



PD&E Services for SR 9/I-95
from South of Woolbright Road to North of Woolbright Road

FPID No.: 437279-1-22-02 | ETDM No.: 14341

Alternative Public Workshop

July 22, 2020



Welcome



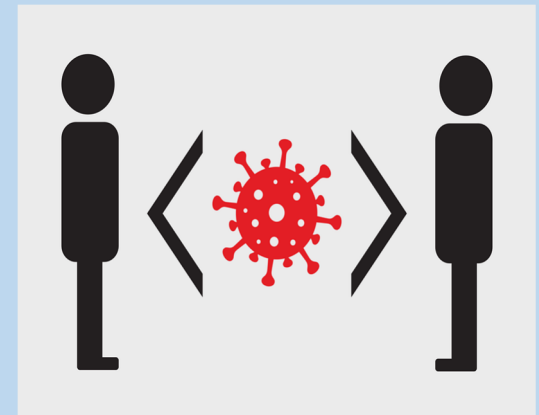
Humberto Arrieta, PE
 FDOT Project Manager
 Florida Department of Transportation



Jeff Easley, PE
 Consultant Project Manager
 Hanson Professional Services Inc.

Online Alternatives Public Workshop

- COVID-19 pandemic
- A State of Emergency is in effect (Executive Order 20-52)
- MS Teams online meeting platform
- No cost to the public to log-in





Technical Information (Listen Only mode)



All attendees will be placed in **'Listen Only'** mode throughout the meeting.



Type your comments or questions in the control panel **Questions** pane.



Responses to comments and questions will be provided later.

Technical Information



Technical Information



Test Need help?   

Virtual Public Meeting



Subtitles on   


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Technical Information (Technical Issues)

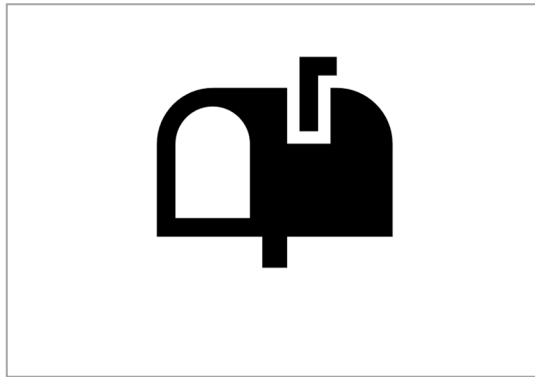


 This meeting is being recorded.

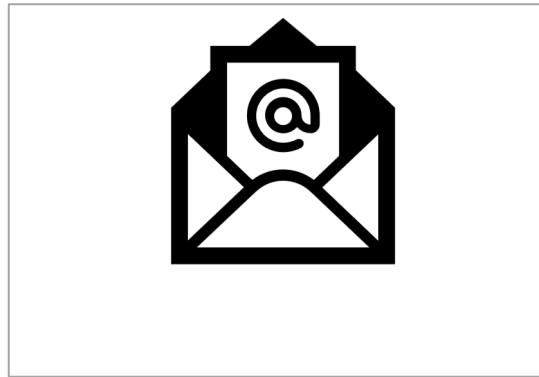


Type your issue in **Questions pane** on the control panel.

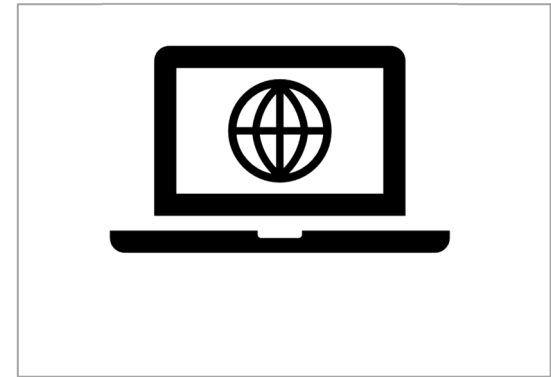
Public Notice



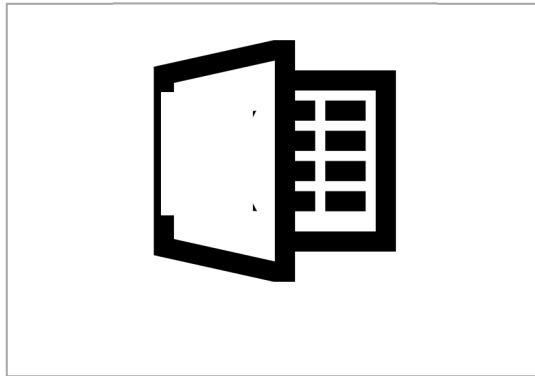
Property owner/tenant letters



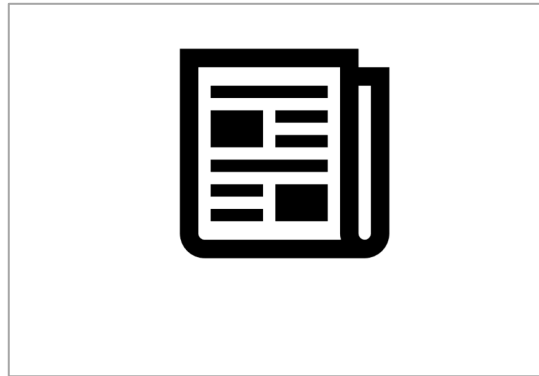
Emails to project contacts list



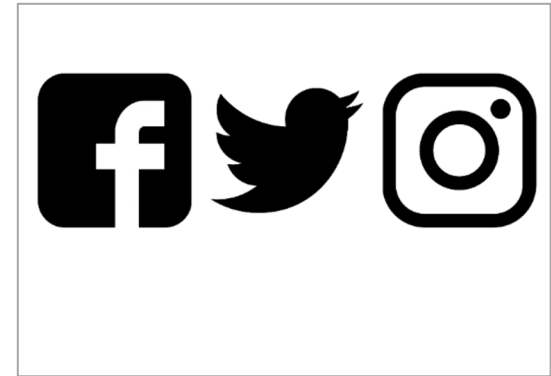
Department or project webpage



Florida Administrative Register



Newspaper



Social media

Title VI



The Florida Department of Transportation is required to comply with various non-discrimination laws and regulations, including Title VI of the Civil Rights Act of 1964.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status.

Persons wishing to express their concerns about Title VI may do so by contacting either:

District Four

Florida Department of Transportation

District Four Title VI Coordinator

Sharon Singh Hagyan

3400 West Commercial Boulevard

Fort Lauderdale, Florida 33309-3421

(954) 777 4190

Toll Free at (866) 336-8435, Ext. 4190

Sharon.SinghHagyan@dot.state.fl.us

Tallahassee Office

Florida Department of Transportation

State Title VI Coordinator

Jacqueline Paramore

Equal Opportunity Office

605 Suwannee Street, MS 65

Tallahassee, Florida 33309-3421

(850) 414 4753

Jacqueline.paramore@dot.state.fl.us



Federal-State Partnership

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

Public Comments



During Meeting



Type comments or questions in the Questions pane on the control panel.

After meeting: by July 31, 2020

humberto.arrieta@dot.state.fl.us



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www.fdot.gov/projects/95atWoolbright

Today's Agenda



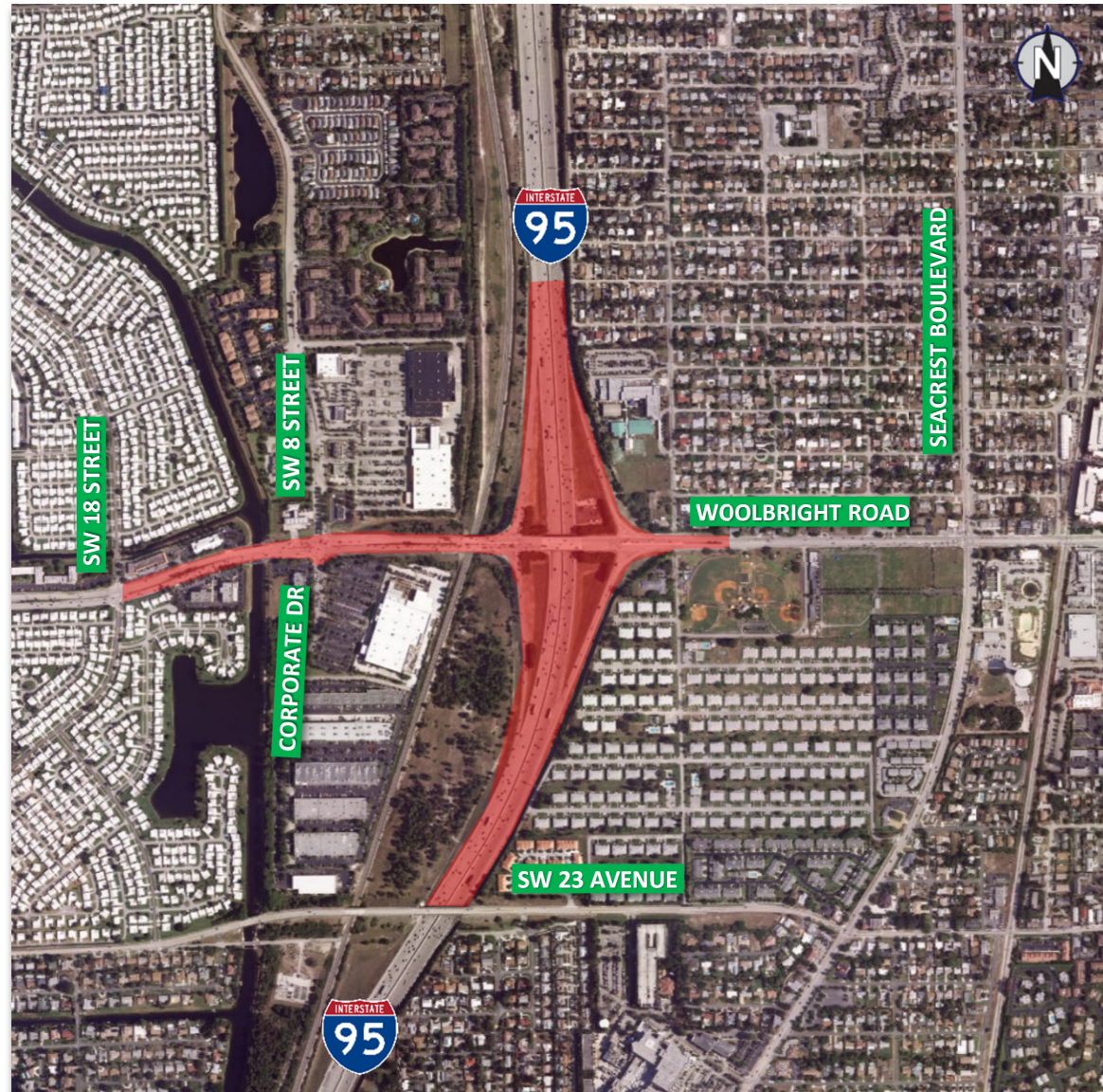
- Introduction
- Project Development & Environment (PD&E) Study Process
- Project Description
- Key Project Issues
- Alternatives Analysis
- Summary Schedule
- Closing





Project Location

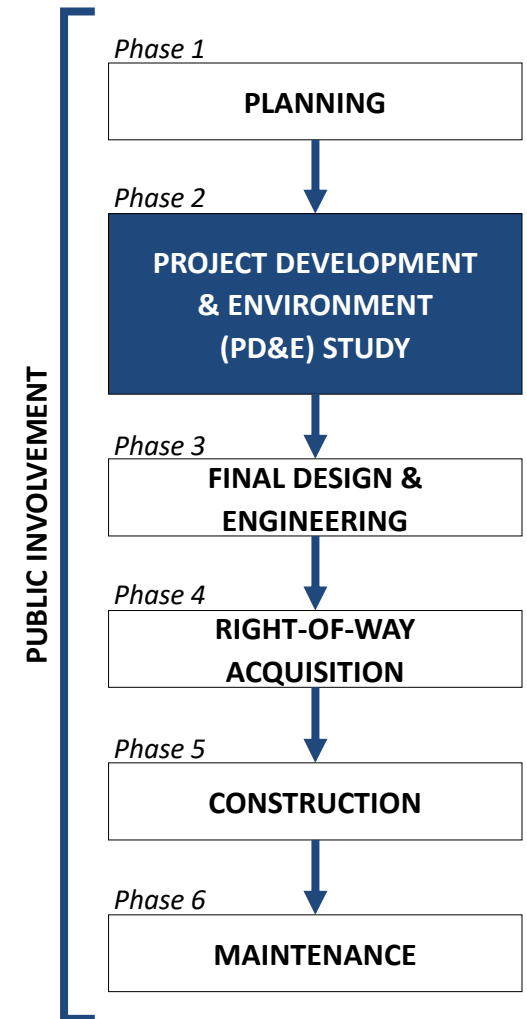
- SR 9/I-95 Interchange at Woolbright Road
- Palm Beach County, Florida
 - City of Boynton Beach
- SR 9/I-95
 - 10 Lanes divided Interstate
 - Strategic Intermodal System (SIS)
 - Posted Speed Limit: 65 MPH
 - Adjacent Interchanges:
 - Boynton Beach Boulevard – 1.0 Miles North
 - Atlantic Avenue – 3.8 Miles South
- Woolbright Road
 - Six Lanes divided west of I-95
 - Five Lanes with a two-way left turn lane east of I-95
 - Urban Minor Arterial
 - Posted Speed Limit: 40 MPH
- SFRC/CSX Railway parallel to I-95





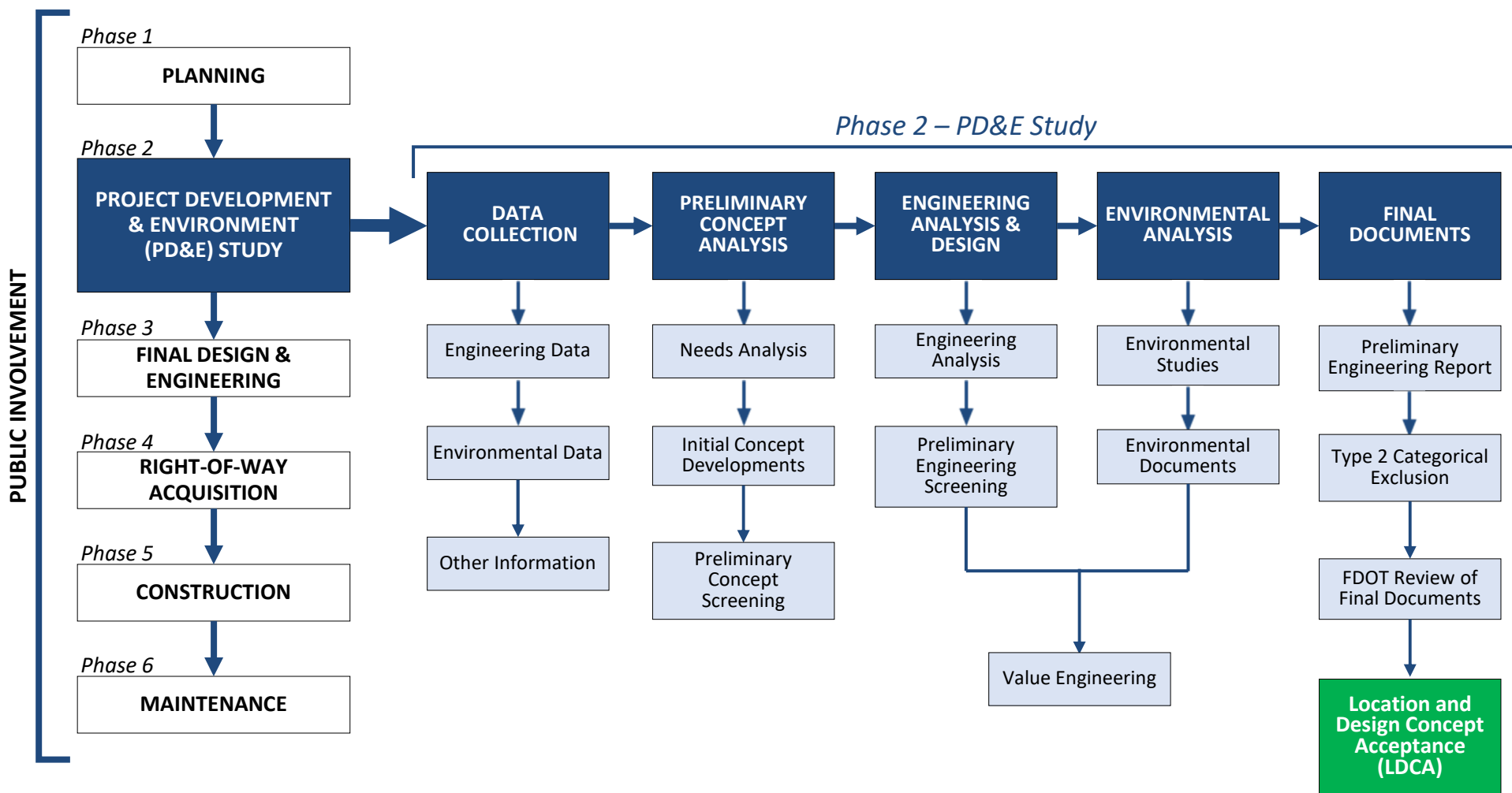
Introduction

- What is a Project Development and Environment (PD&E) Study?
 - A process followed by FDOT to evaluate:
 - Engineering Alternatives
 - Environmental Impacts
 - Social, Cultural and Economic impacts associated with a planned transportation project
 - Mandated by the National Environmental Policy Act (NEPA)
 - Required when Federal Funds are Involved





PD&E Study Process





Project Limits

- SR 9/I-95 – from South of Woolbright Road to North of Woolbright Road
- Woolbright Road– From SW 18 Street to just East of the I-95 interchange



Purpose and Need

Project Purpose: The purpose of the study is to address traffic spillback onto I-95, reduce congestion on I-95 and Woolbright Road, improve interchange operations, and improve safety at the I-95 and Woolbright Road interchange through the 2045 design year horizon.

Need:

- System Linkage
- Capacity
- Transportation Demand
- Modal Interrelationships
- Safety

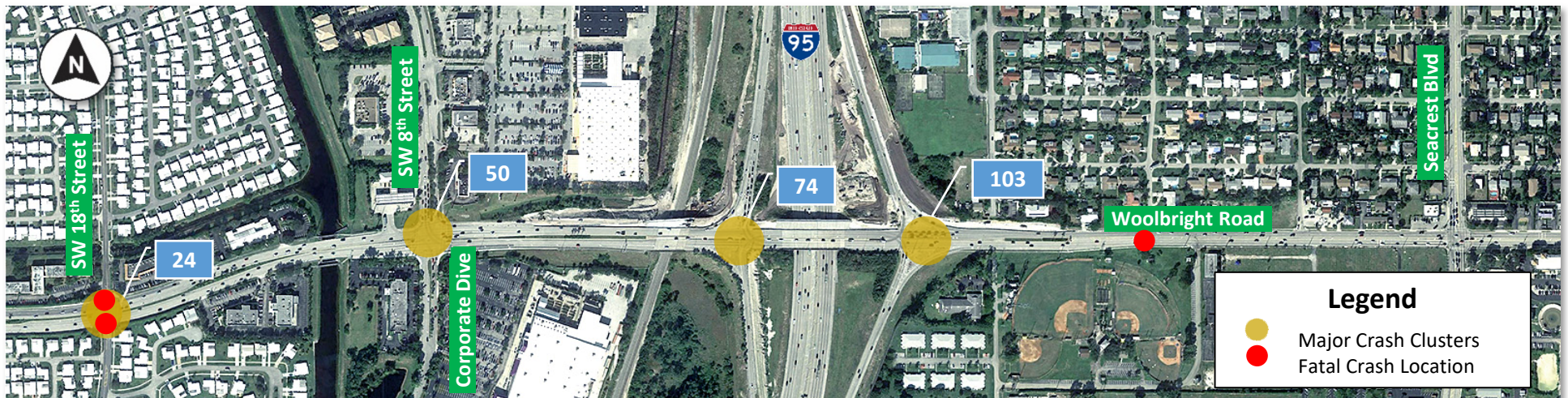
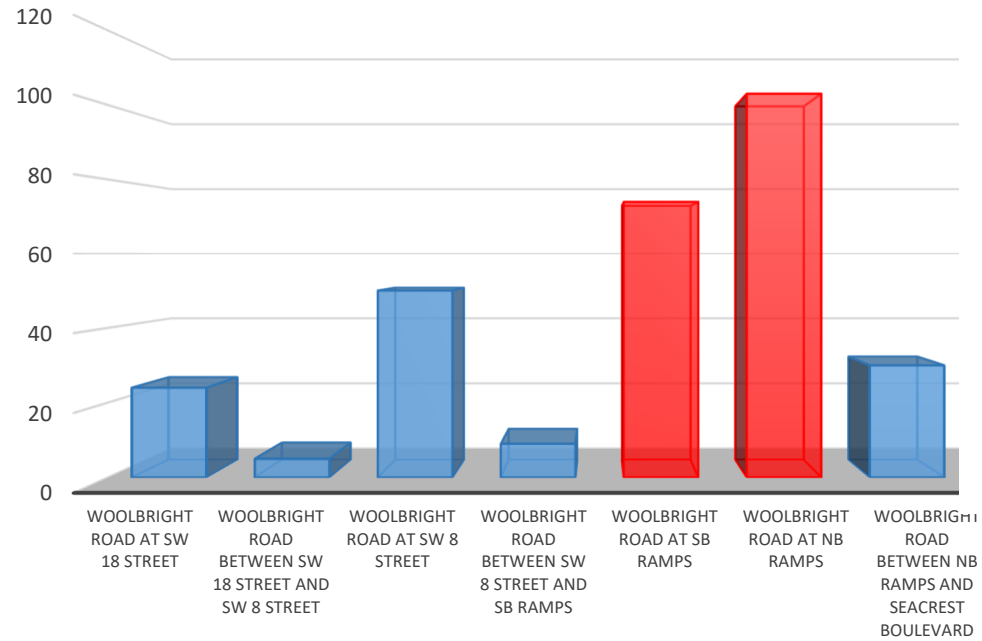


Existing Crash Analysis



• Woolbright Road

- Five years of crash data: 2013 to 2017
- 306 crashes in total
- 212 injuries and 3 fatalities
- Prominent Crash Types:
 - Rear End (43.3%)
 - Angle (26.7%)



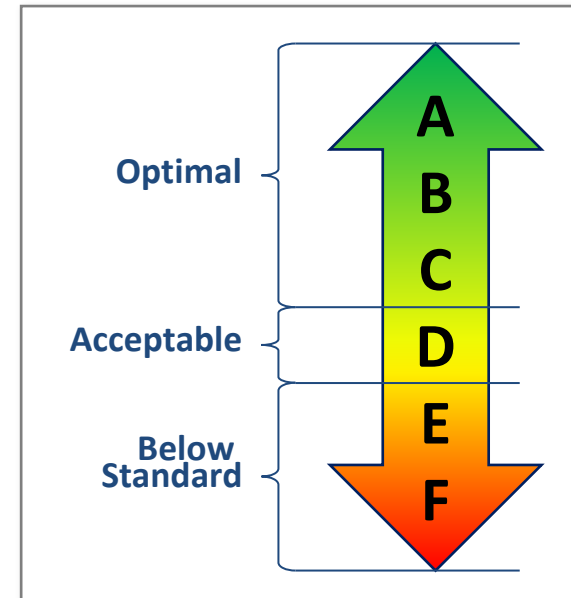
Legend

- Major Crash Clusters
- Fatal Crash Location



What is Level of Service?

- Level of Service (LOS)
 - A standard measurement, based on vehicle delay and speed, which reflects the relative ease of traffic flow on a scale of A to F
- LOS “A”: free-flow traffic
- LOS “F”: highly congested traffic conditions

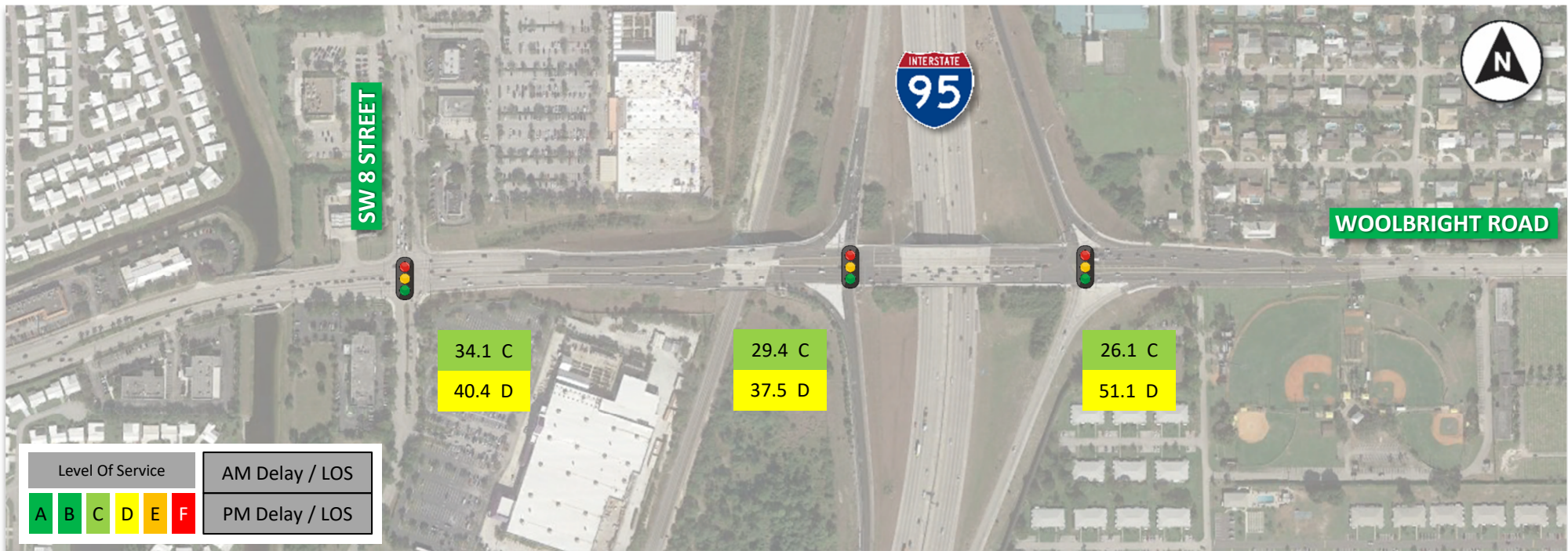
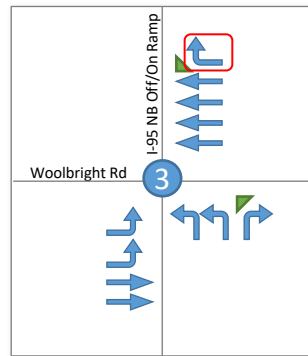
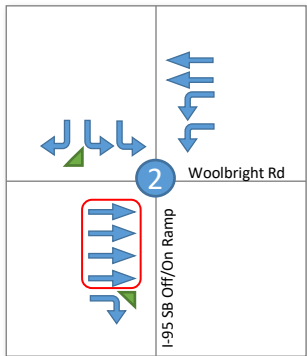
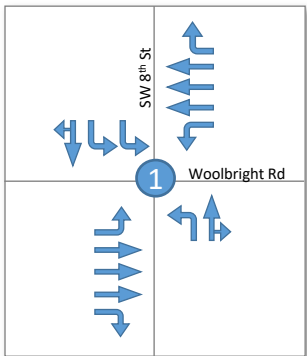




Existing Year Conditions

Lane Configuration, Delay and LOS

- Existing Lane/Movement
- Proposed Improvements
- LOS F Movements

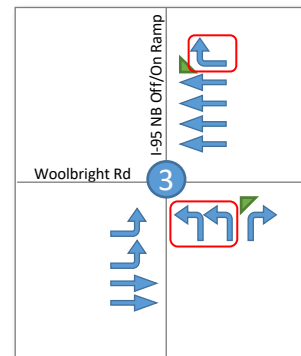
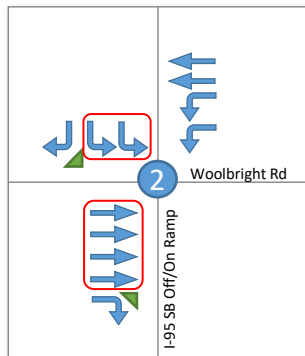
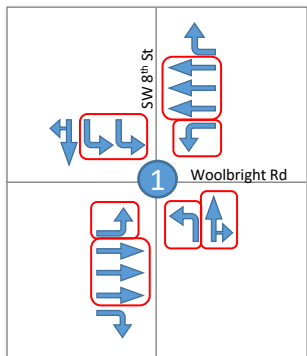




No Action 2045 Year Conditions

Lane Configuration, Delay and LOS

- Existing Lane/Movement
- Proposed Improvements
- LOS F Movements





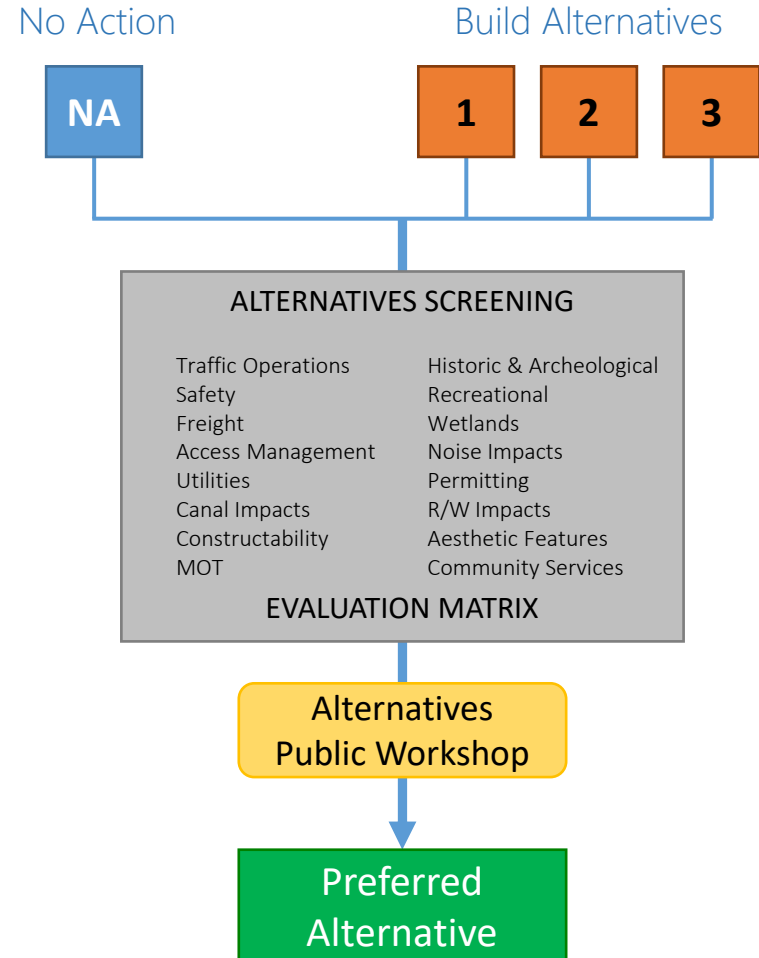
Alternatives Analysis

No Action

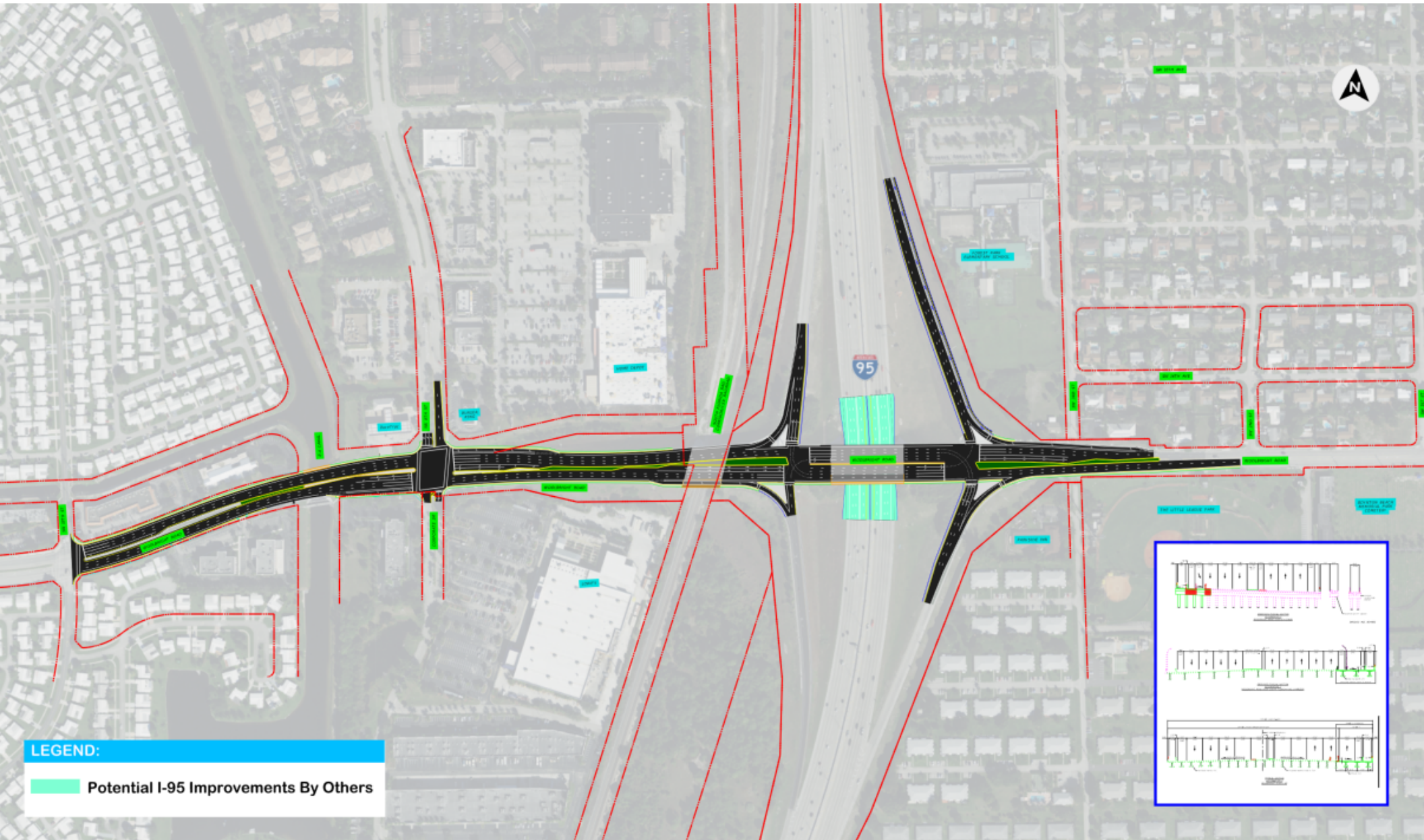
Build Alternatives

- Long Term
- Meet Purpose and Need
- Ultimate Improvements
- Open to Traffic in 8-10 Years

Alternatives Evaluation Process

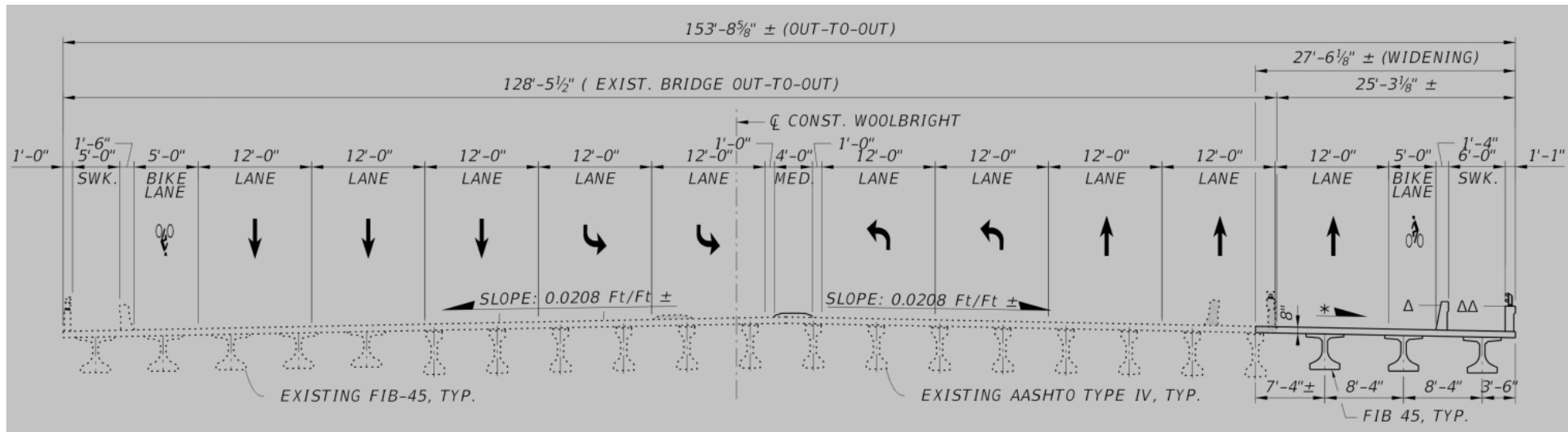


Alternative 1 | Tight Diamond Interchange (TDI)

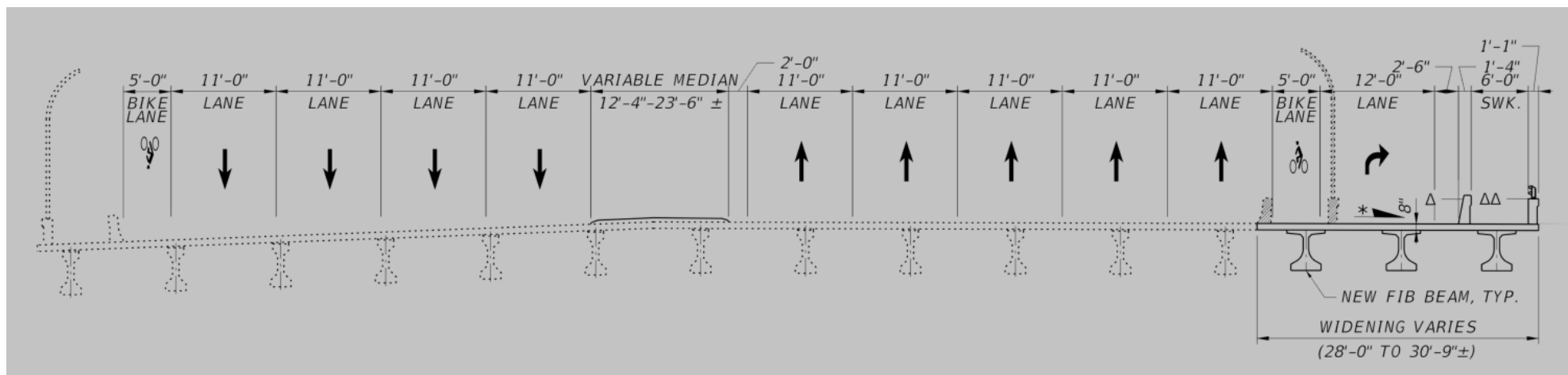


LEGEND:
Potential I-95 Improvements By Others

Alternative 1 | Tight Diamond Interchange (TDI)

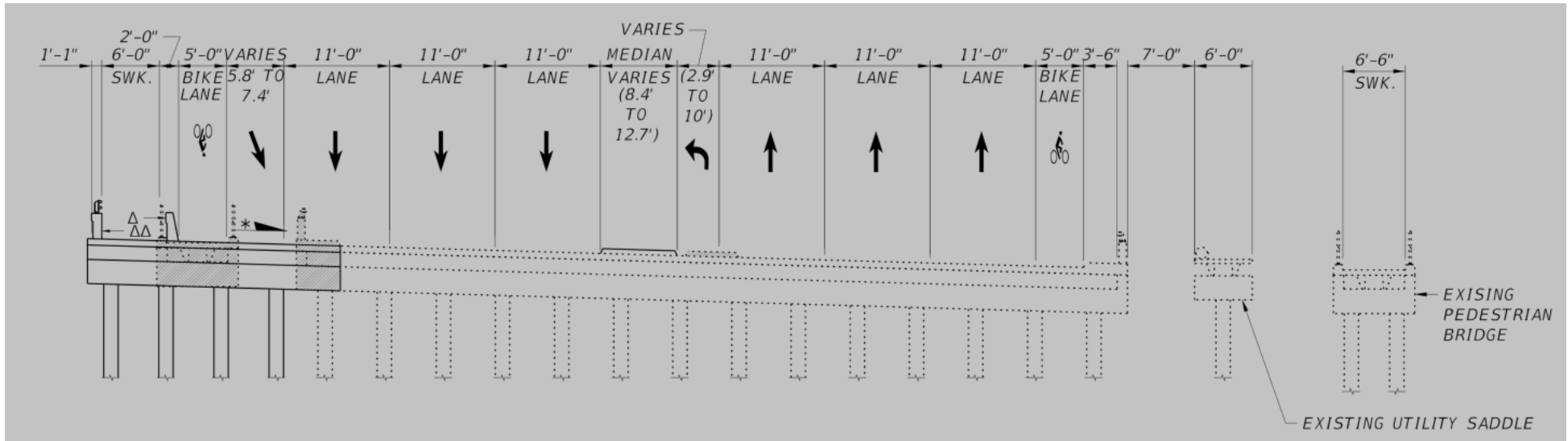


Woolbright Road over I-95



Woolbright Road over SFRC

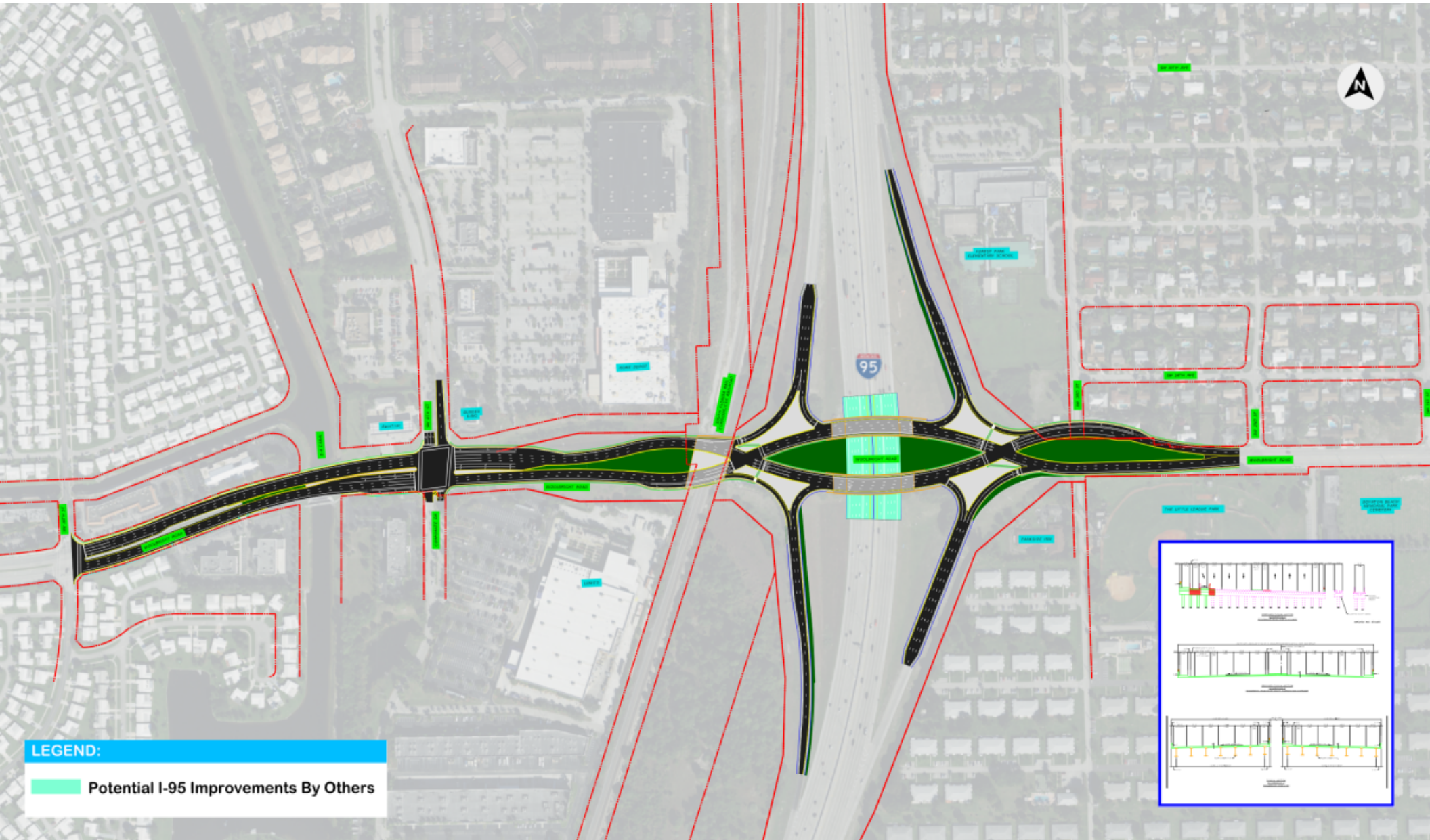
Alternative 1 | Tight Diamond Interchange (TDI)



Woolbright Road over E-4 Canal

These improvements along Woolbright Road over the E-4 Canal apply to all Build Alternatives.

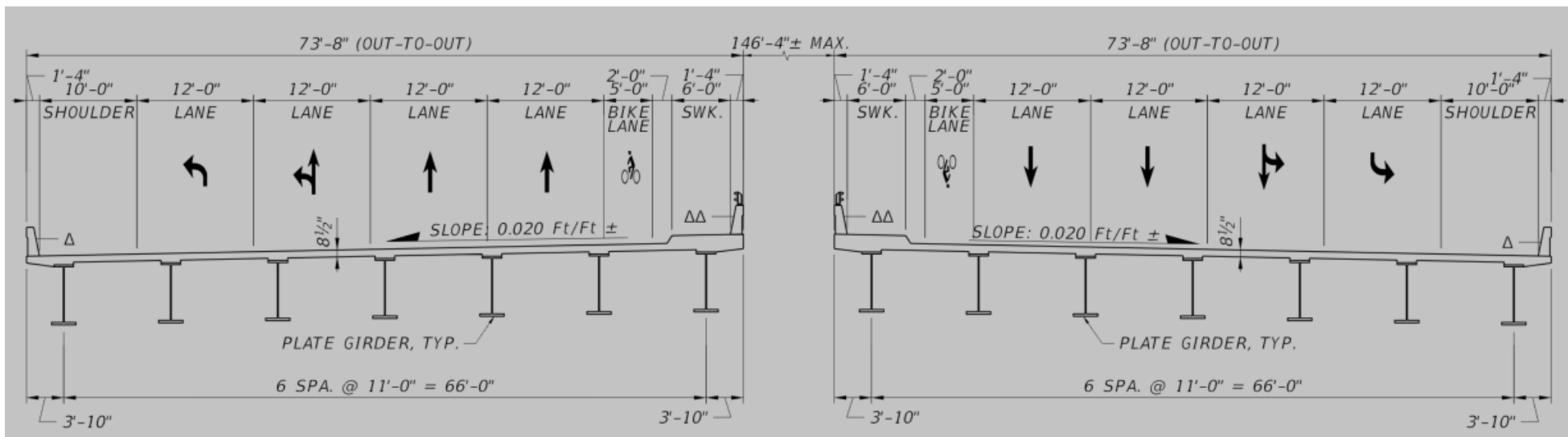
Alternative 2 | Diverging Diamond Interchange (DDI)



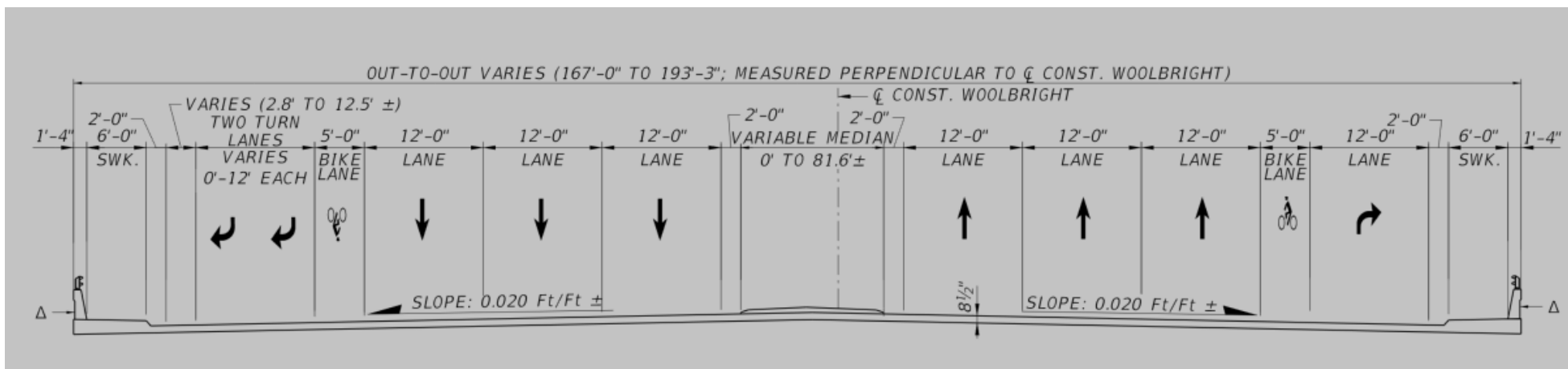
LEGEND:
Potential I-95 Improvements By Others



Alternative 2 | Diverging Diamond Interchange (DDI)

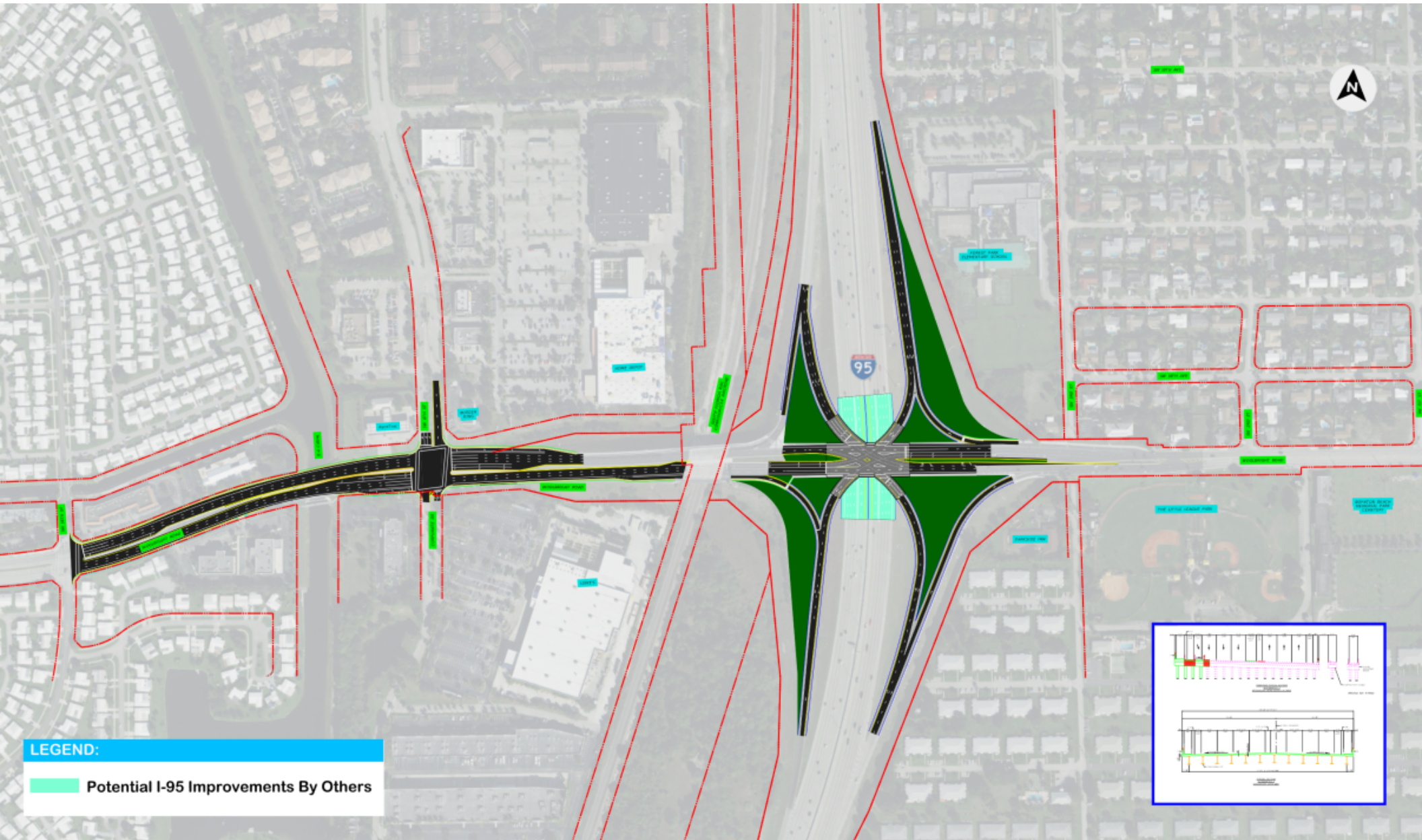


Woolbright Road over I-95

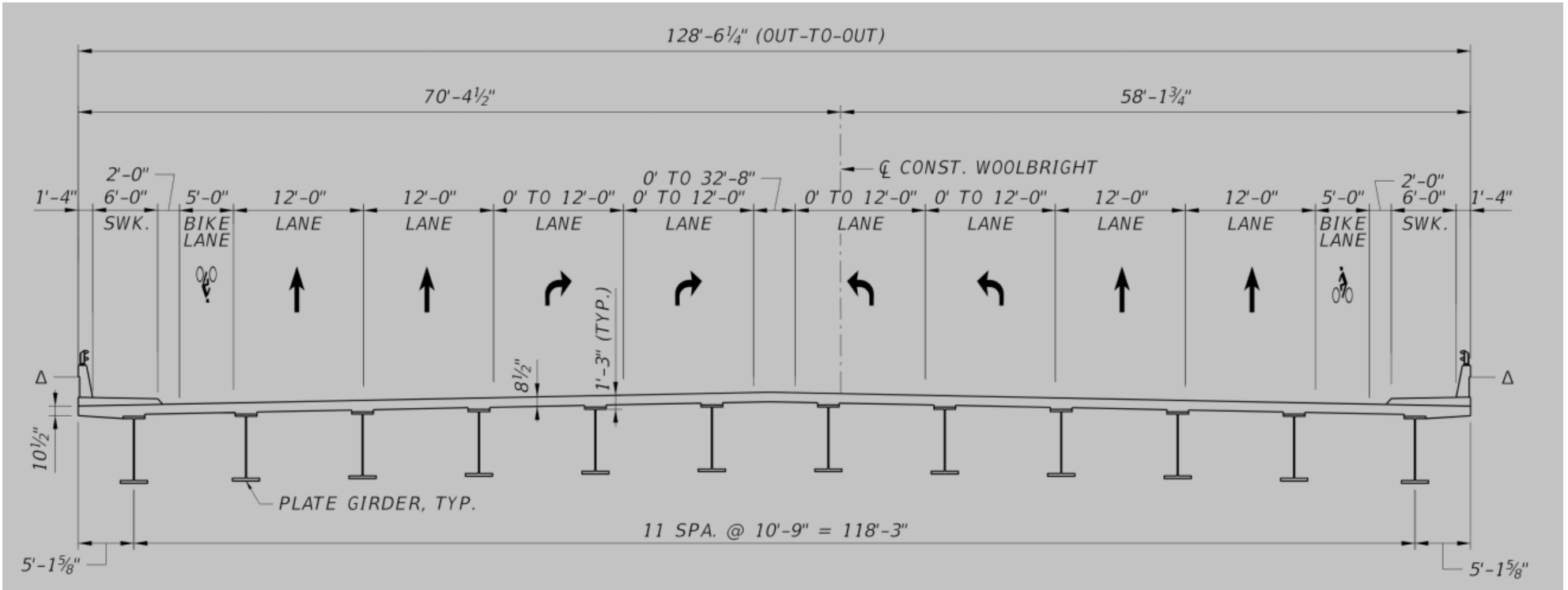


Woolbright Road over SFRC

Alternative 3 | Single Point Urban Interchange (SPUI)



Alternative 3 | Single Point Urban Interchange (SPUI)

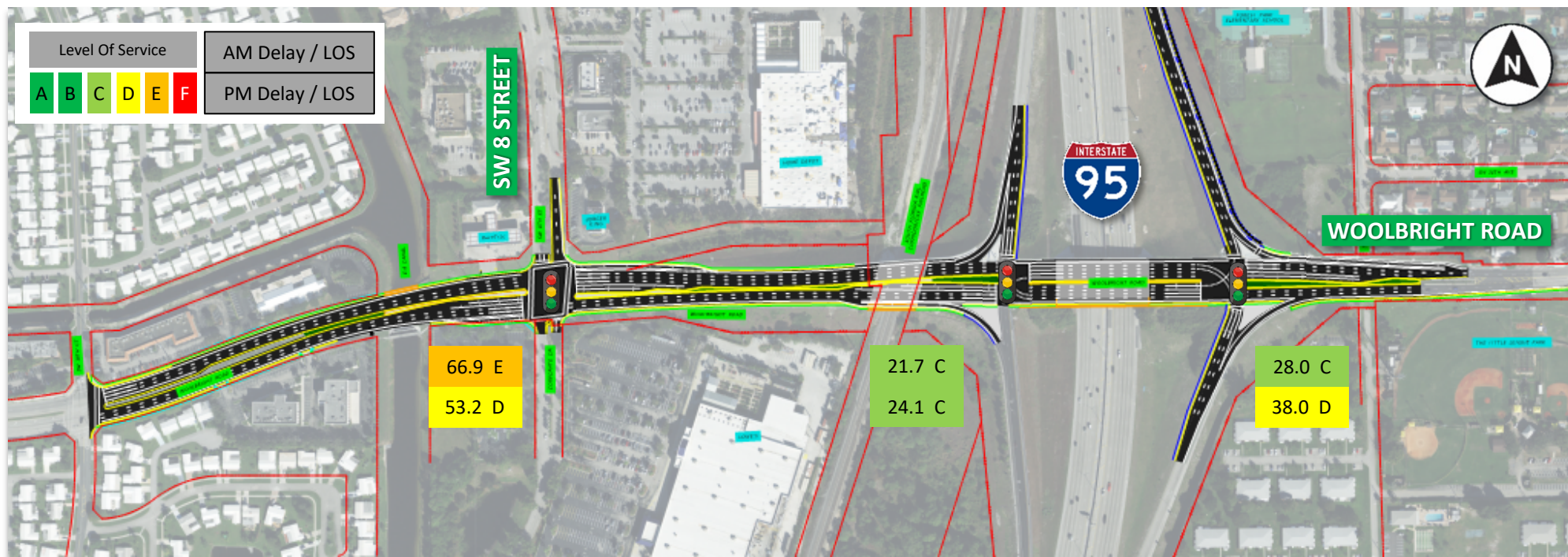
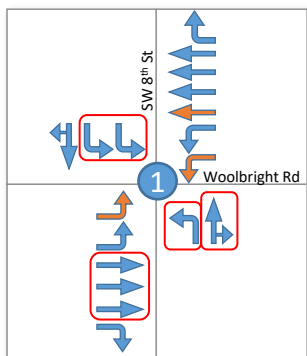
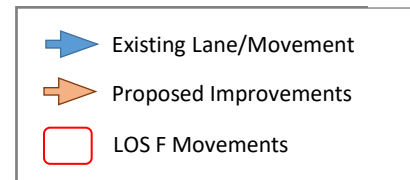


Woolbright Road over I-95



Alternative 1 – 2045 Year Conditions

Lane Configuration, Delay and LOS

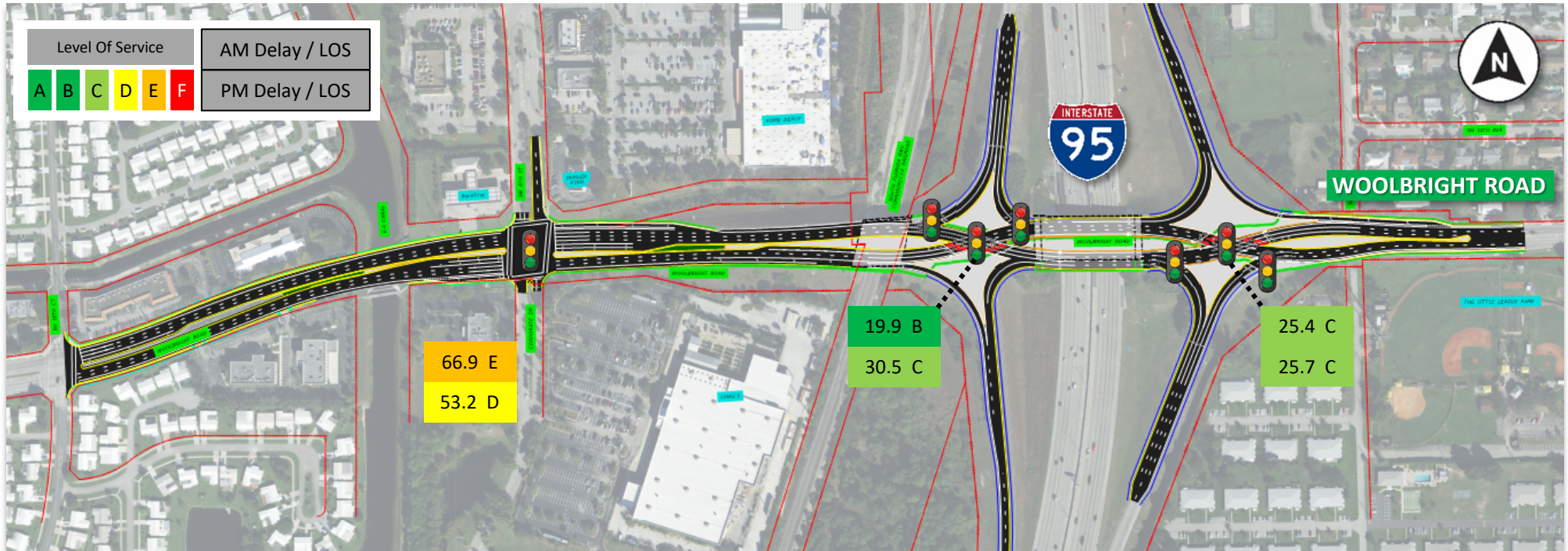
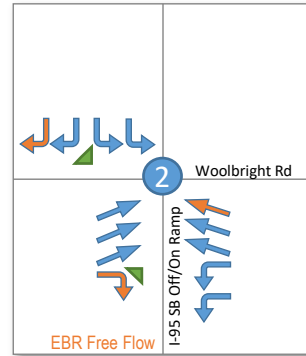
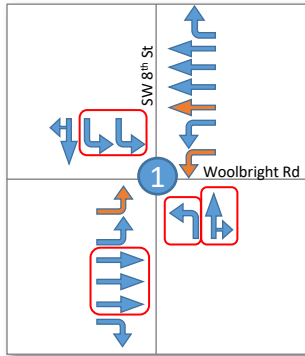




Alternative 2 – 2045 Year Conditions

Lane Configuration, Delay and LOS

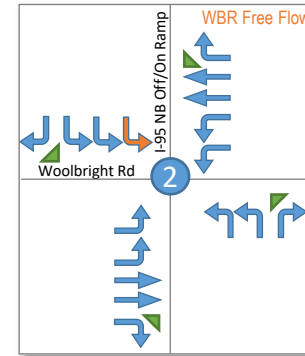
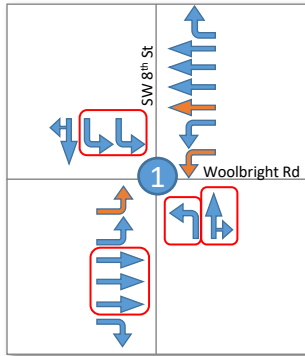
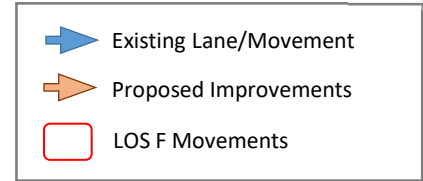
- Existing Lane/Movement
- Proposed Improvements
- LOS F Movements





Alternative 3 – 2045 Year Conditions

Lane Configuration, Delay and LOS





Drainage Analysis

- All roadway projects are required to meet FDOT and SFWMD design criteria. For this project, the primary criteria are:
 - Must not increase runoff from the site;
 - Must not reduce floodplain volume;
 - Must not increase nutrient loading;
 - Must not impact water quality.
- Drainage requirements are being met within existing R/W by modifying existing dry detention ponds and swales that ultimately discharge to the E-4 Canal.
- Modifications to the existing collection system will be required.
- Needs for additional, offsite, ponds is not anticipated.



Environmental Analysis

Protected Species and Habitat – Minimal Impacts

- Potential presence of gopher tortoise on southwest quadrant of interchange.
- The project is located within wood stork Core Foraging Area for wood stork.
- The project is located within Designated Consultation Area for scrub-jays.

Water Quality – Minimal Impacts

- E-4 Canal is a Verified Impaired Florida Water for nutrients. The project will be designed to meet state water quality and quantity requirements.
- Best management practices will be utilized during construction to control erosion, sediment release, and stormwater surface runoff to minimize adverse impacts on water resources
- The project is within the Biscayne Aquifer Streamflow and Recharge Zone. Project requires Sole Source Aquifer Impact Determination by EPA.

Social and Economic – Minimal Impacts

- Potential right of way impacts to one commercial property associated with all alternatives (partial takes).
- Potential right of way impacts to two residential properties associated with Alternative 2 (full take).
- Capacity improvements at the interchange will enhance the mobility of people and goods. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses in the area.



Environmental Analysis

Wetlands & Surface Waters – Minimal Impacts

- The initial evaluation findings indicated that there are no wetlands within 500 feet of the project. Some of the stormwater swales and ponds located within and adjacent to the right-of-way may support wetland vegetation but are components of the highway drainage system and are constructed man-made features.
- Widening of the roadway may require a partial fill of the canal.

Contaminated Sites – No Anticipated Impacts

- No reported contamination sites were identified within 0.5-mile radius of the project.

Cultural Resources – No Anticipated Impacts

- There are no anticipated impacts to any historical or archaeological sites as part of the proposed project alternatives.

Noise and Air – No Anticipated Impacts

- There are no noise and air impacts associated to any of the proposed project alternatives.

Relocation Potential – Impacts

- There are relocation potential impacts associated with Alternative 2.

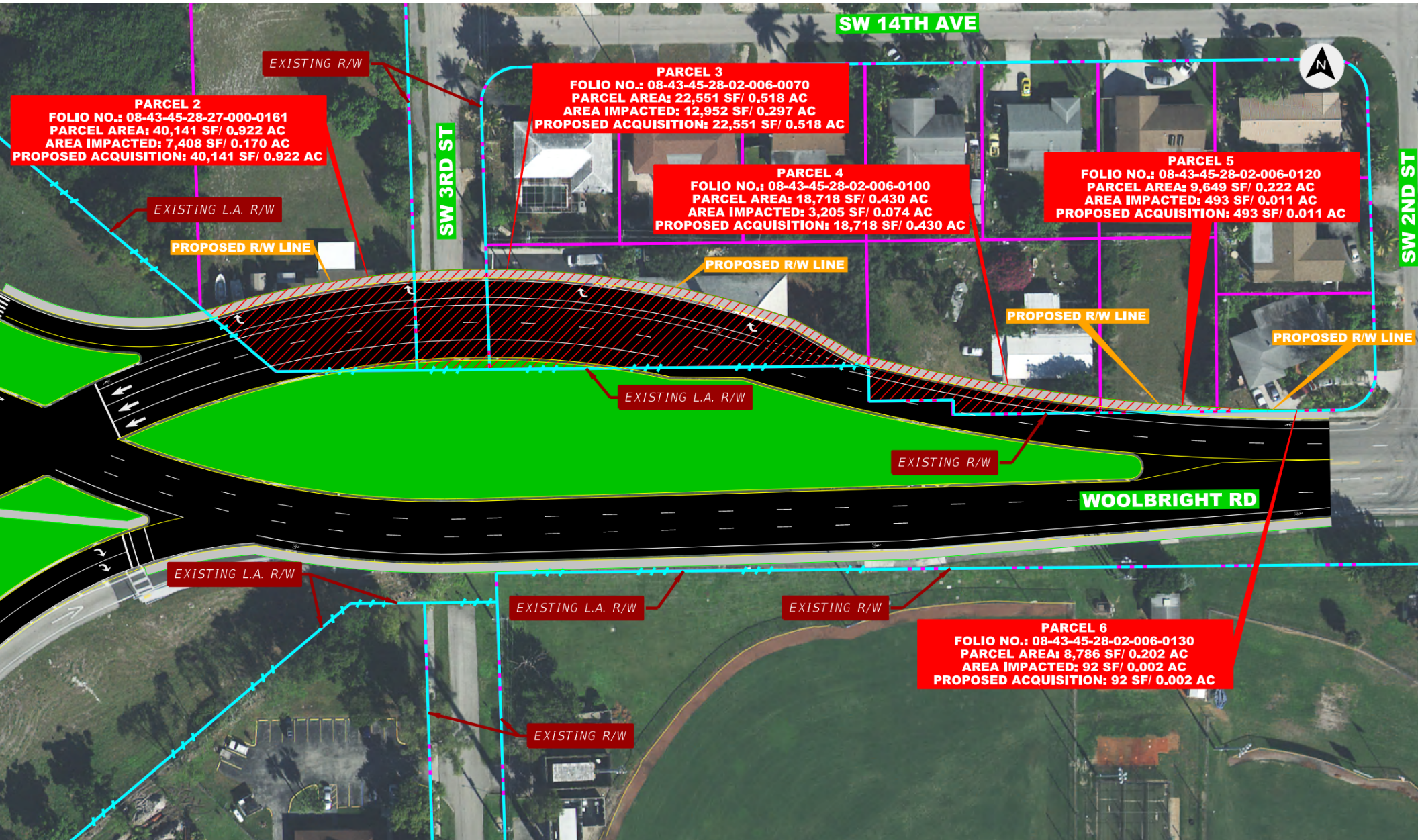


Right of Way

Preliminary Right of Way Impacts

COMPONENT	ALTERNATIVE 1 TDI	ALTERNATIVE 2 DDI	ALTERNATIVE 3 SPUI
Residential Properties	0	3	0
Business Properties	1	2	1
Vacant Land	0	1	0
TOTAL PROPERTIES IMPACTED	1	6	1
TOTAL RELOCATIONS	0	2	0

Right of Way | Alternative 2



Preliminary Cost Estimate



COMPONENT	ALTERNATIVE 1 TDI	ALTERNATIVE 2 DDI	ALTERNATIVE 3 SPUI
Roadway Construction	\$8,000,000	\$19,000,000	\$22,000,000
Engineering Design & CEI	\$2,400,000	\$5,130,000	\$5,940,000
Right of Way Acquisition	\$1,500,000	\$5,200,000	\$1,500,000
TOTAL COST	\$11,900,000	\$29,330,000	\$29,440,000

Evaluation Matrix



CRITERIA		NO ACTION	ALTERNATIVE 1 (Tight Diamond Interchange)	ALTERNATIVE 2 (Diverging Diamond Interchange)	ALTERNATIVE 3 (Single Point Urban Interchange)
TRAFFIC OPERATIONS & SAFETY	Operational Performance (Year 2045)	Does not satisfy Level of Service Target	Satisfies Level of Service Target	Satisfies Level of Service Target	Satisfies Level of Service Target
	Reduction in delay at Ramp Terminals	None	39% Reduction	39% Reduction	42% Reduction
	Reduction in queues at Ramp Terminals	None	49% Reduction	39% Reduction	30% Reduction
	Potential Crash Reduction	None	22% Crash Reduction	35% Crash Reduction	15% Crash Reduction
ENGINEERING	Meets Purpose & Need	No	Yes	Yes	Yes
	Meets Geometric Design Criteria	Yes	Yes	Yes	Yes
	Utility Impacts and Relocations	None	Low	Medium	Low
	Impacts to the SFRC Bridge	None	Widening	Widening	None
	Multimodal Improvements (Pedestrian/Bicycle/Transit)	None	Yes	Yes	Yes
	Maintenance of Traffic	N/A	Bridge over I-95 Widening and Bridge over SFRC Widening	New Bridge over I-95 and Bridge over SFRC Widening	New Bridge over I-95
	Access Modifications	None	None	None	None
	Compatibility with Future I-95 widening project	No	No	Yes	Yes
SOCIAL-ECONOMIC	Relocation Potential	None	None	2 Relocations	None
	Economic and Employment Impacts	None	None	1 Business Impact	None
	Social & Neighborhood Impacts	None	Low	Medium	Low
	Lost of Parking	None	None	None	None
PHYSICAL & NATURAL ENVIRONMENT	Protected Species and Habitat	None	3 potential species within the area	3 potential species within the area	3 potential species within the area
	Wetland & Surface Waters Impacted	None	None	None	None
	Water Quality	None	Minimal	Minimal	Minimal
	Contamination Sites Impacted	None	Minimal	Minimal	Minimal
	Cultural/Historical/Archaeological	None	None	None	None
	Noise Impacts	None	None	None	None
COST	Right-of-Way	\$0	\$1,500,000	\$5,200,000	\$1,500,000
	Construction	\$0	\$8,000,000	\$19,000,000	\$22,000,000
	Engineering Design & CEI	\$0	\$2,400,000	\$5,130,000	\$5,940,000
	Benefit Cost Ratio	0.00	5.61	3.26	1.98



Public Involvement

Past Activities:

- Agency/Public Kick-Off Meetings – May 16, 2019
- Coordination with City of Boynton Beach
- Coordination with Palm Beach TPA

Ongoing Activities:

- Online Alternatives Public Workshop – July 22, 2020
- Virtual Open House – July 20, 2020 to July 31, 2020
- Coordination with local communities
- Coordination with major stakeholders

Upcoming Activities:

- Presentations to Palm Beach County TPA
- Public Hearing – Winter 2020



SCRIPT SECTION: Public Comment



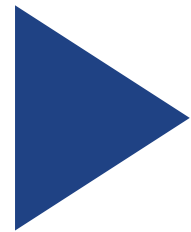
Please submit your comments by July 31, 2020



Responses to comments and questions will be provided later.



All comments and questions are part of the **Public Record**.



All registrants will receive a link to the **meeting recording**.

Thank you!
Please submit your comments



15 more minutes

by July 31, 2020



Type comments or questions in the Questions pane on the control panel.

humberto.arrieta@dot.state.fl.us



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Thank You!

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