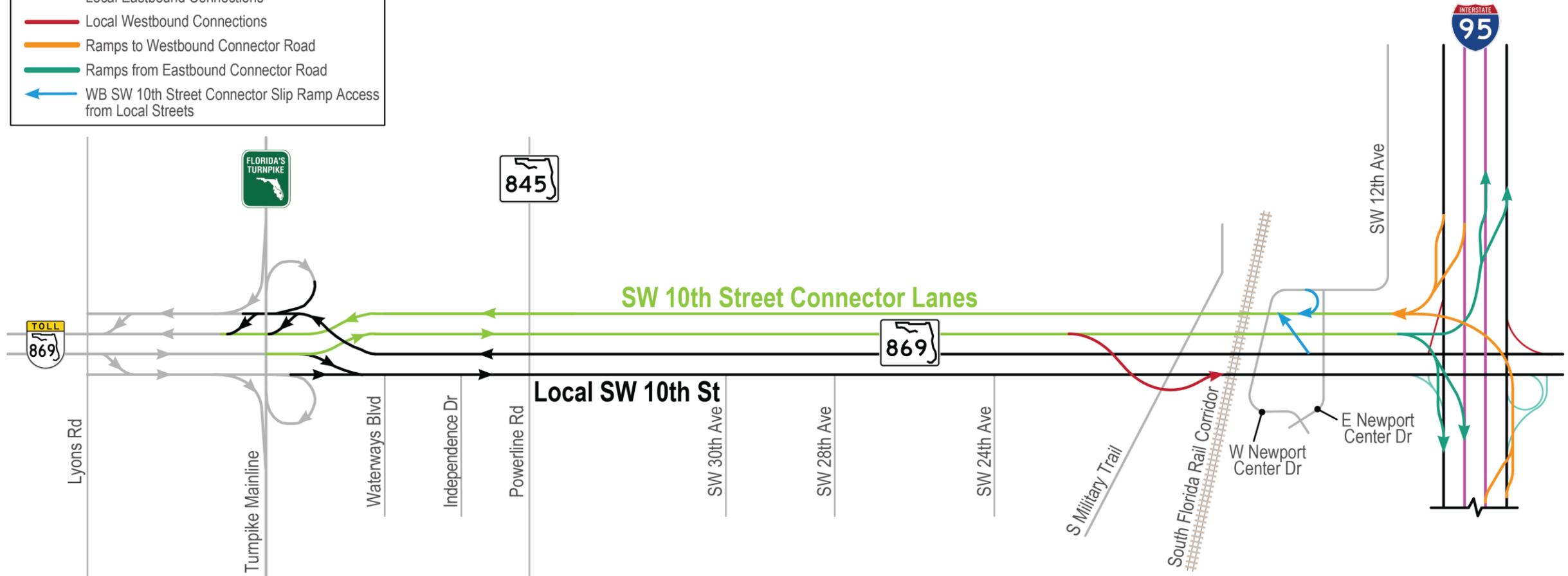


# SW 10<sup>th</sup> Street Connector Project (436964-2 and 439891-1)

**Legend**

- Connector Lanes
- Local / General Use Lanes
- I-95 Managed Lanes
- Local Eastbound Connections
- Local Westbound Connections
- Ramps to Westbound Connector Road
- Ramps from Eastbound Connector Road
- ← WB SW 10th Street Connector Slip Ramp Access from Local Streets





# A safer, more connected South Florida region.



- Noise barrier walls
- Aesthetic enhancements for retaining walls, noise barrier walls, bridge structures
- 12'-wide shared-use path in and around improved and landscaped green space

# PROJECT OVERVIEW VIDEO LINK



Click on logos above to view the video.

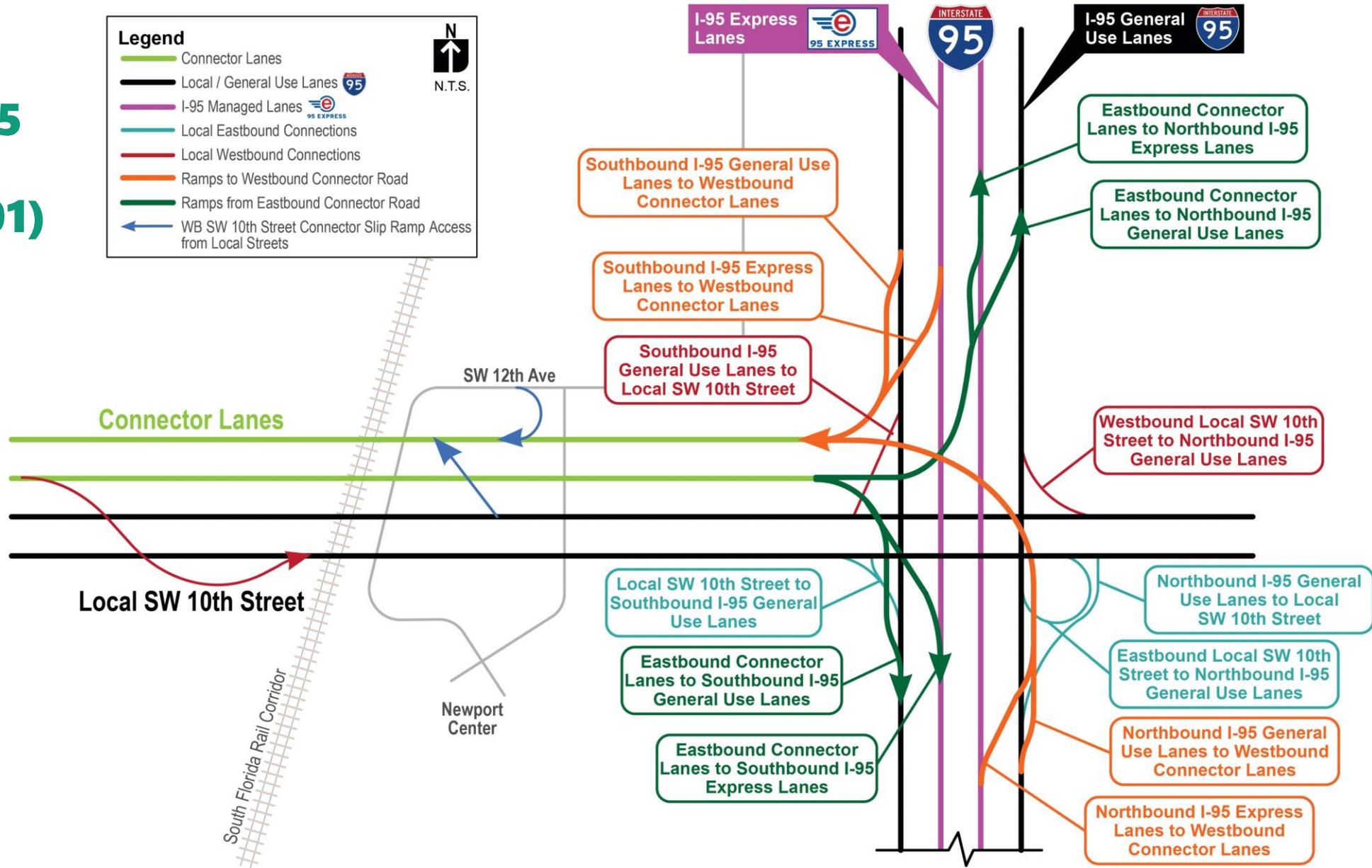
**Detailed Technical Overview  
(focus on I-95 / SW 10<sup>th</sup> Street Interchange)**

# SW 10<sup>th</sup> Street Connector / I-95 Interchange (436964-2-52-01)

**Legend**

- Connector Lanes
- Local / General Use Lanes
- I-95 Managed Lanes
- Local Eastbound Connections
- Local Westbound Connections
- Ramps to Westbound Connector Road
- Ramps from Eastbound Connector Road
- WB SW 10th Street Connector Slip Ramp Access from Local Streets

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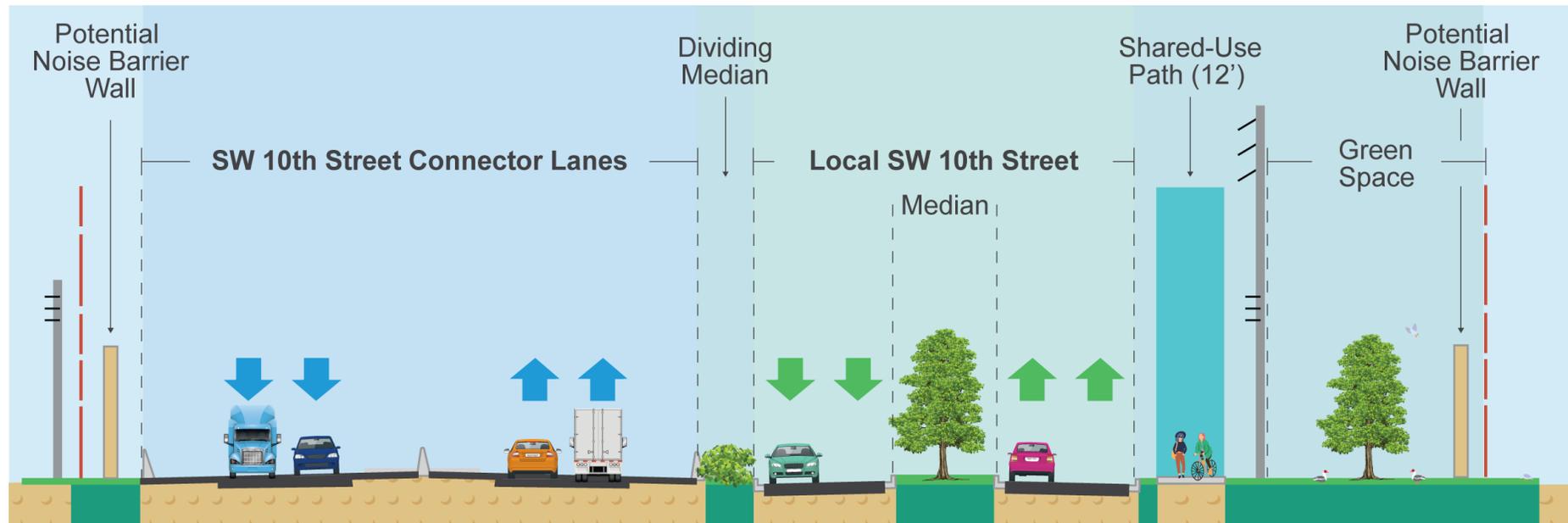
# SW 10<sup>th</sup> Street Connector - Roadway

## 1 SW 10<sup>th</sup> Street Connector Lanes

- Regional Connection
- Higher Speed
  - (60 mph)
- Limited Access (No Tolls)
- Trucks Allowed

## 2 Local SW 10<sup>th</sup> Street

- Access for all Businesses and Residential Communities
- Lower Speed
  - (35 mph)
- Shared Use Path for Bicyclists and Pedestrians



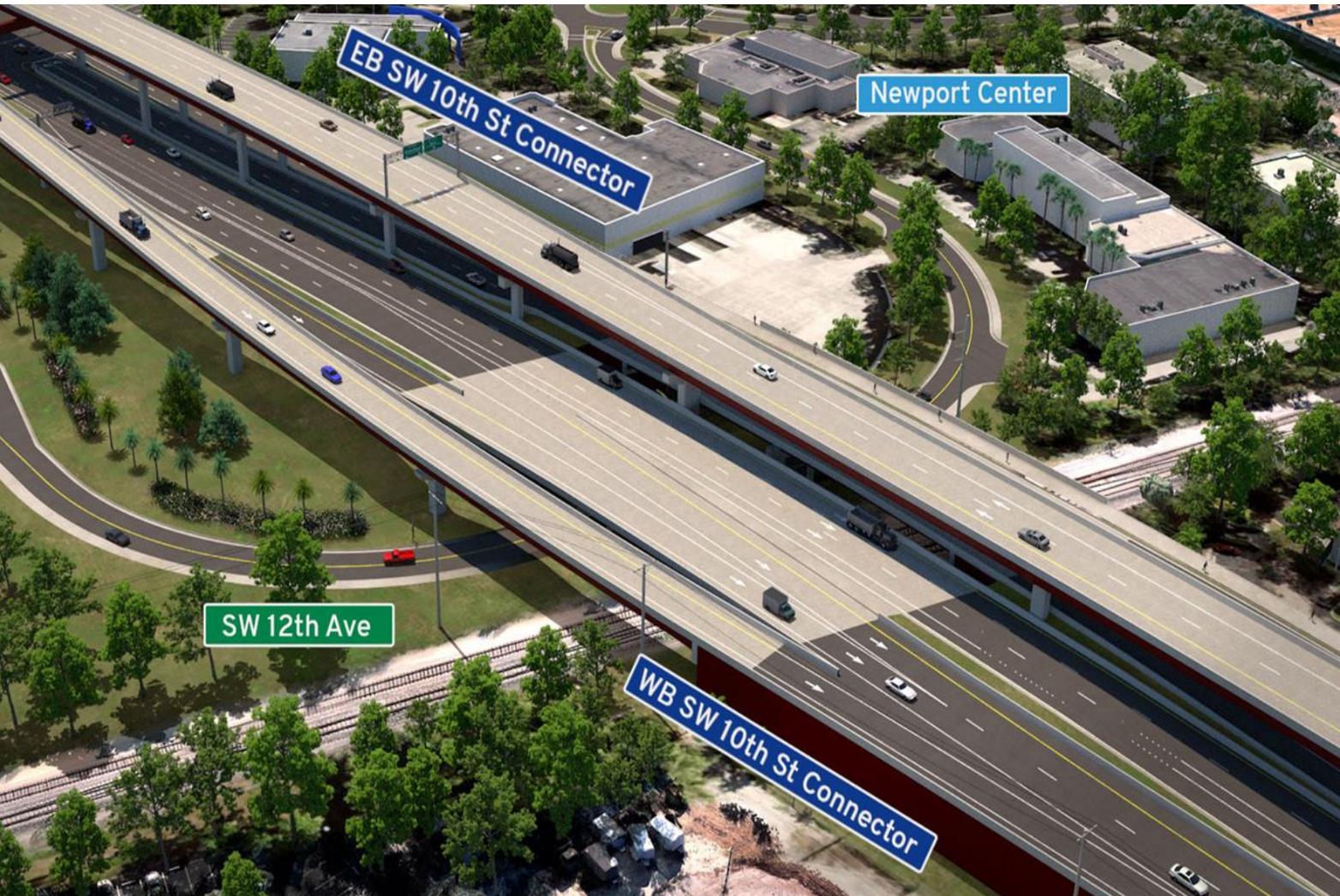
# SW 10<sup>th</sup> Street Connector / I-95 Interchange: Roadway

- Addition of a second NB and SB I-95 Express Lane between within project limits, completing Phase 3
- Military Trail bike lanes / sidewalk
- Newport Center and SW 12<sup>th</sup> Avenue rebuild
- Minor improvements to other cross-streets



Trees Shown At Maturity

# Bridges and Structures



- New Bridges
  - 13 Steel (approx. 25,000 linear ft., 925,000 sq. ft.)
  - 2 Concrete Girder
- Bridge Replacements
  - 6 Concrete Girder
- Overall Bridge length / area (approx.)
  - Box Girder 18,900 linear ft., 756,100 sq. ft.
  - Steel Plate 5,730 linear ft., 212,000 sq. ft.
  - Florida I-Beam 5,500 linear ft., 335,000 sq. ft.

# Bridges and Structures



- Retaining Walls (approx. 556,600 sq. ft.)
- Noise Barrier Walls
  - Ground Mounted 99,300 sq. ft.
  - Shoulder Mounted 6,100 linear ft.
- Extensive OH Sign and DMS Structures
  - 21-100 ft. OH sign - 23
  - 101 – 200 ft. OH sign - 14
  - DMS Structures (including Toll Amount/Lane Status) - 36

# Structures Aesthetics

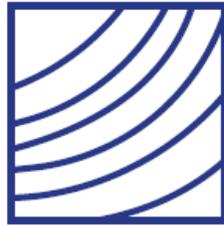
## GRAPHIC ELEMENTS

It is critical that the SW 10th Street Connector showcase uniquely South Florida elements that are inspired by specific community details found within the corridor itself. Some of those elements, detailed below, will be found within the proposed corridor designs in this document.



### SAWGRASS TO SEAGRASS

Working inland from the breathtaking coastline of the Atlantic Ocean to the vast wetlands and marshes of western Broward.



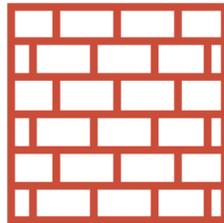
### OCEAN WAVES

Inspired by the miles of beautiful Atlantic Ocean shoreline.



### RIPPLE

Inspired by a combination of the Atlantic, and the aesthetics of the spanish tile adorned roofs of the SW 10th Street Corridor.



### RUSTIC

Capturing the traditions, history and pioneer spirit of the Deerfield Beach community.

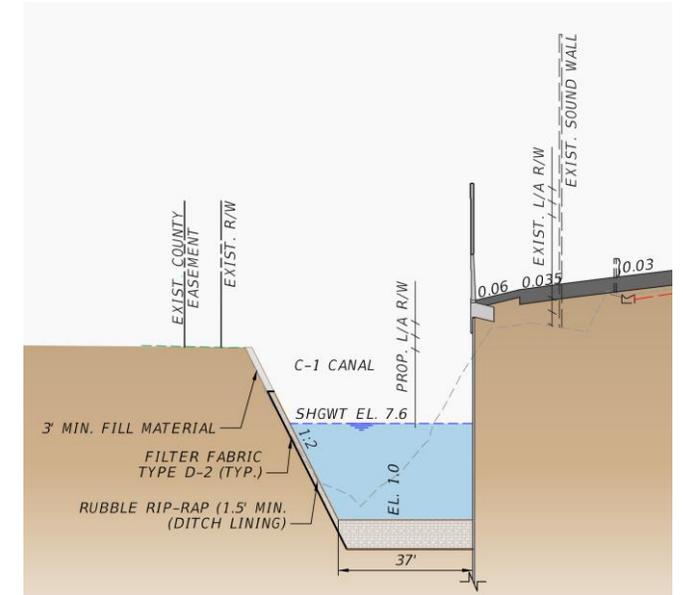
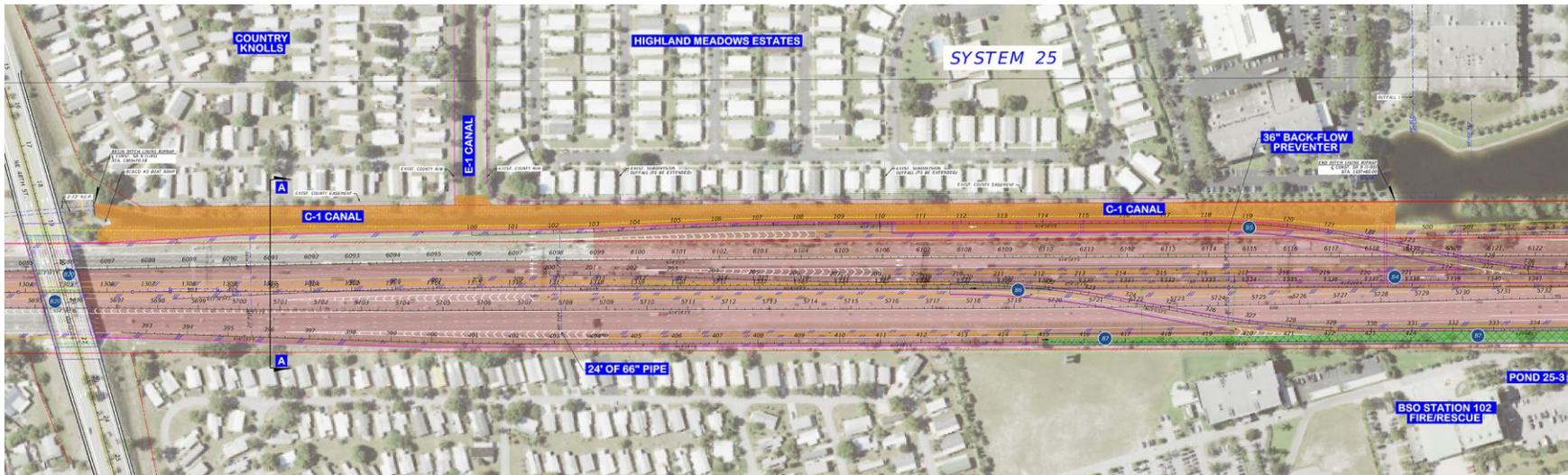
## Prescriptive Design Elements

- Ground Mounted Noise Barrier Walls
- Retaining Walls
- Bridge Piers / Straddles
- Bridge Steel Girders

# I-95 Drainage System

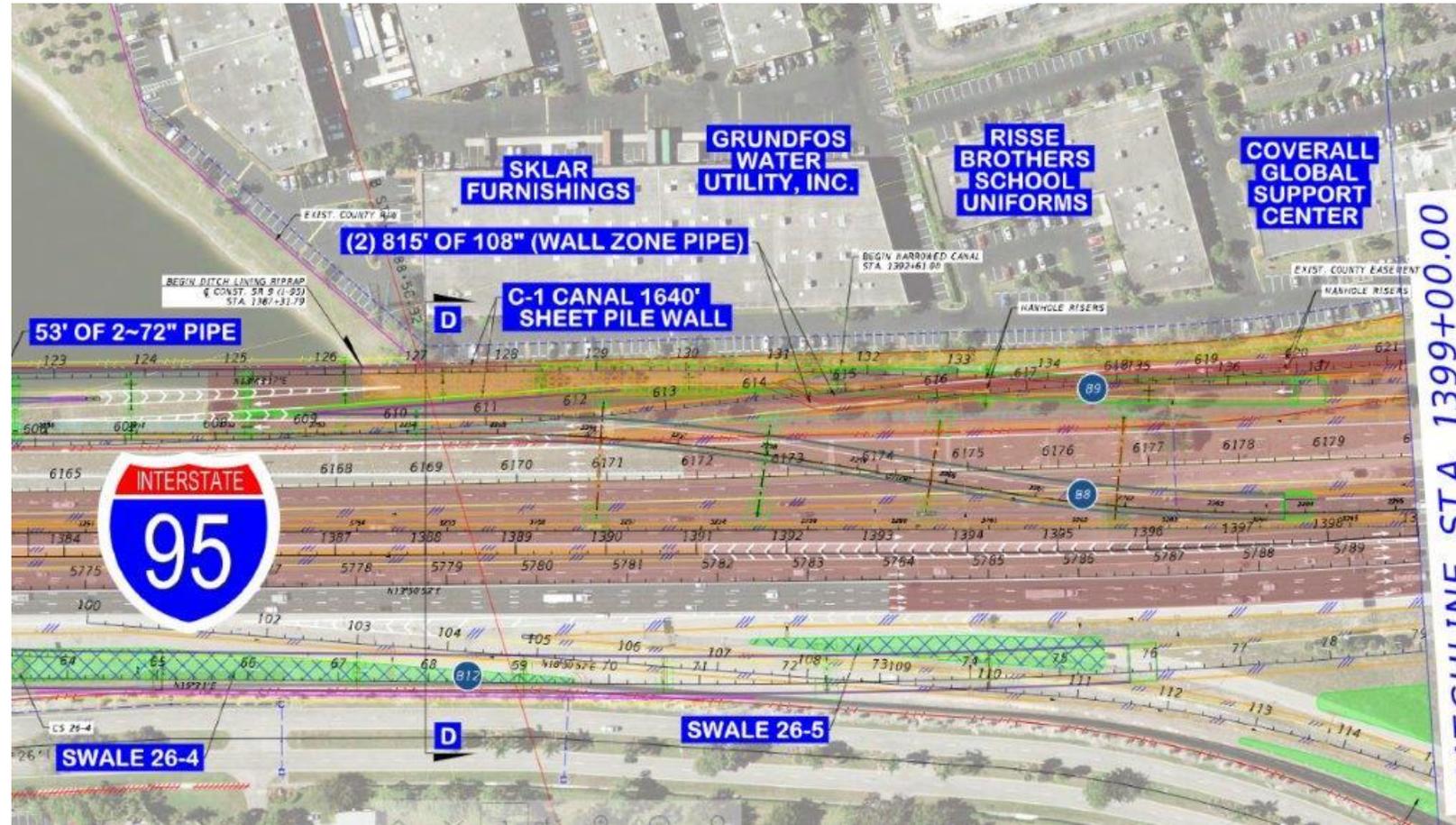
## • Stormwater Management Facilities

- Linear Dry Ponds (swales)
- Dry and / or Wet Detention / Retention Ponds
- New or Modified Control Structures and Outfalls
- Accommodate Landscape Opportunity Areas for Post-Construction Stand-Alone Landscape Project(s)



# I-95 Drainage System

- 48" Pipe – 1,700+ linear ft. (Hillsboro Boulevard)
  - Steel (Jack & Bore) and Storm Drain
- RCP Culvert Extensions (I-95)
  - 42" – 85 linear ft.
  - 66" – 250 linear ft.
  - 72" – 150 linear ft.
- 108" wall zone pipes – 1,630 linear ft. (north of triangle Lake)

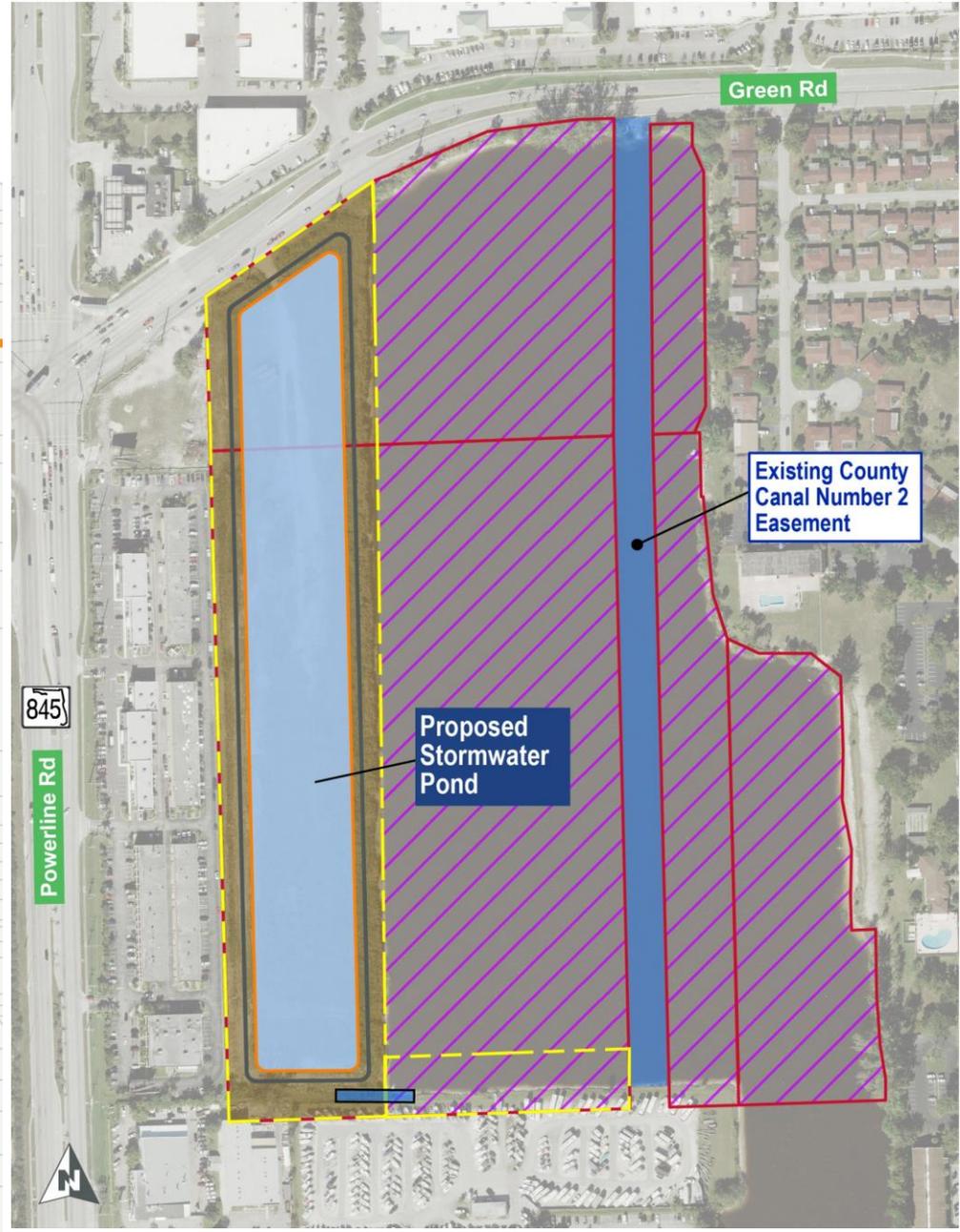
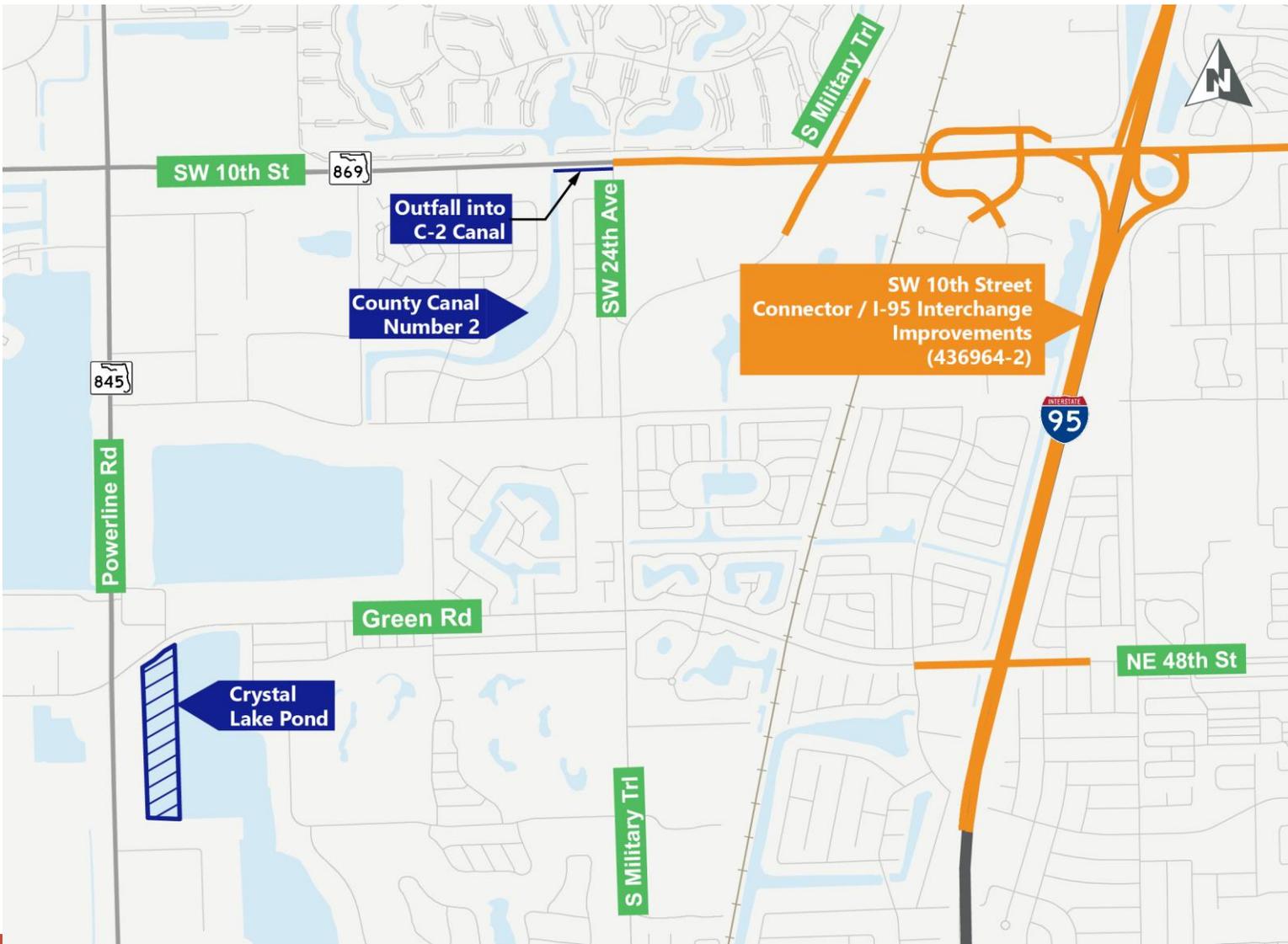


# Other I-95 (BCWCD Canal 1) Basin Stormwater Management Features

- Proposed control structures – 11
- Covered C-1 Canal with sheet pile – 300 ft. (south of SW 10<sup>th</sup> Street)
- C-1 Canal sheet pile wall – 1,640 ft. (north of Triangle Lake)
- 16 dry swales – 15.35 acres (at bottom)
- 6 wet ponds – 24.87 acres (at SHWT)
- New S-2 and S-3 control structures
- Back-flow preventers – 36" and 72"



# Crystal Lake Pond Site (County Canal 2 Basin)



# Environmental Permits

- **BCWCD Canal 1 (east of SFRC):**

- SFWMD Conceptual ERP submittal August 2022
- FDEP 404 Permit submittal August 2022
- SW 12<sup>th</sup> Ave and Newport Center Conceptual
  - ERPs under development. City of D.B. as co-permittee
  - Contractor to obtain County Surface Water Management Licenses

- **BCWCD Canal 2 (west of SFRC):**

- SFWMD Conceptual ERP issued February 11, 2022
- FDEP 404 permit issued April 1, 2022
- Contractor to obtain Crystal Lake Broward County Surface Water Management License

# Utility Relocation Master Plan

- **Utility Relocation Master Plan for City of Deerfield Beach Utilities (to be performed as Utility Work by Highway Contractor)**
  - Approx. 3,000' 12" Force Main
  - Approx. 3,500' 20" Force Main
  - Approx. 9,000' 16" Potable Water Main
  - Approx. 2,000' 16" Raw Water Main
  - Approx. 2,000' 24" Raw Water Main
  - Approx. 8,000' 12" Reclaimed Water
  - Miscellaneous additional minor segments of Utility Relocations

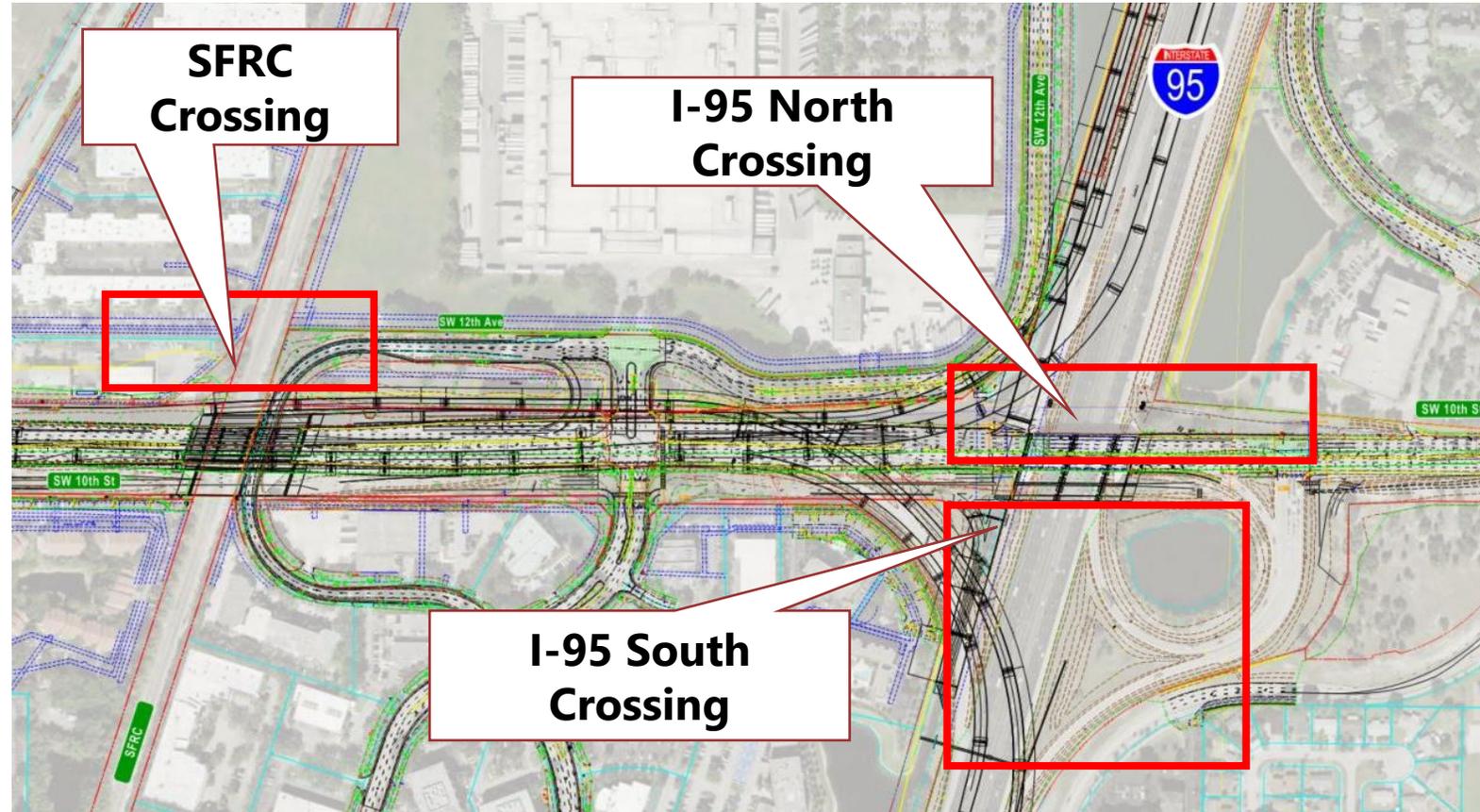
# Utility Relocation Master Plan

- **Utility Relocation for additional Utilities (to be performed as Utility Work by Highway Contractor)**
  - Approx. 7,150' 2"-12" FPL PVC conduit
  - Approx. 2,000' 32" - 42" FPL Steel casing
  - Approx. 8,500' 2"-24" AT&T PVC conduit
  - Approx. 2,400' 16"-42" AT&T Steel casing
  - Approx. 4,000' 2" Sprint PVC conduit
  - Miscellaneous additional minor segments of Utility Relocations

# Utility Master Plan

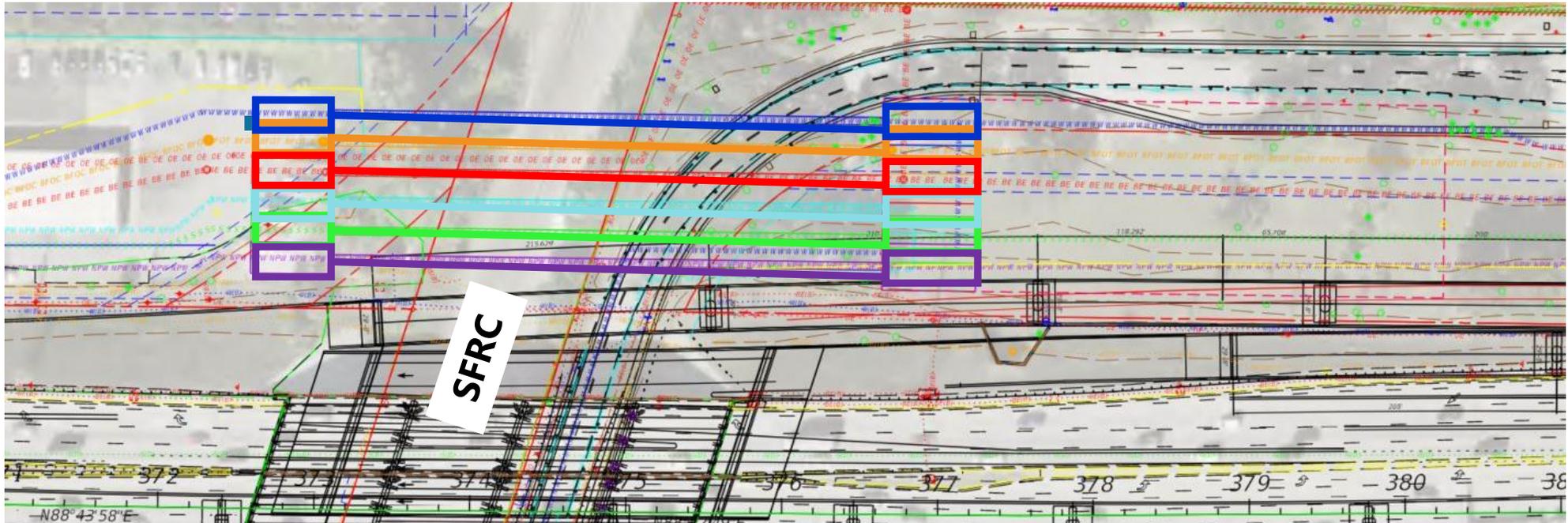
## • Trenchless Utility Casing Construction

- **Railroad:** Six (6) separate installations, each approx. 300 ft. in length
- **I-95:** Two (2) separate installations – one approx. 750 ft. in length, and another approx. 400 ft. in length



# Utility Master Plan

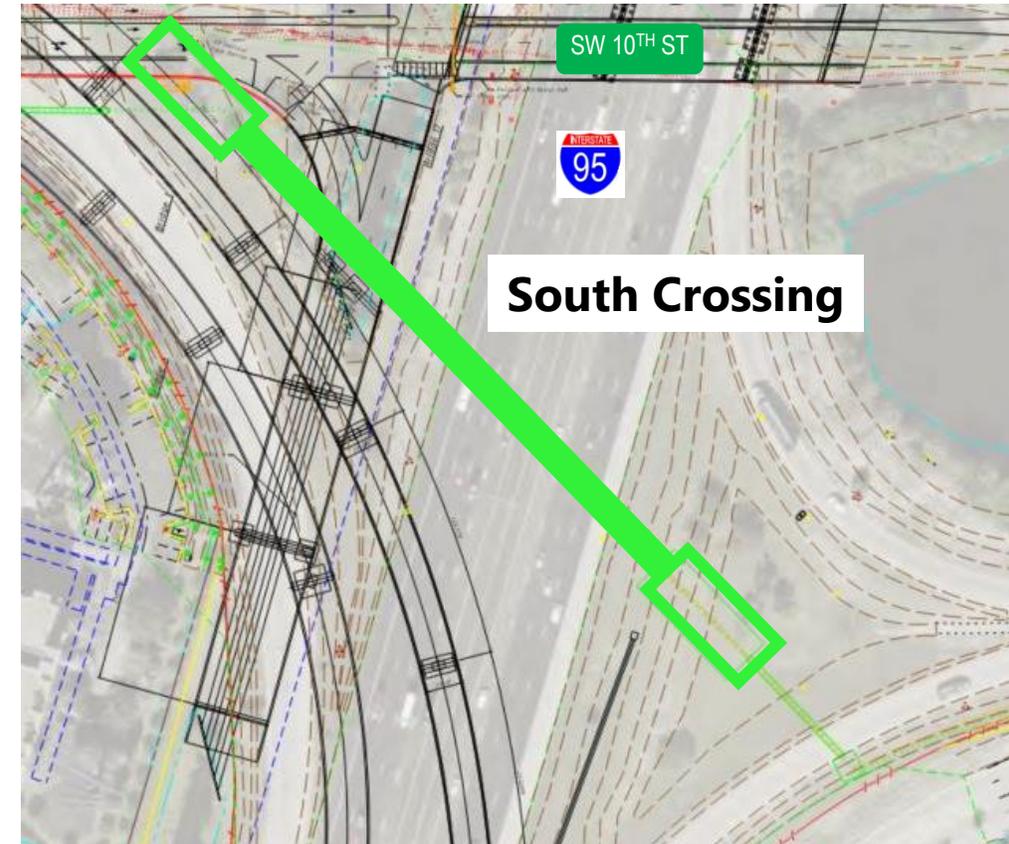
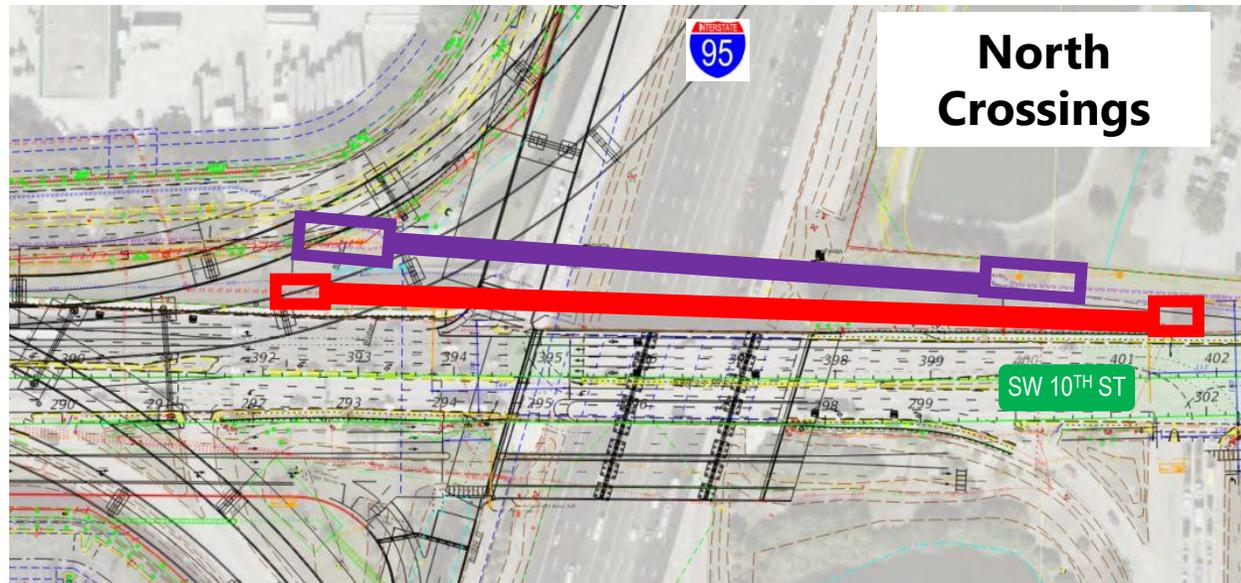
- **Trenchless Utility Casing Construction – SFRC Crossing (Track Switches)**
  - Six (6) separate installations each approximately 300 ft. in length
  - SFRTA restrictions on methodology and participation on risk mitigation plan



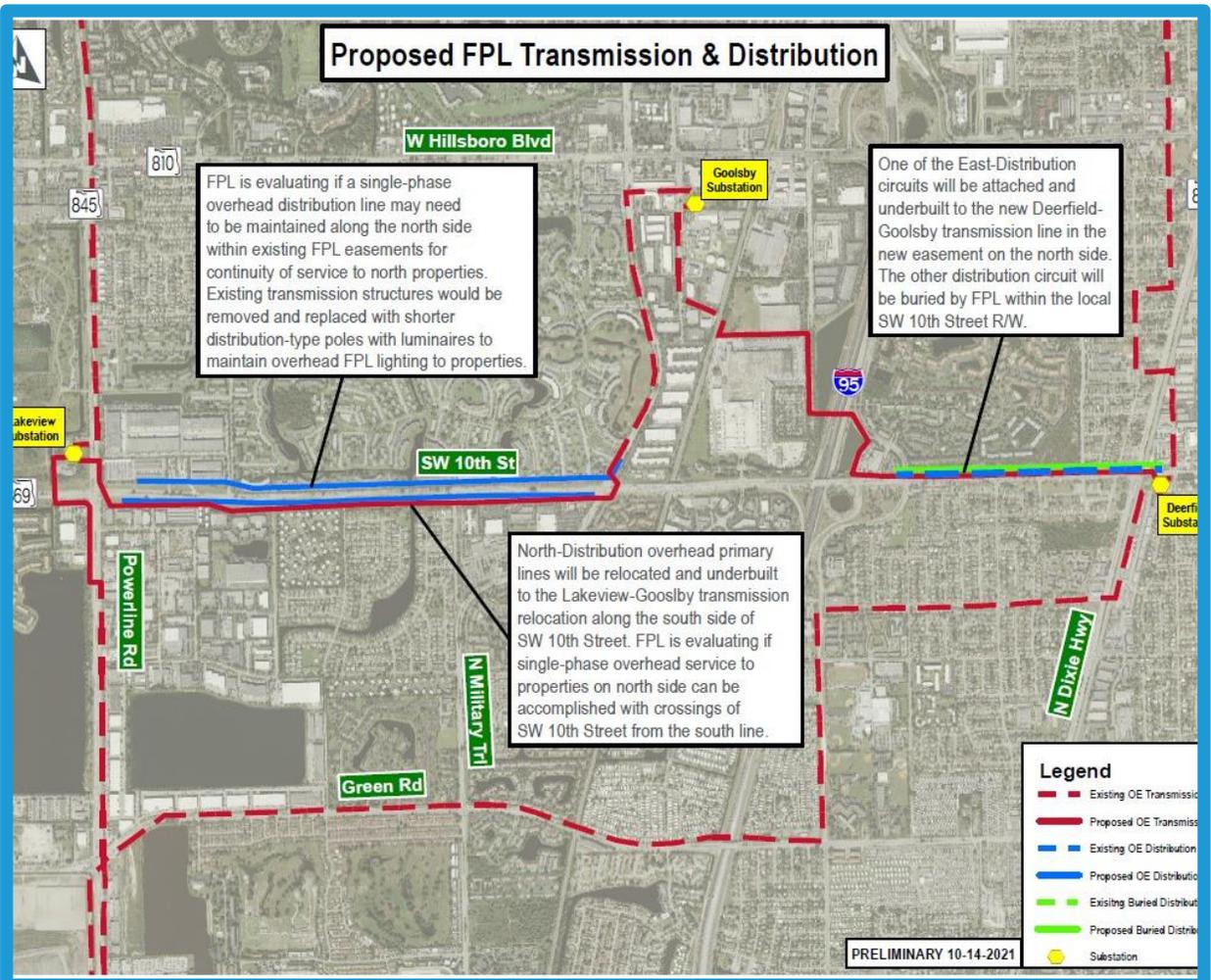
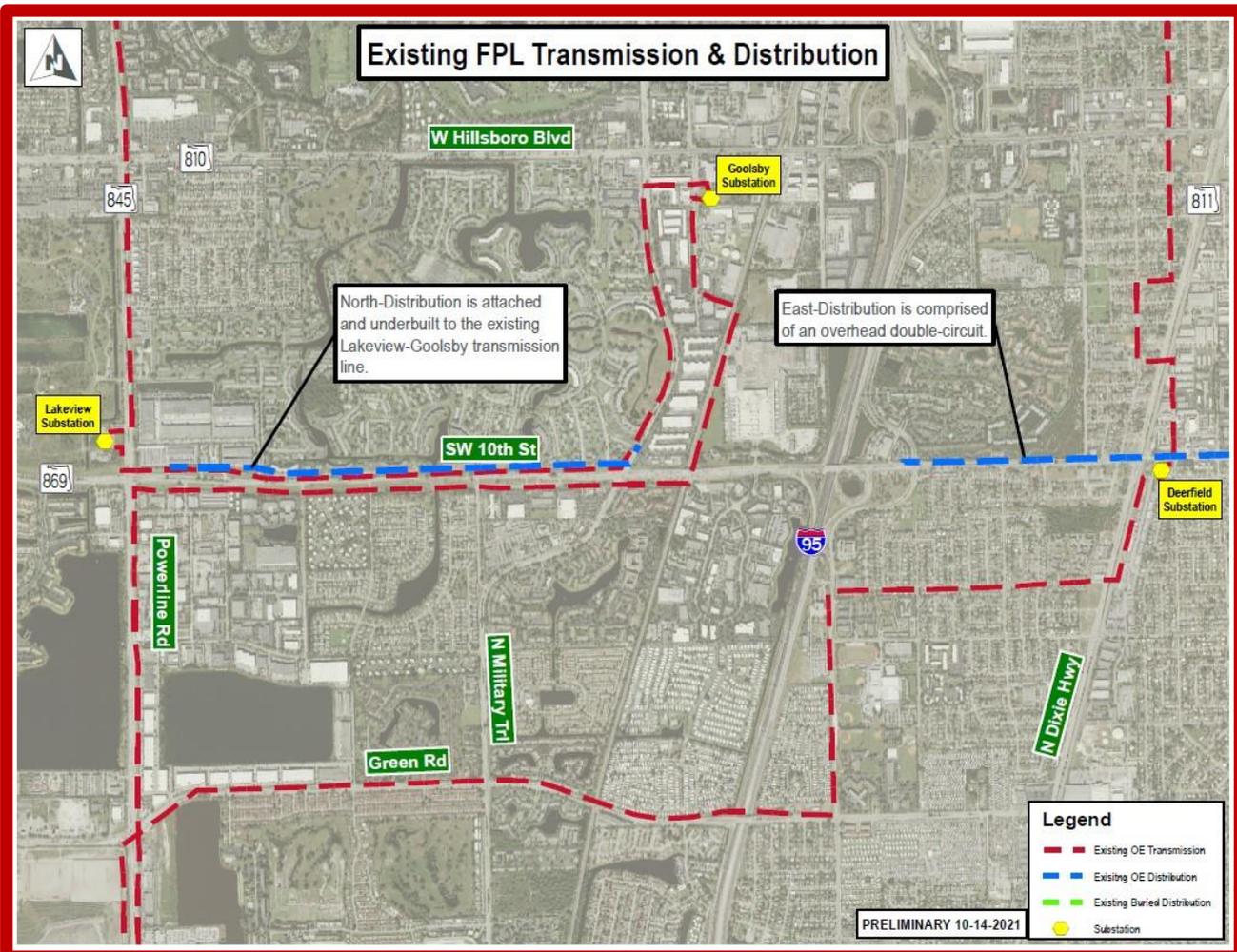
# Utility Master Plan

- **Trenchless Utility Casing Construction – I-95**

- Two (2) separate installations – one approx. 750 ft. in length, and another approx. 400 ft. in length



# FPL Transmission & Distribution Line Changes (pre-construction)



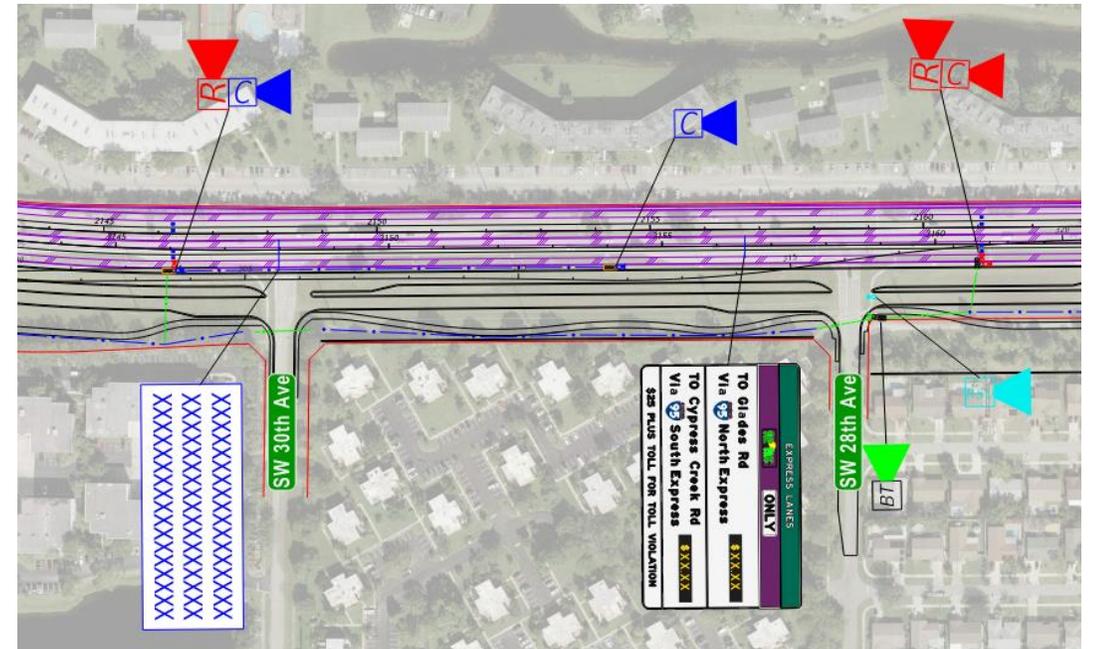
# ITS

- ITS Maintenance of Communications (MOC) Plan
- Maintain and Upgrade Existing ITS Devices Throughout I-95 and SW 10th Street Connector Project Limits
- DMS Subsystem, Including Toll Amount and Lane Status DMS
  - 61 Total DMS Panels
- CCTV Camera Subsystem
  - 36 Cameras



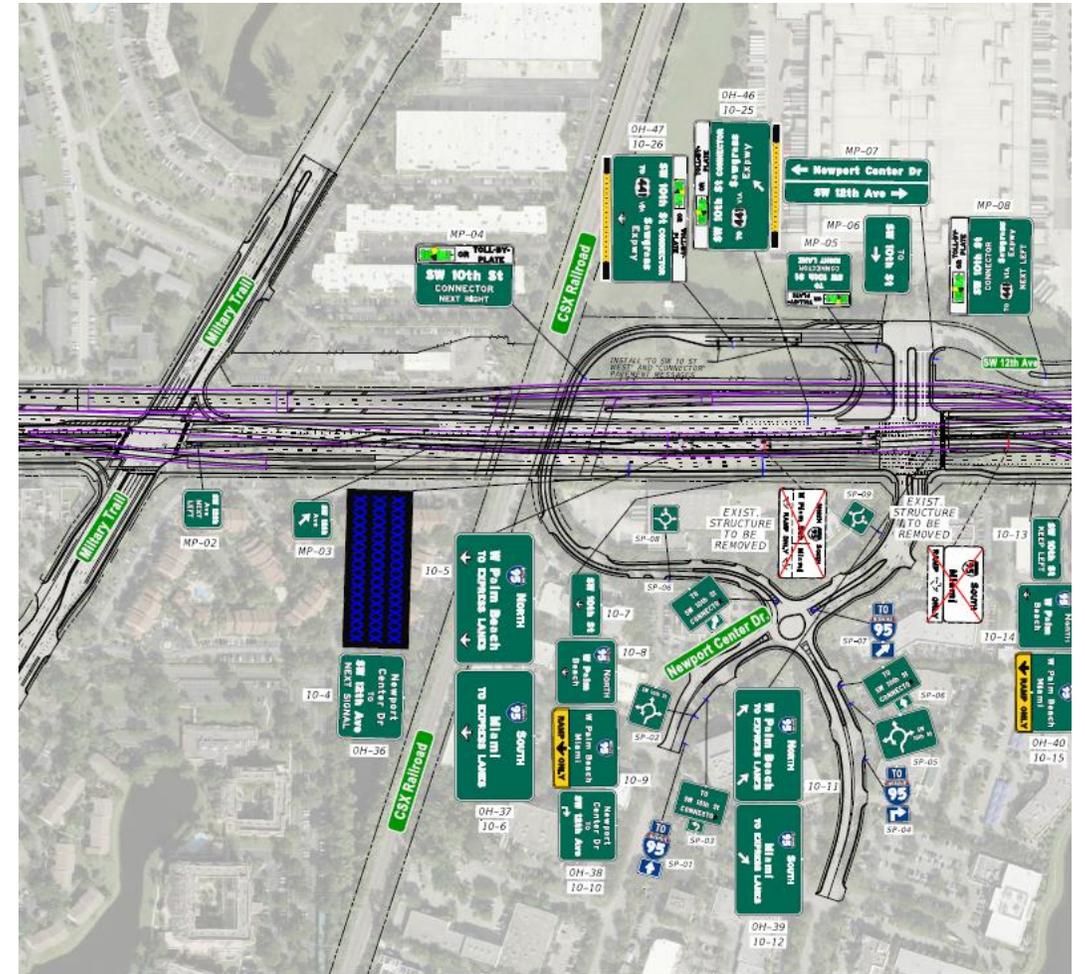
# ITS

- MVDS Subsystem (Limited Access facilities)
  - MVDS Detectors – 41
  - Bluetooth Detectors – 20
- Power Distribution Subsystem (with generator backups)
- Roadside Units (RSU) – 30 (all three facilities)
- Communications Hub (at Intch.)
- Fiber (SW 10<sup>th</sup> Street and I-95)
  - 144 SMFOC – approx. 6-miles



# Signing Master Plan

- I-95
- I-95 Express
- SW 10<sup>th</sup> Street Local Lanes
- SW 10<sup>th</sup> Street Connector Lanes
- Newport Center Drive / SW 12<sup>th</sup> Avenue



# Signalization

## 439891-1 SW 10<sup>th</sup> Street Connector Project

- SW 10<sup>th</sup> Street / Waterways Boulevard
- SW 10<sup>th</sup> Street / Independence Drive
- SW 10<sup>th</sup> Street / Powerline Road
- Powerline Road / Quiet Waters Business Park Entrance
- SW 10<sup>th</sup> Street / SW 28<sup>th</sup> Avenue

## 436964-2 I-95 / SW 10<sup>th</sup> Street Interchange Project

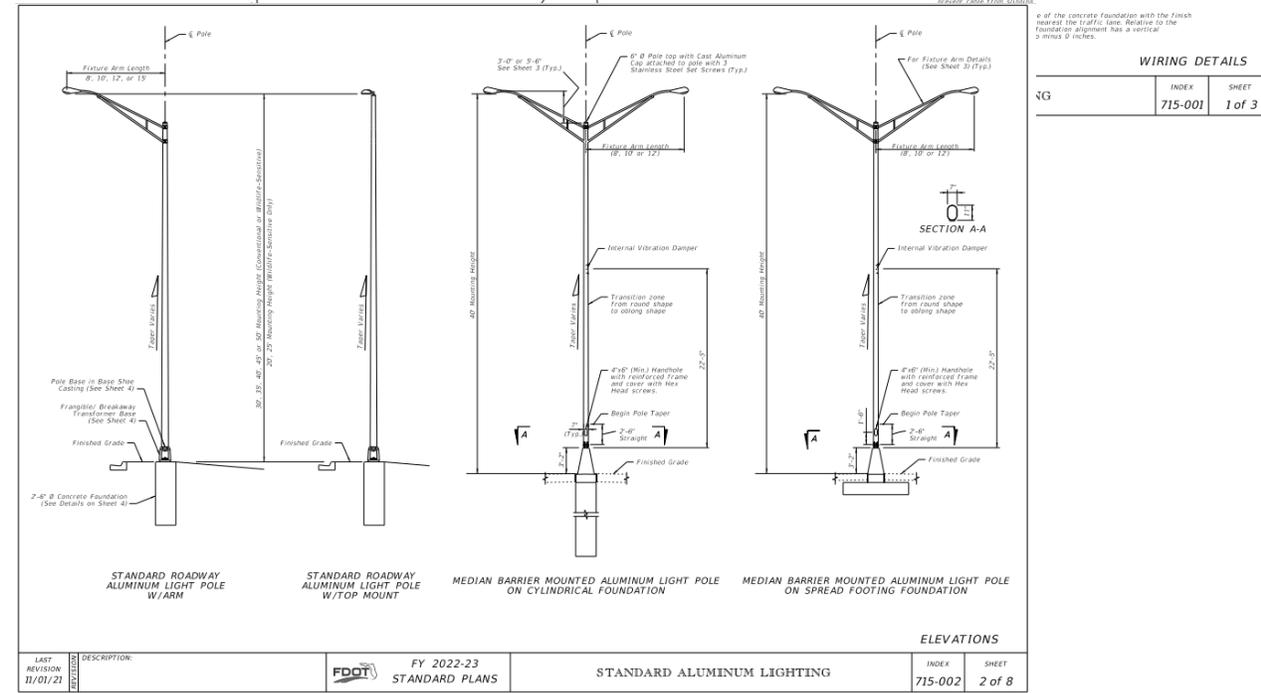
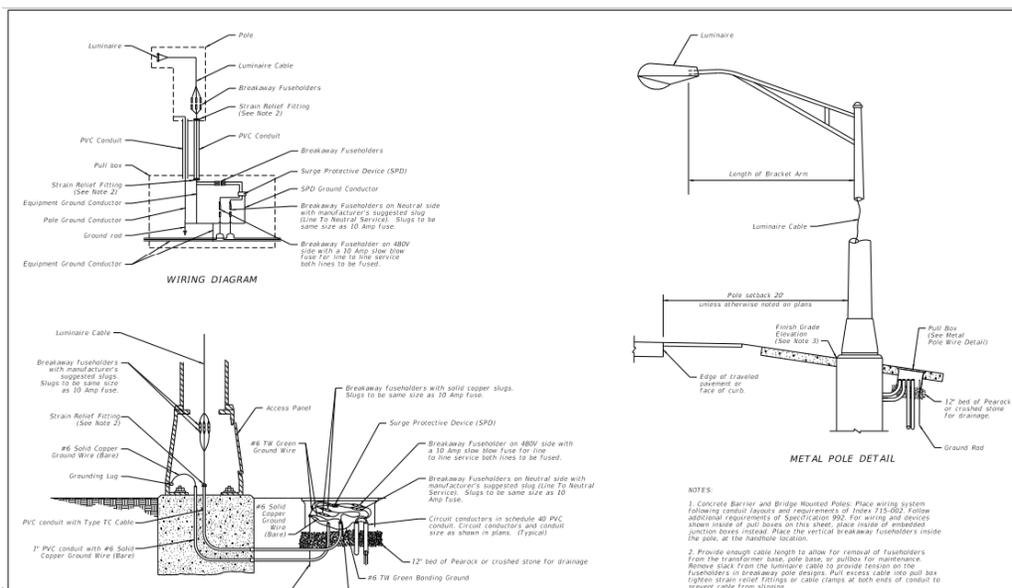
- SW 10<sup>th</sup> Street / Military Trail
- SW 10<sup>th</sup> Street / Newport Center Drive
- SW 10<sup>th</sup> Street / SB Ramps
- SW 10<sup>th</sup> Street / NB Ramps
- SW 10<sup>th</sup> Street / Natura Drive
- Hillsboro Boulevard / NB Ramp





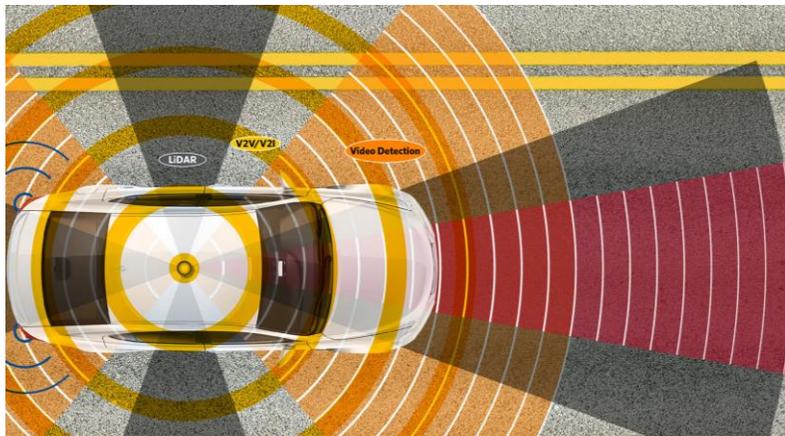
# Lighting – I-95

- FDOT Standard LED fixtures on General Purpose (GP), Express Lanes (EL), and ramps / flyovers along I-95
- Approx. 250 conventional lighting poles
- Compatible with I-95 Express Phase 3 lighting



# I-95 Interchange Temporary Smart Work Zone Systems

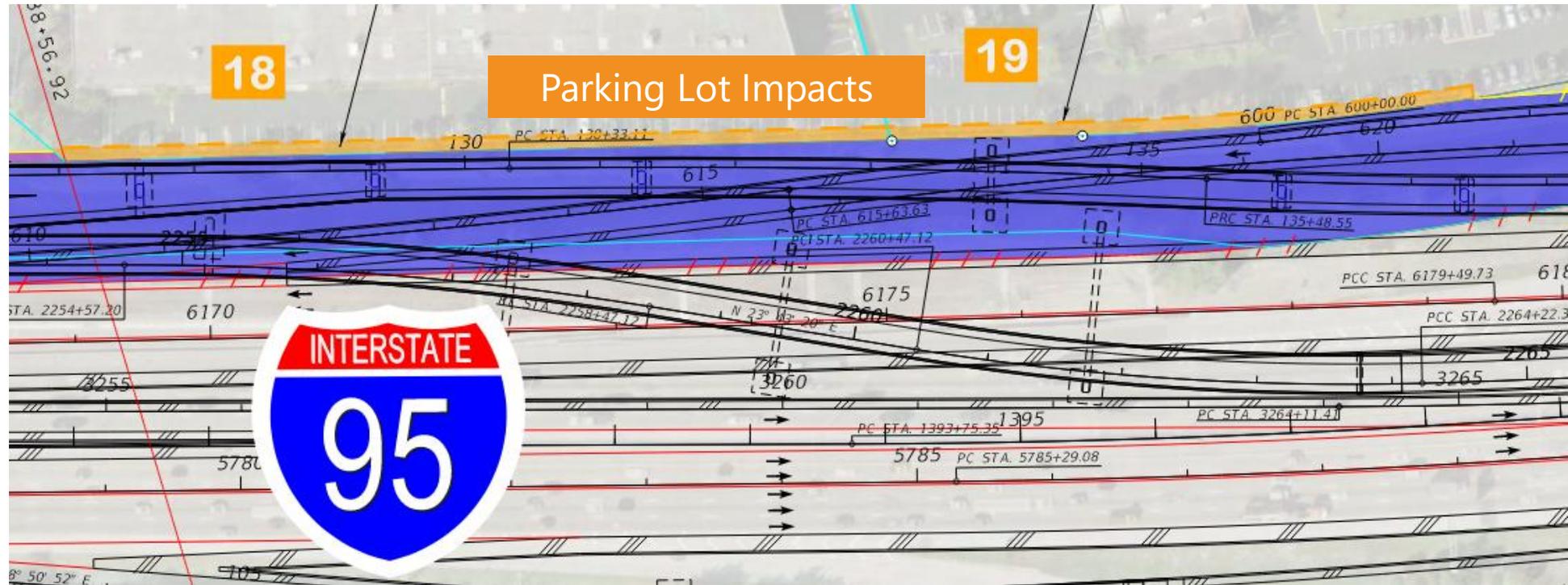
- Queue Warning System
- Travel Time Information System
- Dynamic Work Zone Boundary System



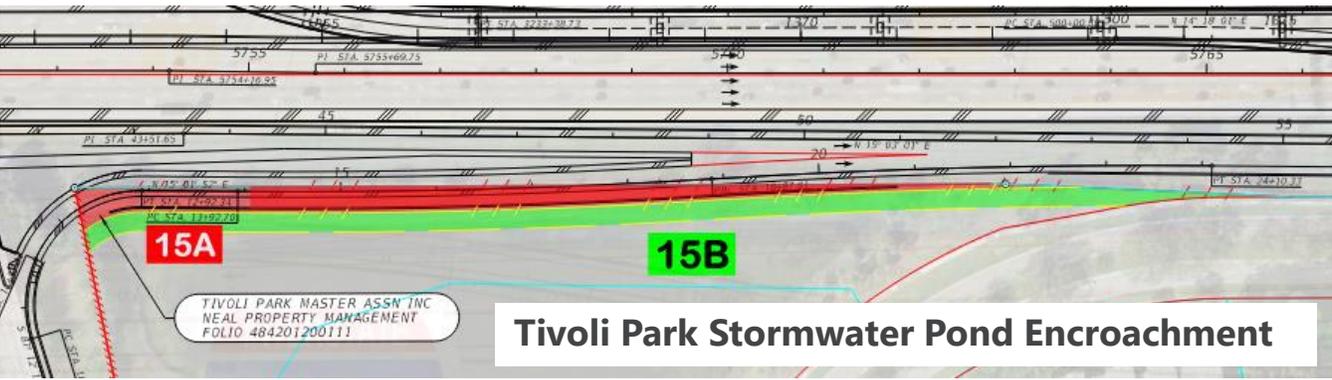
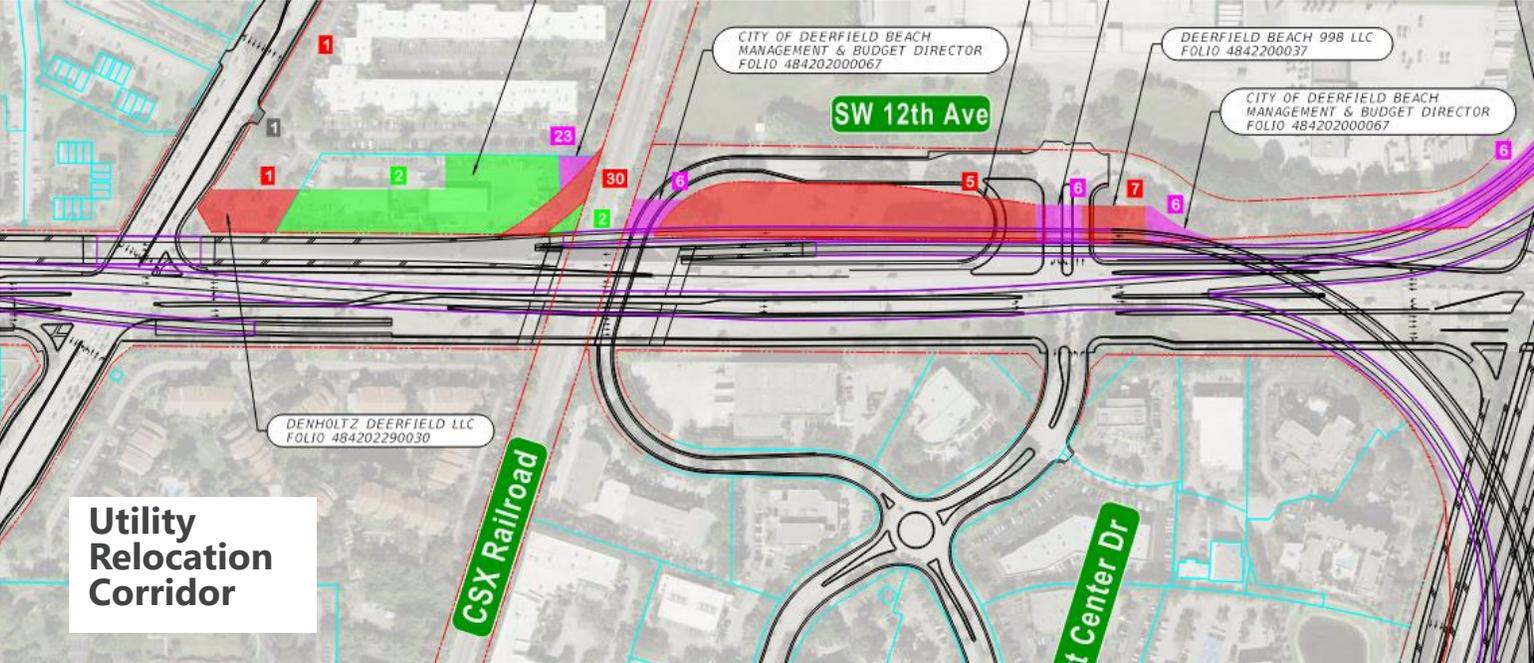
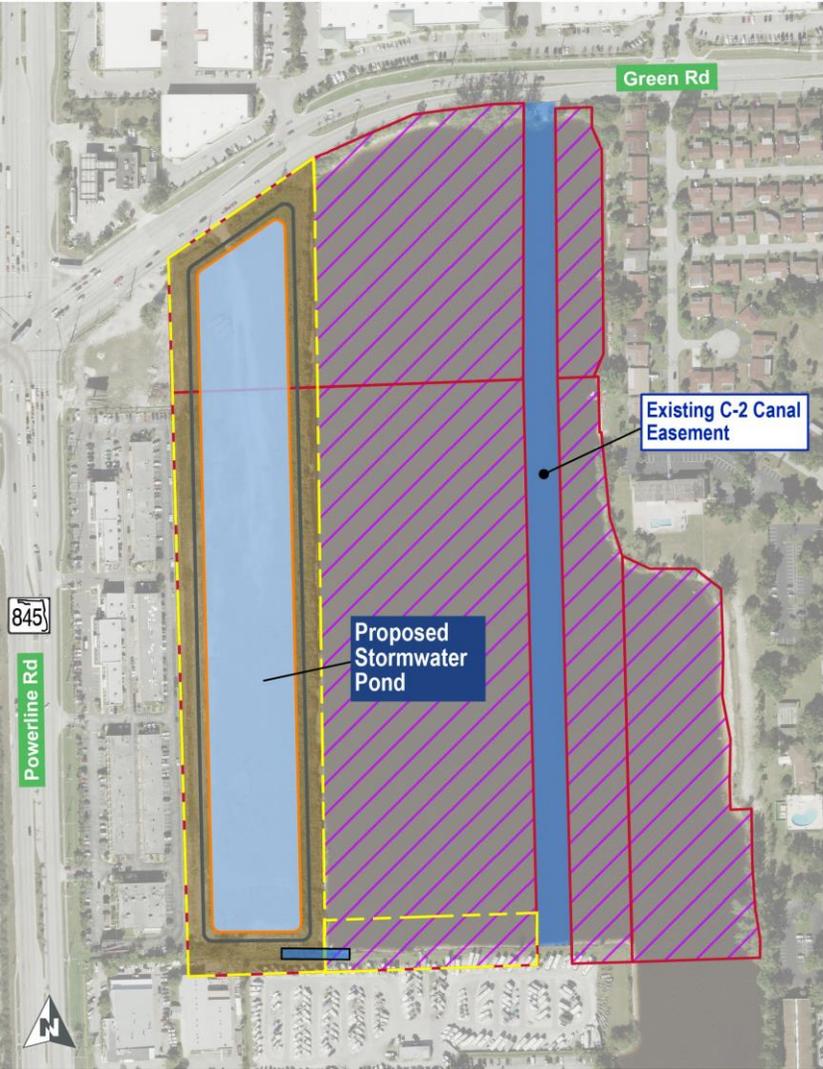
# Right-of-Way Requirements

- Department Intent to Avoid / Minimize Construction Activities Outside the Existing Right of Way
  - Four (4) permanent parcel impacts
  - Six (6) temporary construction easements

- AF4  
Quadrant  
LLC, TCE's



# Right-of-Way Requirements (436964-2)



# Public Outreach

- **Recent and Ongoing Outreach Efforts:**

- January 2022 Project Information Session
- Information Posted on SW 10<sup>th</sup> Street Connector Website
- Project One-on-One Contractor Meetings – August 9, 2022
- Elected Official Briefings – Spring to Fall 2022
- Structure Aesthetics Charette – Fall 2022
- Public Meeting (combined with the SW 10<sup>th</sup> Street Connector Projects) – Fall 2022

- **DB Firm Responsible for Ongoing Support Role to FDOT PIO for Key Deliverables:**

- Community Awareness Plan
- Public Meetings / Workshops
- Technical Assistance

- **Refer to RFP Public Involvement Section for Additional Details**



# Contract Bonus Program for Prioritized Construction

- Early Completion Incentive/Disincentive
- No Excuse Bonus
- Prioritization and cost allocation under development

# Next Steps for Project Implementation

**SW 10th St. Connector**  
(436964-2, 439891-1)

*August 2022*  
**Industry Forum**

**SW 10th St. Connector / I-95 Interchange**  
(436964-2)

*December 2022*  
**Advertisement**

*November 2023*  
**Letting**

**SW 10th St. Connector**  
(439891-1)

*December 2023*  
**Advertisement**

*November 2024*  
**Letting**



# DB Procurement Process

- Adjusted Score Design-Build
- Standard FDOT Two-Phase DB Approach
- Phase I – Expanded Letter of Interest
- Phase II – Technical Proposal
  - Alternative Technical Concept (ATC) Meetings
  - Risk Matrix Review Meetings
  - Page Turn Meeting
  - Question & Answer Session
- Bid Price Proposal
- Final Selection Formula (Adjusted Score)
  - Bid Price Proposal / Technical Score

# Technical Review Committee (436964-2) – Subject to Change

- Deborah Ihsan
- July Jimenez
- Mark Moshier
- Anson Sonnett

# FM# 436964-2 DB Procurement Schedule

Procurement Activity	Milestone Date
Planned Advertisement (with Draft RFP)	November 4, 2021
Advertisement	December 12, 2022
Expanded Letters of Interest Due	February 7, 2023
Shortlist Posting	February 15, 2023
Final RFP Provided to DB Firms	February 20, 2023
Technical Proposals Due	September 8, 2023
Bid Price Proposals Due	November 1, 2023
Anticipated Award Date	November 28, 2023
Anticipated Execution Date	December 13, 2023

# FM# 436964-2 CEI Project Procurement Schedule

Procurement Activity	Milestone Date*
Advertisement	March 6, 2023
Advertisement Close	March 21, 2023
Longlist	April 5, 2023
Shortlist	April 10, 2023
Final Selection	May 15, 2023
Anticipated Execution Date	July 21, 2023

# DBE SPECIALIZED DEVELOPMENT PROGRAM VIDEO LINK



**DBE Specialized  
Development Program**  
A focused approach to assisting prime  
contractors



**ARIEL**  
BUSINESS GROUP  
Enterprise & Government Consulting

PRESENTED BY:

**THOMAS HUGGINS III**  
FDOT SDP PROJECT DIRECTOR

**TERRY WATSON**  
STATE DBE PROGRAM COORDINATOR

Click on logos above to view the video.

# For more information before Advertisement:

**Vanita Saini, P.E.** | FDOT Project Manager

Florida Department of Transportation, District Four  
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Ft. Lauderdale, Florida 33309

Phone: 954-777-4468

Toll Free: 866-336-8435, ext. 4468

Email: [Vanita.Saini@dot.state.fl.us](mailto:Vanita.Saini@dot.state.fl.us)

**Project Website:** [www.SW10Street.com](http://www.SW10Street.com)

## SW 10TH ST. CONNECTOR

FDOT DISTRICT 4

# For more information after Advertisement:

**Maria Velarde, P.E.** | FDOT Senior Contract Specialist

Florida Department of Transportation, District Four

3400 W. Commercial Blvd.

Ft. Lauderdale, Florida 33309

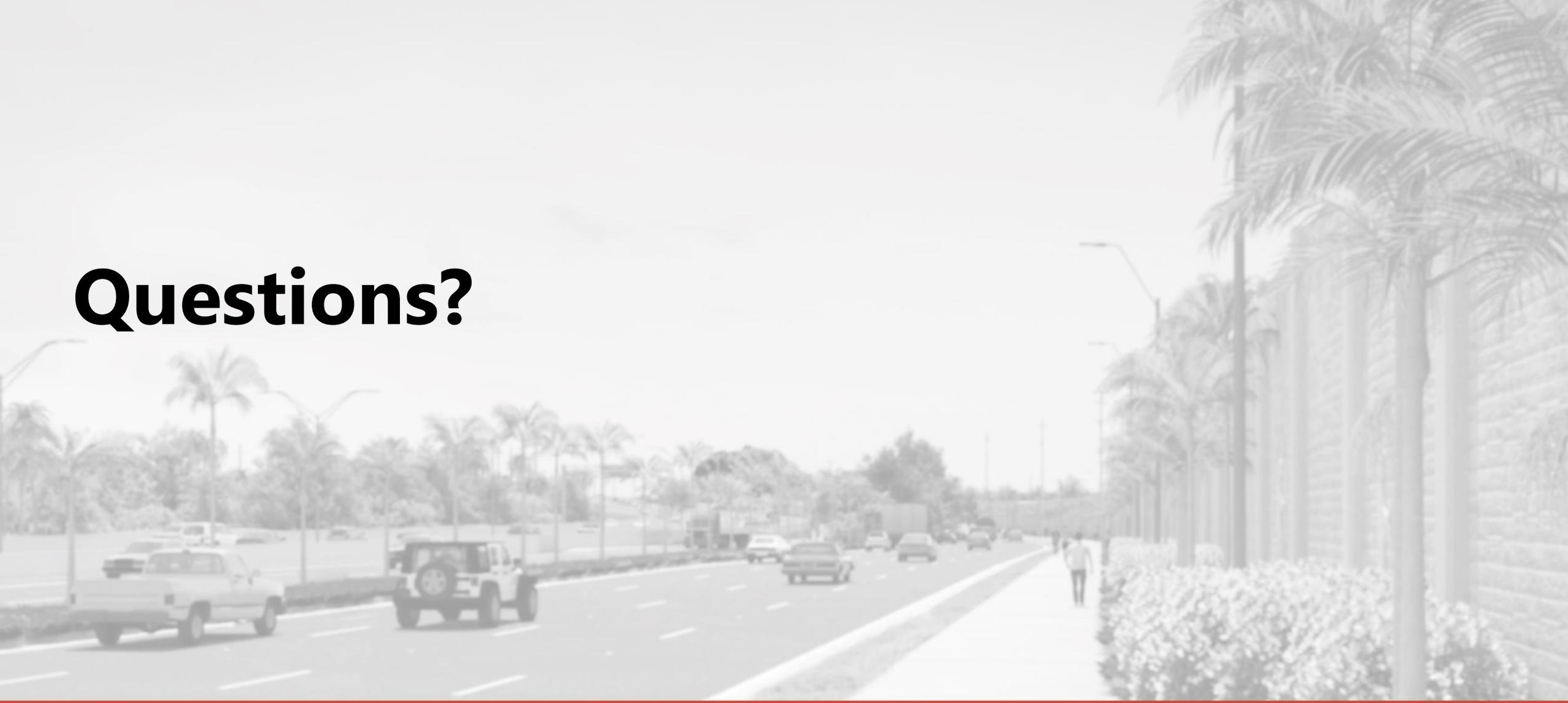
Phone: 954-777-4084

Toll Free: 866-336-8435, ext. 4084

Email: [Maria.Velarde@dot.state.fl.us](mailto:Maria.Velarde@dot.state.fl.us)

**SW 10TH ST. CONNECTOR**

**FDOT DISTRICT 4**



**Questions?**

# **SW 10TH ST. CONNECTOR**

**FDOT DISTRICT 4**

**Optional items Beyond This Slide**

# Project Risk Sharing Strategies Summary

## Risk Sharing Strategies to evaluate and develop

- ATC Draft Submittals
- High-Risk Item Contingency Fund
- Scope Validation Phase
- Utility Coordination – District Utility Facilitator
- Utility Coordination – Review / Inspection Schedules
- Reference Documents
- Project Schedule and Municipal Partners
- Standard of Care
- Team Member Dispute Resolution Process

# SW 10<sup>th</sup> Street Connector / I-95 Interchange: Looking West



# SW 10<sup>th</sup> Street Connector / I-95 Interchange: Looking Southwest



# SW 10<sup>th</sup> Street Connector Overpass at Military Trail



# Procurement and Construction Starts

- **SW 10<sup>th</sup> Street Connector / I-95 Interchange (436964-2)**
  - Advertise for Design-Build Construction Contract: **December 2022**
  - Letting: **November 2023**
  - Begin Construction: **Approx. Q3 2024**
  
- **SW 10<sup>th</sup> Street Connector (west of SW 24<sup>th</sup> Avenue) (439891-1)**
  - Advertise for Design-Build Construction Contract: **December 2023**
  - Letting: **November 2024**
  - Begin Construction: **Approx. Q4 2025**