PRELIMINARY ENGINEERING 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: February 2023

PROFESSIONAL ENGINEER CERTIFICATION

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This preliminary engineering report contains engineering information that fulfills the purpose and need for the Florida's Turnpike (SR 91) Project Development & Environment Study from north of Jupiter (Indiantown Road / SR 706) (MP 117.0) to Fort Pierce (Okeechobee Road (SR 70)) (MP 153.7) in Palm Beach, Martin and St. Lucie Counties, Florida. I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

I hereby certify that I am a registered professional engineer in the State of Florida practicing with H. W. Lochner, Inc., and that I have prepared or approved the evaluation, findings, opinions, conclusions or technical advice for this project.

[Only Sign and Seal the Final Report

Include "DRAFT" on the Cover of the Draft Report]



This item has been digitally signed and sealed by *William G. Howell, P.E.* on the date adjacent to the seal.

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TABLE OF CONTENTS

1.0 PROJECT SUMMARY 1-1
1.1 PROJECT DESCRIPTION 1-1
1.2 PURPOSE & NEED 1-3
1.3 COMMITMENTS 1-4
1.4 ALTERNATIVES ANALYSIS SUMMARY 1-5
1.4.1 Mainline Alternative 1-5
1.4.2 Interchange Alternatives 1-5
1.5 DESCRIPTION OF PREFERRED ALTERNATIVE 1-7
1.5.1 Preferred Mainline Alternative 1-7
1.5.2 Preferred Interchange Alternatives 1-8
1.6 LIST OF TECHNICAL DOCUMENTS 1-10

2.0 EXISTING CONDITIONS 2-1
2.1 ROADWAY 2-1
2.2 RIGHT-OF-WAY 2-2
2.3 ROADWAY CLASSIFICATION 2-2
2.4 ADJACENT LAND USE 2-2
2.5 ACCESS MANAGEMENT CLASSIFICATION 2-4
2.6 DESIGN AND POSTED SPEEDS 2-4
2.7 VERTICAL AND HORIZONTAL ALIGNMENT 2-4
2.7.1 Vertical Alignment 2-4
2.7.2 Horizontal Alignment 2-7
2.8 PEDESTRIAN ACCOMMODATIONS 2-10
2.9 BICYCLE FACILITIES 2-11
2.10 TRANSIT FACILITIES 2-11
2.11 PAVEMENT CONDITION 2-11
2.12 TRAFFIC VOLUMES AND OPERATIONAL CONDITIONS 2-13
2.12.1 Existing Year Traffic Analysis 2-13
2.13 INTERSECTION LAYOUT AND TRAFFIC CONTROL 2-16
2.13.1 Existing Interchanges 2-16
2.13.2 Intelligent Transportation System (ITS) 2-22
2.14 RAILROAD CROSSINGS 2-24
2.15 CRASH DATA AND SAFETY ANALYSIS 2-24
2.15.1 Crash Density 2-24

2.15.2 Crash Severity 2-28
2.15.3 Crash Types 2-29
2.15.4 Crash Ratios 2-31
2.16 DRAINAGE 2-33
2.17 SOILS AND GEOTECHNICAL DATA 2-34
2.18 UTILITIES 2-35
2.19 LIGHTING 2-41
2.19.1 Palm Beach County 2-41
2.19.2 Martin County 2-41
2.19.3 St. Lucie County 2-42
2.20 SIGNS 2-42
2.20.1 Palm Beach County 2-42
2.20.2 Martin County 2-43
2.20.3 St. Lucie County 2-43
2.21 AESTHETICS FEATURES 2-45
2.21.1 SW Martin Highway (SR 714) 2-45
2.21.2 SE Becker Road 2-45
2.21.3 SW Port St. Lucie Boulevard 2-45
2.21.4 Crosstown Parkway 2-46
2.21.5 W Midway Road 2-46
2.21.6 Okeechobee Road (SR 70) 2-46
2.22 BRIDGES AND STRUCTURES 2-47

3.0 PROJECT DESIGN CONTROLS & CRITERIA 3-1
3.1 ROADWAY CONTEXT CLASSIFICATION 3-1
3.2 DESIGN CONTROL AND CRITERIA 3-1

4.0 ALTERNATIVES ANALYSIS 4-1
4.1 PREVIOUS PLANNING STUDIES 4-1
4.2 NO-BUILD (NO-ACTION) ALTERNATIVE 4-2
4.3 TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS ALTERNATIVE 4-3
4.4 FUTURE CONDITIONS 4-3
4.5 BUILD ALTERNATIVE(S) 4-5
4.5.1 Alternative Analysis 4-5
4.5.2 Analysis Methodology 4-5
4.5.3 Analysis Summary 4-5
4.5.4 SW Martin Highway (SR 714) 4-6
4.5.5 SE Becker Road 4-10
4.5.6 SW Port St. Lucie Boulevard 4-13

4.5.7 Crosstown Parkway....4-17
4.5.8 W Midway Road....4-20
4.5.9 Okeechobee Road (SR 70)....4-23
4.6 COMPARATIVE ALTERNATIVES EVALUATION....4-26
4.6.1 Interchange Alternatives....4-27
4.7 SELECTION OF THE PREFERRED ALTERNATIVE....4-33
4.7.1 SW Martin Highway....4-33
4.7.2 SE Becker Road....4-33
4.7.3 SW Port St. Lucie Boulevard....4-33
4.7.4 Crosstown Parkway....4-33
4.7.5 W Midway Road....4-34
4.7.6 Okeechobee Road (SR 70)....4-34
5.0 PROJECT COORDINATION & PUBLIC INVOLVEMENT....5-1
5.1 AGENCY COORDINATION....5-1
5.1.1 Efficient Transportation Decision Making....5-1
5.1.2 Advance Notification Package....5-1
5.1.3 Public Involvement Plan....5-1
5.1.4 Government Agencies Coordination....5-2
5.1.5 Community Coordination....5-3
5.2 PUBLIC INVOLVEMENT....5-3
5.2.1 Newsletter....5-3
5.2.2 Public Information Meeting(s)....5-3
5.2.3 Public Hearing....5-4
5.2.4 Comments and Coordination....5-5
6.0 DESIGN FEATURES OF THE PREFERRED ALTERNATIVE....6-1
6.1 ENGINEERING DETAILS OF THE PREFERRED ALTERNATIVE....6-1
6.1.1 Typical Sections....6-1
6.1.2 Mainline....6-1
6.1.3 Bridges and Structures....6-2
6.1.4 Right-of-way and Relocations....6-4
6.1.5 Horizontal and Vertical Geometry....6-6
6.1.6 Bicycle and Pedestrian Accommodations....6-8
6.1.7 Multi-Modal Accommodations....6-8
6.1.8 Access Management....6-9
6.1.9 Intersection and Interchange Concepts....6-10
6.1.10 Intelligent Transportation System and TSMO Strategies....6-23
6.1.11 Utilities....6-23

6.1.12 Drainage and Stormwater Management Facilities 6-31
6.1.13 Floodplain Analysis 6-32
6.1.14 Transportation Management Plan 6-34
6.1.15 Special Features 6-38
6.1.16 Design Variations and Design Exceptions 6-39
6.1.17 Cost Estimates 6-40
6.1.18 Cost Risk and Value Engineering 6-41
6.2 SUMMARY OF ENVIRONMENTAL IMPACTS OF THE PREFERRED ALTERNATIVE 6-44
6.2.1 Future Land Use 6-44
6.2.2 Recreational Areas 6-44
6.2.3 Cultural Resources 6-46
6.2.4 Wetlands 6-47
6.2.5 Protected Species and Habitat 6-49
6.2.6 Essential Fish Habitat 6-51
6.2.7 Highway Traffic Noise 6-52
6.2.8 Contamination 6-56

LIST OF FIGURES

Figure **Page Number**

Figure 1-1: Project Location Map 1-2
Figure 1-2: Mainline – Preferred Typical Section 1-8
Figure 2-1: Existing Florida's Turnpike Mainline Typical Section 2-1
Figure 2-2: Existing Thomas B. Manuel Bridge Typical Section 2-2
Figure 2-3: SW Kanner Highway to SW Martin Highway (SR 714) Existing Intersection Configuration 2-18
Figure 2-4: SE Becker Road to SW Port St. Lucie Boulevard Existing Intersection Configuration 2-19
Figure 2-5: Crosstown Parkway to St. Lucie West Boulevard Existing Intersection Configuration 2-20
Figure 2-6: W Midway Road to Okeechobee Road (SR 70) Existing Intersection Configuration 2-21
Figure 2-7: Crash Density along Northbound Florida's Turnpike (SR 91) 2-25
Figure 2-8: Crash Density along Southbound Florida's Turnpike (SR 91) 2-26
Figure 2-9: Crash Densities at Major Intersections within the Project Study Area 2-27
Figure 4-1: SW Martin Highway (SR 714) Lane Configuration – Alternative 7B 4-8
Figure 4-2: SW Martin Highway (SR 714) Lane Configuration – Alternative 7S 4-9
Figure 4-3: SE Becker Road Lane Configuration – Alternative 1 4-11
Figure 4-4: SE Becker Road Lane Configuration – Alternative 3 4-12
Figure 4-5: SW Port St. Lucie Boulevard Lane Configuration – Alternative 1 4-15
Figure 4-6: SW Port St. Lucie Boulevard Lane Configuration – Alternative 2 4-16
Figure 4-7: Crosstown Parkway Lane Configuration – Alternative 3 4-18
Figure 4-8: Crosstown Parkway Lane Configuration – Alternative 4 4-19
Figure 4-9: W Midway Road Lane Configuration – Alternative 1 4-21
Figure 4-10: W Midway Road Lane Configuration – Alternative 4 4-22
Figure 4-11: Okeechobee Road (SR 70) Lane Configuration – Alternative 1 4-24
Figure 4-12: Okeechobee Road (SR 70) Lane Configuration – Alternative 4 4-25
Figure 6-1: Proposed Mainline Typical Section 6-2
Figure 6-2: Proposed Thomas B. Manuel Bridge Typical Section 6-2
Figure 6-3: SW Martin Highway (SR 714) – Preferred Interchange Alternative 6-12
Figure 6-4: SE Becker Road – Preferred Interchange Alternative 6-14
Figure 6-5: SW Port St. Lucie Boulevard – Preferred Interchange Alternative 6-16
Figure 6-6: Crosstown Parkway – Preferred Interchange Alternative 6-18
Figure 6-7: W Midway Road – Preferred Interchange Alternative 6-20
Figure 6-8: Okeechobee Road (SR 70) – Preferred Interchange Alternative 6-22

LIST OF TABLES

Table **Page Number**

Table 1-1: Interchange Alternatives Tier Evaluation Matrix 1-7
Table 1-2: Preferred Interchange Alternatives 1-8
Table 1-3: Technical Documents 1-10
Table 2-1: Existing Land Use 2-3
Table 2-2: List of Vertical Curves 2-4
Table 2-3: List of Horizontal Curves 2-7
Table 2-4: Existing Pavement Cracking and Ride Ratings (2020) 2-12
Table 2-5: Existing Mainline Traffic Volumes (2016) 2-14
Table 2-6: Existing Ramp Traffic Volumes (2016) 2-14
Table 2-7: Existing (2016) Peak Hour HCS Freeway Segment Level of Service 2-15
Table 2-8: Existing (2016) Peak Hour HCS Ramp Capacity Analysis 2-16
Table 2-9: Crash Severity along Florida's Turnpike (SR 91) 2-28
Table 2-10: Crash Severity at Study Intersections 2-29
Table 2-11: Crash Types along Florida's Turnpike (SR 91) 2-30
Table 2-12: Crash Type at Study Intersections 2-31
Table 2-13: Bicycle and Pedestrian Related Crashes at Study Intersections (2012 – 2016) 2-31
Table 2-14: Crash Ratios along Florida's Turnpike (SR 91) 2-32
Table 2-15: Crash Ratios at Study Intersections 2-33
Table 2-16: Utility Agency Owners 2-35
Table 2-17: Existing Utility Information 2-37
Table 2-18: Existing Sign Inventory 2-44
Table 2-19: Existing Bridges 2-48
Table 2-20: Existing Bridge Culverts 2-49
Table 3-1: Design Criteria 3-1
Table 4-1: Future Mainline Traffic Volumes (2045) 4-4
Table 4-2: Future Ramp Traffic Volumes (2045) 4-4
Table 5-1: Government Agencies Coordination Meetings 5-2
Table 6-1: Mainline Bridges 6-3
Table 6-2: Overpass Bridges 6-4
Table 6-3: Proposed Right-of-way Impacts 6-5
Table 6-4: Preliminary Right-of-way Cost Estimate 6-5
Table 6-5: Potential Residential Relocations 6-6
Table 6-6: Potential Business Relocations 6-6

Table 6-7: Proposed Horizontal Alignment 6-6
Table 6-8: Preferred Interchange Alternatives 6-10
Table 6-9: Build Impacts & Relocation Cost Estimates 6-24
Table 6-10: Preferred Pond Alternatives 6-32
Table 6-11: Mainline Floodplain Encroachment Estimates 6-33
Table 6-12: Interchange Floodplain Encroachment Estimates 6-33
Table 6-13: Potentially Feasible and Reasonable Noise Barrier Locations 6-39
Table 6-14: Proposed Design Exceptions and Variations 6-40
Table 6-15: Estimated Total Project Costs 6-41
Table 6-16: CRAVE Recommendations 6-42
Table 6-17: Preferred Alternative Wetland and Other Surface Water Impacts 6-48
Table 6-18: Estimated UMAM Functional Loss from Wetland and Natural Other Surface Water Impacts 6-49
Table 6-19: Federal Protected Species Effect Determinations 6-50
Table 6-20: State Protected Species Effect Determinations 6-50
Table 6-21: Estimated Essential Fish Habitat Impacts 6-52
Table 6-22: Potentially Feasible and Reasonable Noise Barrier Evaluation Summary 6-54
Table 6-23: Summary of Risk Ratings - Mainline 6-56
Table 6-24: Summary of Risk Ratings – Ponds 6-56

APPENDICES

Appendix A	Preferred Alternative Concept Plans
Appendix B	Long Range Estimate (LRE)
Appendix C	Project Traffic Forecast Memorandum
Appendix D	Interchange Feasibility Technical Memorandum
Appendix E	Recommendation of Preferred Alternative Memorandum
Appendix F	Typical Section Package

1.0 PROJECT SUMMARY

1.1 Project Description

Florida's Turnpike Enterprise (FTE) conducted a Project Development and Environment (PD&E) study to evaluate capacity improvements to the existing Florida's Turnpike (State Road (SR) 91) corridor in Palm Beach, Martin and St. Lucie Counties, Florida. The project limits extend from north of Jupiter (Indiantown Road / SR 706) 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 from four to eight lanes by adding two general toll lanes in each direction.

Currently, Florida's Turnpike (SR 91 or Turnpike) is a four-lane limited access toll facility. The interchange at Jupiter (Indiantown Road / SR 706) at MP 116 is not included in this study. The interchange of Turnpike and SW Martin Highway (SR 714) (MP 134.6) is the only exit in 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 second at SW Port St. Lucie Boulevard / SR 716 (MP 143.1). The Port St. Lucie - Fort Pierce Service Plaza is at MP 145. The northernmost interchange is at Okeechobee Road (SR 70) (MP 153.2) near Fort Pierce in St. Lucie County.

Numerous bridge structures will need to be widened or reconstructed along with the roadway. The project corridor includes crossings of the Loxahatchee River and St. Lucie Canal. Reconfiguration of existing interchanges and 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).

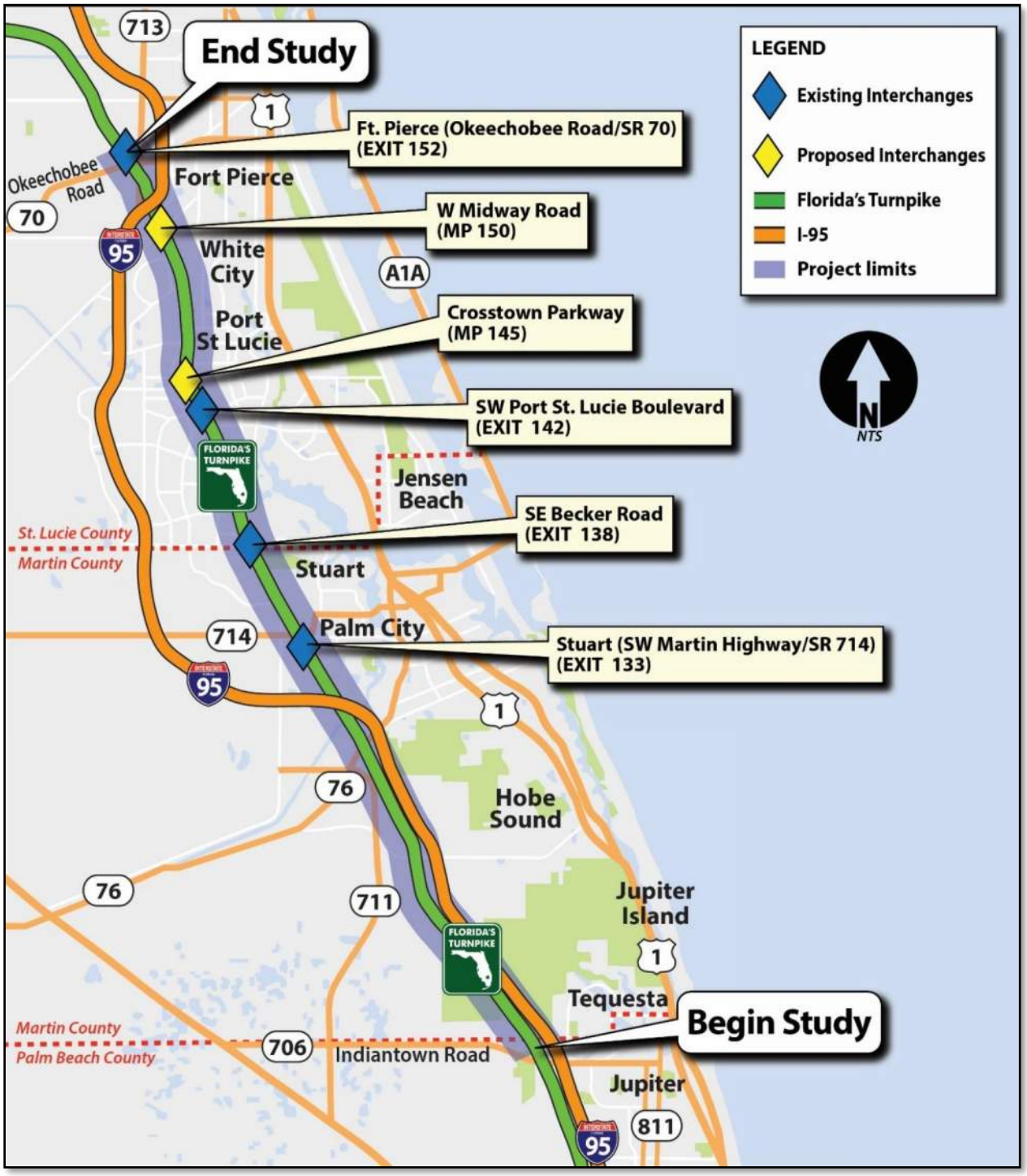


Figure 1-1: Project Location Map

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 have been 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 the Turnpike mainline 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 employment. The Turnpike 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 year 2045, which represents a 26.3% increase; the population in St. Lucie County is expected to increase by 35.6% by year 2045 to nearly 410,000; and the population in Martin County is expected to increase by 22.7% by year 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 (Martin, St. Lucie and Indian River Counties) is expected to add an additional 104,103 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 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, 135 crashes involved trucks, 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. 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%). 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 the study corridor are identified as "critical segments with highest vehicle 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 Commitments

Florida's Turnpike Enterprise (FTE) is committed to the following measures to minimize impacts to the natural environment:

- If protected plant species 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 provide 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.

- Florida's Turnpike Enterprise will continue to coordinate and partner with St. Lucie County on:
    - the design and construction of the new W Midway Road interchange, including the replacement of the existing W Midway Road bridge over Florida's Turnpike and proposed on- and off-ramps associated with this interchange.
    - the design and construction of the new proposed Florida's Turnpike bridge over Glades Cut Off Road, including ensuring the new proposed structure will adequately span St Lucie County's proposed improvements to Glades Cut Off Road.

- 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 March 2022, contingent upon the following conditions during future Design phases:

    - Final recommendations on the construction of abatement measures is 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.

1.4 Alternatives Analysis Summary

1.4.1 Mainline Alternative

This PD&E study involves the widening of the Turnpike 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. Only one roadway typical section was deemed feasible in order to avoid substantial costs associated with impacting Florida Gas Transmission (FGT) pipelines located on the east side of the roadway, and hence a western widening was selected as the preferred alternative.

1.4.2 Interchange Alternatives

In addition to proposed operational improvement alternatives at the four existing interchange locations at 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 proposed interchange locations are at Crosstown Parkway (MP 145) and W Midway Road (MP 150). The *Interchange Feasibility Technical*

Memorandum – March 2020 prepared for this project provides more detail as to the development of alternatives for these two new proposed interchange locations.

As part of the selection of two new proposed interchange locations, a total of four alternative locations were analyzed based on specific criteria. There were three categories and 16 design parameters evaluated for each alternative analysis. The categories included: engineering; environmental and community; and cost considerations. The design parameters included: traffic operations, local road impacts, overall interchange performance, floodplain and wetland impacts, potential residential and business relocations, right-of-way and FGT impacts, right-of-way and construction costs, and benefit/cost (B/C) ratio. The design parameters were distributed among the categories as follows: engineering (7 parameters); environmental and community (5 parameters); and cost (4 parameters).

As part of a Tier 1 analysis, a total of 18 potential interchange alternatives were evaluated at the four alternative interchange locations. The interchange alternatives considered at the four alternative interchange locations included:

- Five full interchange alternatives at SW Kanner Highway (MP 130)
- Seven partial/full interchange alternatives at Crosstown Parkway (MP 145)
- Two partial interchange alternatives at St. Lucie West Boulevard (MP 146)
- Four full interchange alternatives at W Midway Road (MP 150)

Only 11 of the initial 18 alternatives were considered for further evaluation as part of the Tier 2 analysis, with no alternatives being considered further for the SW Kanner Highway and St. Lucie West Boulevard locations. At these two locations, the PD&E study will consider them as crossroads with no direct connection to the Turnpike. The design intent is for the existing overpass bridges and roadway approaches at these two locations to be reconstructed as part of this PD&E study.

The remaining 11 interchange alternatives at the remaining two interchange locations were carried forward into the Tier 2 analysis. These two interchange locations included:

- Seven partial/full interchange alternatives at Crosstown Parkway (MP 145)
- Four full interchange alternatives at W Midway Road (MP 150)

Of these 11 alternatives, seven were eliminated from further evaluation, while four were carried forward into the Tier 3 analysis; two alternatives at each of the two alternative interchange locations. Refer to **Table 1-1** for the Interchange Alternatives Tier Evaluation Matrix.

Table 1-1: Interchange Alternatives Tier Evaluation Matrix

Interchange Location	Tier 1	Tier 2	Tier 3
SW Kanner Highway (MP 130.4)			
Alternative 1 (F)	X		
Alternative 2 (F)	X		
Alternative 3 (F)	X		
Alternative 4 (F)	X		
Alternative 5 (F)	X		
Crosstown Parkway (MP 144.7)			
Alternative 1 (P)	A	X	
Alternative 2 (P)	A	X	
Alternative 3 (P)	A	A	A
Alternative 4 (P)	A	A	A
Alternative 5 (F)	A	X	
Alternative 6 (F)	A	X	
Alternative 7 (F)	A	X	
St. Lucie West Boulevard (MP 146.3)			
Alternative 1 (P)	X		
Alternative 2 (P)	X		
W Midway Road (MP 150.4)			
Alternative 1 (F)	A	A	A
Alternative 2 (F)	A	X	
Alternative 3 (F)	A	X	
Alternative 4 (F)	A	A	A
Total Alternatives	**18**	**11**	**4**

A = Alternative Advanced
X = Alternative Eliminated
P = Partial Interchange
F = Full Interchange

**Information extracted from the Interchange Feasibility Technical Memorandum, March 2020.*

As part of the Tier 3 evaluation, all four remaining interchange alternatives were analyzed based on the specific criteria mentioned previously. Each design parameter was weighted and assigned a score between 1 and 10, with 1 being the worst score and 10 being the best score. The scores were combined to reflect a total score, and a ranking of 1 or 2 was assigned based on the total score. A ranking of 1 reflects the preferred alternative for the interchange location under consideration.

1.5 Description of Preferred Alternative

1.5.1 Preferred Mainline Alternative

The preferred alternative for Florida's Turnpike (SR 91) includes widening the existing four-lane divided typical section to an eight-lane divided typical section. The widening will include adding two general toll lanes in each direction of travel. Due to the presence of Florida Gas Transmission (FGT) buried utilities on the east side of the roadway, all of the proposed widening will occur to the west of the existing Turnpike roadway. 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 width for the proposed roadway improvement from southbound outside edge of shoulder to

northbound outside edge of shoulder is 146 feet. The proposed mainline improvements fall within the available limited access right-of-way and do not require right-of-way acquisition. However, right-of-way acquisition will be required for interchange improvements and for offsite stormwater ponds and floodplain compensation sites. The Turnpike mainline preferred typical section is provided below in **Figure 1-2.**

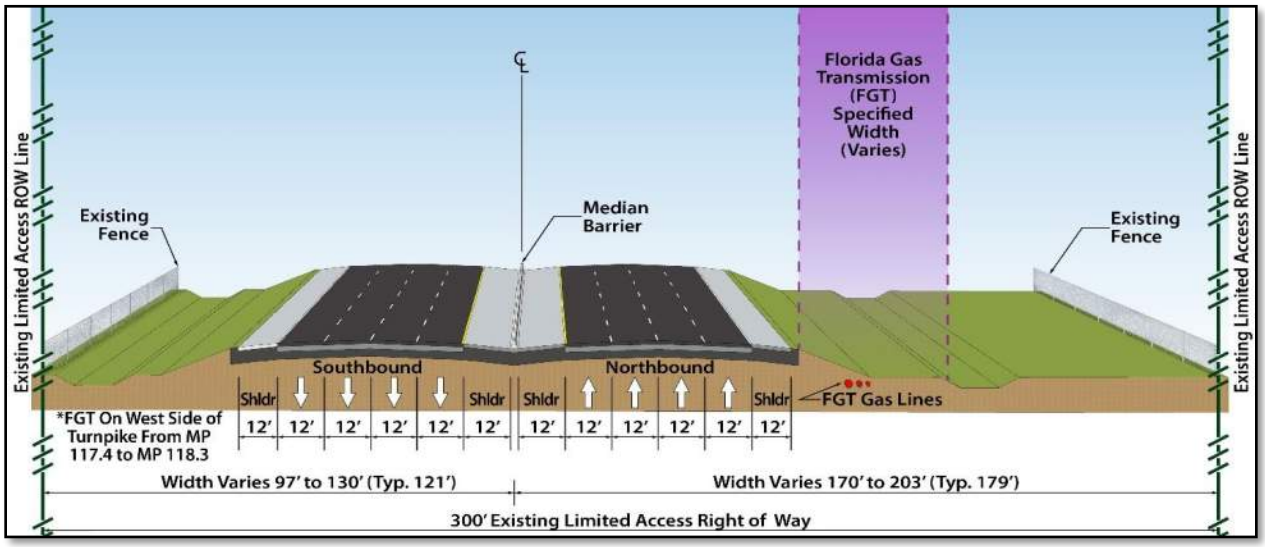


Figure 1-2: Mainline – Preferred Typical Section

1.5.2 Preferred Interchange Alternatives

Two interchange alternatives were evaluated for each of the six interchange locations; four existing and two new proposed interchanges. A brief description, detailing the selection of each respective preferred interchange alternative is provided below. For a detailed description of each preferred interchange alternative, refer to *Section 6.1.9* of this *Preliminary Engineering Report.* Refer to **Table 1-2** for a summary of the preferred interchange alternatives for the four existing interchanges and the two proposed interchanges.

Table 1-2: 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

1.5.2.1 SW Martin Highway (SR 714)

For SW Martin Highway, Alternatives 7B and 7S were evaluated. While both alternatives proposed to reconfigure the existing interchange, Alternative 7B scored equal to or better in most evaluation categories and was markedly less expensive and had fewer right-of-way impacts than Alternative 7S**. As a result, Alternative 7B was recommended as the preferred interchange alternative for SW Martin Highway (SR 714).**

1.5.2.2 SE Becker Road

For SE Becker Road, Alternatives 1 and 3 were evaluated. While both alternatives proposed to reconfigure the existing interchange and provided acceptable operating conditions, construction and right-of-way costs were markedly less for Alternative 1. Alternative 1 also provides better operating conditions at the intersection of SE Becker Road and SW Bradshaw Circle. **Alternative 1 was recommended as the preferred interchange alternative for SE Becker Road.**

1.5.2.3 SW Port St. Lucie Boulevard

For SW Port St. Lucie Boulevard, Alternatives 1 and 2 were evaluated. Both alternatives proposed reconfiguring the existing interchange. Alternative 1 was found to have a more complicated road to bridge connection where the northbound Turnpike off-ramp connects to the SW Port St Lucie Boulevard overpass bridge. Alternative 1, also has more severe impacts to FGT, which translates into higher relocation costs. **Alternative 2 was recommended as the preferred interchange alternative for SW Port St. Lucie Boulevard.**

1.5.2.4 Crosstown Parkway

For Crosstown Parkway, Alternatives 3 and 4 were evaluated. While both alternatives proposed to construct a new southbound on/northbound off partial interchange, with Alternative 4 the SW Bayshore Boulevard and Crosstown Parkway intersection operated at a Level of Service (LOS) F in the PM peak period. The potential for queues on the ramp spilling back into the mainline was also greater with Alternative 4 due to the shorter ramp lengths. Right-of-way costs, parcel impacts, and business and residential relocations are substantially more severe with Alternative 4. **Alternative 3 was recommended as the preferred interchange alternative for Crosstown Parkway.**

1.5.2.5 W Midway Road

For W Midway Road, Alternatives 1 and 4 were evaluated. Both alternatives proposed construction of a new full interchange; however, Alternative 1 was less expensive and had less right-of-way impacts than Alternative 4 but had more wetland impacts. Alternative 1 also has strong local support. **As a result, Alternative 1 was recommended as the preferred interchange alternative for W Midway Road.**

1.5.2.6 Okeechobee Road (SR 70)

For Okeechobee Road (SR 70), Alternatives 1 and 4 were evaluated. Both alternatives proposed to reconfigure the existing interchange. Alternative 4 separates the Turnpike southbound on and off movements from the Turnpike northbound on and off movements, which provides congestion relief and

minimizes backups at the S Kings Highway intersection and impacts to the operation of Okeechobee Road (SR 70). However, while both alternatives are similar in construction costs, Alternative 4 is substantially higher in right-of-way cost and parcel impacts and requires one residential relocation. **Alternative 4 was recommended as the preferred interchange alternative for Okeechobee Road (SR 70).**

1.6 List of Technical Documents

Table 1-3: Technical Documents

Technical Reports	Dated
Advance Notification Package	December 2016
Public Involvement Plan	April 2018
Public Meetings Summary Report	May 2020
Comments and Coordination Report	May 2022
Engineering	
Project Traffic Forecast Memorandum	June 2017
Safety Analysis Report	June 2019
Location Hydraulic Report	June 2021
Pond Siting Report	June 2021
Typical Section Package	June 2021
Utility Assessment Package	February 2021
Preliminary Toll Siting Technical Memorandum	June 2021
Interchange Feasibility Technical Memorandum	March 2020
Recommendation of Preferred Alternative Memorandum	February 2021
Bridge Analysis Technical Memorandum	January 2023
Geotechnical Report	April 2021
Intelligent Transportation Systems Memorandum	June 2021
Environmental	
State Environmental Impact Report	May 2022
Contamination Screening Evaluation Report	February 2021
Cultural Resource Assessment Survey	September 2020
Natural Resources Evaluation	May 2021
Noise Study Report	March 2022
Water Quality Impact Evaluation	December 2020
Sociocultural Effects Evaluation Technical Memo	February 2021
Conceptual Stage Relocation Plan	January 2022
ETDM Programming Screen Summary Report	May 2017
Aesthetic Plan Report	November 2020
Air Quality Technical Memorandum	October 2020

2.0 EXISTING CONDITIONS

2.1 Roadway

The PD&E study limits extend through three counties including Palm Beach, Martin and St. Lucie Counties. The project limits extend from north of Jupiter (Indiantown Road / SR 706) at Mile Post (MP) 117 to north of Okeechobee Road (SR 70) at MP 153.7 near Fort Pierce, a distance of approximately 36.7 miles. Within the project limits, Florida's Turnpike (SR 91) is a four-lane divided, limited access, expressway facility. The existing typical section consists of two 12-foot travel lanes with a 10-foot outside shoulder and a 10-foot and 8-foot inside shoulder in the northbound and southbound directions, respectively. The existing median width is 20 feet paved with a 2-foot median barrier wall separating the travel lanes. The overall existing roadway width from the southbound outside edge of paved shoulder to the northbound outside edge of paved shoulder is 88 feet. The existing typical section is shown in **Figure 2-1.** The Thomas B. Manuel Bridge is a major structure within the project limits and the existing bridge typical section is shown below in **Figure 2-2.**

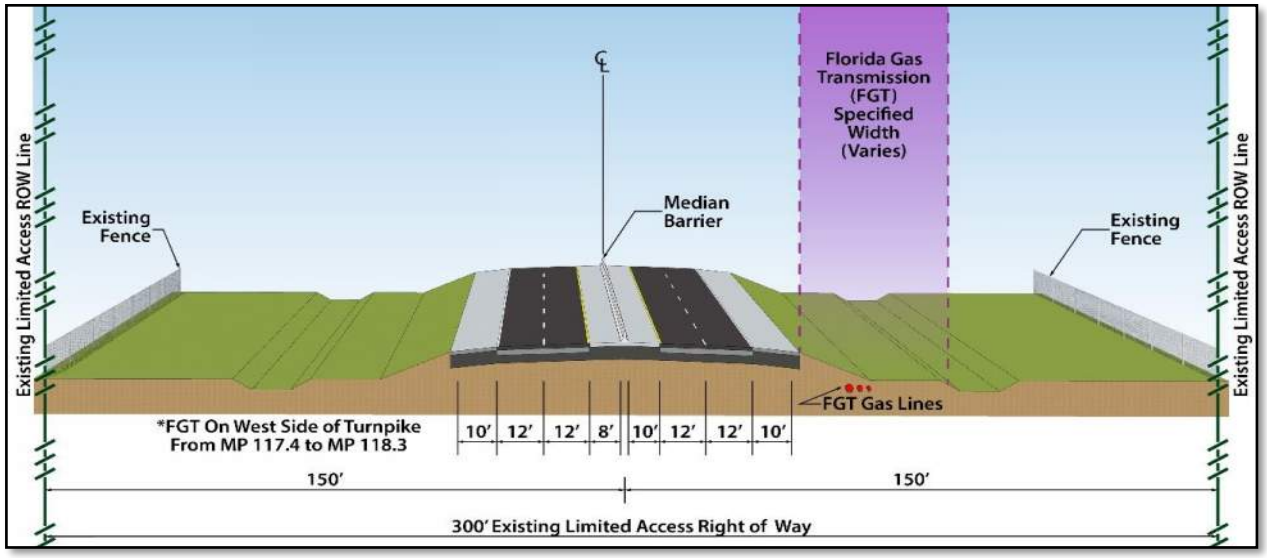


Figure 2-1: Existing Florida's Turnpike Mainline Typical Section

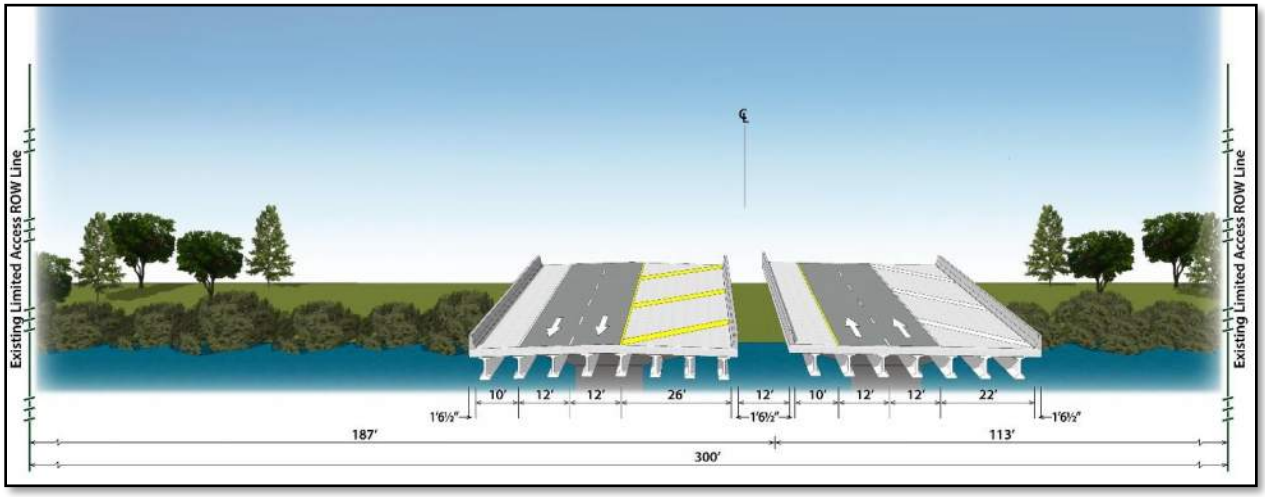


Figure 2-2: Existing Thomas B. Manuel Bridge Typical Section

2.2 Right-of-Way

The existing right-of-way width along the Turnpike is generally 300 feet. The proposed mainline widening will be constructed within the existing right-of-way.

2.3 Roadway Classification

Within the project limits, the Turnpike is divided into two functional roadway classifications. The project limits begin at MP 117 and end at MP 153.7. The functional classification for the majority of the project limits is Urban Expressway. Between MP 120 and MP 129 in Martin County, the functional classification is Rural Expressway. The Turnpike is also a Strategic Intermodal System (SIS) corridor.

2.4 Adjacent Land Use

The land use along and adjacent to the Florida's Turnpike Corridor is primarily agricultural. On the south end of the project starting in Palm Beach County, the land use is primarily residential. Travelling north to Martin County, the land use transitions to primarily agricultural. As the mainline approaches SR 76, land use transitions from primarily agricultural to residential, agricultural, and industrial. The land use becomes agricultural and industrial as the mainline traverses to SW Martin Highway, then becomes a mixture of planned developments, public lands, and general use. As the mainline enters St. Lucie County, land use becomes residential, institutional, and commercial. Land use transitions back to agricultural at the northern terminus of the study. **Table 2-1** identifies the existing land uses within an approximate one-mile buffer of the corridor.

Table 2-1: Existing Land Use

Region	Area (Acres)	Land Use Proportion
City of Fort Pierce	**1,559.00**	**3.14%**
Agricultural	47.10	3.02%
Commercial	488.30	31.32%
Conservation	0.50	0.03%
Industrial	294.60	18.90%
Mixed Use	21.00	1.35%
No Data	0.10	0.00%
Other	444.00	28.48%
Residential	263.40	16.90%
City of Port St. Lucie	**15,784.60**	**31.76%**
Commercial	451.40	2.86%
Conservation	142.80	0.90%
General Use	467.90	2.96%
Industrial	18.80	0.12%
Institutional	1,187.20	7.52%
Mixed Use	22.60	0.14%
Other	22.20	0.14%
Planned Unit Development (PUD)	3,953.30	25.05%
Recreational	259.30	1.64%
Residential	9,259.10	58.66%
Unincorporated Martin County	**25,938.00**	**52.19%**
Agricultural	14,528.10	56.01%
Commercial	54.30	0.21%
Industrial	595.60	2.30%
No Data	2,303.60	8.88%
Other	1,129.80	4.36%
Public	1,364.90	5.26%
PUD	4,637.40	17.88%
Residential	1,324.40	5.11%
Unincorporated Palm Beach County	**1,697.10**	**3.42%**
No Data	533.90	31.46%
Public	63.20	3.72%
Residential	1,100.00	64.82%
Unincorporated St. Lucie County	**3,222.30**	**6.48%**
Agricultural	1,176.00	36.49%
Commercial	16.20	0.50%
Conservation	83.60	2.60%
Industrial	711.80	22.09%
Institutional	238.40	7.40%
No Data	477.60	14.82%
Other	188.30	5.84%
PUD	96.60	3.00%
Residential	233.80	7.26%

Town of Jupiter	1,493.60	3.01%
Commercial	58.60	3.92%
Conservation	87.40	5.85%
Industrial	212.00	14.19%
Institutional	165.10	11.05%
No Data	48.30	3.23%
Residential	922.30	61.75%
Grand Total	49,694.60	100.00%

2.5 Access Management Classification

Within the project limits, the Turnpike is designated as Access Class 1 (Limited Access).

2.6 Design and Posted Speeds

The Turnpike has a design speed of 70 miles per hour (mph) with a posted speed of 70 mph.

2.7 Vertical and Horizontal Alignment

2.7.1 Vertical Alignment

There are a total of 32 existing vertical curves along the Turnpike within the project limits. There are also four existing interchanges with vertical curve data available. The four interchanges include SW Martin Highway (SR 714), SE Becker Road, SW Port St. Lucie Boulevard, and Okeechobee Road (SR 70). **Table 2-2** summarizes the existing vertical alignment of the Turnpike and adjacent ramp facilities within the project limits.

Table 2-2: List of Vertical Curves

County	PVC (Mile Post (MP) and/or Station (Sta.))	PVT (Mile Post (MP) and/or Station (Sta.))	Design Speed (mph)	Algebraic Grade Difference (%)	Type	Curve Length (feet)	FDOT Min. Length (feet)	K Value	FDOT Min. K Value	2011 AASHTO Min. K Value
Martin	MP 124.450 Sta. 4238+50.00	MP 124.525 Sta. 4242+50.00	70	1.00	Sag	400	800	400	206	181
Martin	MP 124.582 Sta. 4245+50.00	MP 124.715 Sta. 4252+50.00	70	2.00	Crest	700	1,000	350	506	247
Martin	MP 124.772 Sta. 4255+50.00	MP 124.847 Sta. 4259+50.00	70	1.00	Sag	400	800	400	206	181
Martin	MP 126.789 Sta. 4361+99.00	MP 126.864 Sta. 4365+99.00	70	1.02	Sag	400	800	392	206	181
Martin	MP 126.936 Sta. 4369+80.00	MP 127.069 Sta. 4376+80.00	70	2.00	Crest	700	1,000	350	506	247
Martin	MP 127.149 Sta. 4381+01.00	MP 127.225 Sta. 4385+01.00	70	0.97	Sag	400	800	412	206	181
Martin	MP 130.648 Sta. 4565+74.76	MP 130.818 Sta. 4574+74.76	70	4.55	Sag	700	800	154	206	181
Martin	MP 130.962 Sta. 75+10.00	MP 131.435 Sta. 100+10.00	70	6.00	Crest	2,500	1,000	417	506	247

Martin	MP 132.324 Sta. 4601+46.32	MP 132.457 Sta. 4698+15.20	70	4.60	Sag	700	800	152	206	181
Martin	MP 137.143 Sta. 4908+68.33	MP 137.218 Sta. 4912+68.33	70	1.20	Sag	400	800	333	206	181
St. Lucie	MP 138.029 Sta. 1160+84	MP 138.237 Sta. 1171+84	70	2.00	Crest	1,100	1,000	550	506	247
St. Lucie	MP 138.286 Sta. 1174+43	MP 138.362 Sta. 1178+43	70	1.00	Sag	400	800	400	206	181
St. Lucie	MP 138.680 Sta. 1195+22	MP 138.756 Sta. 1199+22	70	1.00	Sag	400	800	400	206	181
St. Lucie	MP 138.764 Sta. 1199+68	MP 138.954 Sta. 1209+68	70	2.20	Crest	1,000	1,800	455	506	247
St. Lucie	MP 138.963 Sta. 1210+15	MP 139.038 Sta. 1214+15	70	1.20	Sag	400	800	333	206	181
St. Lucie	MP 140.663 Sta. 1299+92	MP 140.739 Sta. 1303+92	70	1.20	Sag	400	800	333	206	181
St. Lucie	MP 140.753 Sta. 1304+68	MP 140.942 Sta. 1314+68	70	2.40	Crest	1,000	1,000	417	506	247
St. Lucie	MP 140.956 Sta. 1315+42	MP 141.032 Sta. 1319+42	70	1.20	Sag	400	800	333	206	181
St. Lucie	MP 142.084 Sta. 1374+98	MP 142.160 Sta. 1378+98	70	1.50	Sag	400	800	267	206	181
St. Lucie	MP 142.163 Sta. 1379+11	MP 142.371 Sta. 1390+11	70	3.00	Crest	1,100	1,000	367	506	247
St. Lucie	MP 142.373 Sta. 1390+24	MP 142.449 Sta. 1394+24	70	1.50	Sag	400	800	267	206	181
St. Lucie	MP 148.015 Sta. 1688+29	MP 148.091 Sta. 1692+29	70	1.00	Sag	400	800	400	206	181
St. Lucie	MP 148.132 Sta. 1694+46	MP 148.265 Sta. 1701+46	70	2.00	Crest	700	1,000	350	506	247
St. Lucie	MP 148.287 Sta. 1702+61	MP 148.362 Sta. 1706+61	70	1.00	Sag	400	800	400	206	181
St. Lucie	MP 150.430 Sta. 1815+78	MP 150.525 Sta. 1820+78	70	3.00	Sag	500	800	167	206	181
St. Lucie	MP 150.547 Sta. 1821+98	MP 150.964 Sta. 1843+98	70	6.00	Crest	2,200	1,000	367	506	247
St. Lucie	MP 150.987 Sta. 1845+18	MP 151.081 Sta. 1850+18	70	3.00	Sag	500	800	167	206	181
St. Lucie	MP 152.359 Sta. 1917+65	MP 152.435 Sta. 1921+65	70	0.70	Sag	400	800	571	206	181
St. Lucie	MP 152.467 Sta. 1923+36	MP 152.543 Sta. 1927+36	70	1.40	Crest	400	1,000	286	506	247
St. Lucie	MP 152.576 Sta. 1929+07	MP 152.651 Sta. 1933+07	70	0.70	Sag	400	800	571	206	181
St. Lucie	MP 152.954 Sta. 1949+04	MP 153.030 Sta. 1953+04	70	2.24	Sag	400	800	178	206	181
St. Lucie	MP 153.036 Sta. 1953+38	MP153.036 Sta. 1970+36	70	5.20	Crest	1,700	1,800	327	506	247
SW Martin Highway (SR 714) Interchange Ramps										

Martin	MP 0.002 Sta. 10+11.00 Ramp 5	MP 0.005 Sta. 10+29.00 Ramp 5	30	2.12	Sag	18	90	9	37	37
Martin	MP 0.156 Sta. 18+22.00 Ramp 5	MP 0.194 Sta. 20+22.00 Ramp 5	30	3.85	Sag	200	90	52	37	37
Martin	MP 0.245 Sta. 22+93.87 Ramp 5	MP 0.332 Sta. 27+53.87 Ramp 5	30	8.00	Crest	460	90	58	31	19
Martin	MP 0.373 Sta. 29+67.00 Ramp 5	MP 0.410 Sta. 31+67.00 Ramp 5	30	3.80	Sag	200	90	53	37	37
Martin	MP 0.111 Sta. 16+92.49 Ramp 4	MP 0.121 Sta. 17+42.49 Ramp 4	40	1.03	Sag	50	120	49	64	64
Martin	MP 0.032 Sta. 12+80.10 Ramp 3	MP 0.051 Sta. 13+80.10 Ramp 3	35	0.52	Sag	100	105	192	49	49
Martin	MP 0.003 Sta. 11+25.00 Ramp 2	MP 0.022 Sta. 12+25.00 Ramp 2	40	0.52	Sag	100	120	194	64	64
Martin	MP 0.124 Sta. 17+65.00 Ramp 2	MP 0.153 Sta. 19+15.00 Ramp 2	40	1.85	Sag	150	120	81	64	64
Martin	MP 0.174 Sta. 20+30.04 Ramp 2	MP 0.182 Sta. 20+70.04 Ramp 2	40	1.41	Sag	40	120	28	64	64
SE Becker Road Interchange Ramps										
St. Lucie	Sta. 102+77.00 Ramp A	Sta. 104+43.00 Ramp A	50	1.69	Sag	166	200	98	96	96
St. Lucie	Sta. 150+00.00 Ramp A	Sta. 108+00.00 Ramp A	50	2.66	Sag	300	200	113	96	96
St. Lucie	Sta. 226+93.00 Ramp B1	Sta. 228+93.00 Ramp B1	50	0.62	Sag	200	200	322	96	96
St. Lucie	Sta. 300+50.00 Ramp B2	Sta. 302+00.00 Ramp B2	35	1.62	Sag	150	105	93	49	49
St. Lucie	Sta. 402+00.00 Ramp C	Sta. 404+00.00 Ramp C	35	1.15	Crest	200	105	174	47	29
St. Lucie	Sta. 414+00.00 Ramp C	Sta. 418+00.00 Ramp C	50	2.07	Sag	400	200	193	96	96
SW Port St. Lucie Boulevard Interchange Ramps										
St. Lucie	Sta. 29+38.00 Ramp AB	Sta. 32+45.00 Ramp AB	25	3.00	Sag	307	75	102	26	26
St. Lucie	Sta. 46+00.00 Ramp AB	Sta. 47+20.00 Ramp AB	25	4.00	Sag	120	75	30	26	26
St. Lucie	Sta. 36+99.00 Ramp AB	Sta. 42+99.00 Ramp AB	25	7.20	Crest	600	75	83	19	12

St. Lucie	Sta. 50+50.00 Ramp AB	Sta. 51+50.00 Ramp AB	25	0.16	Sag	100	75	645	26	26
Okeechobee Road (SR 70) Interchange Ramps										
St. Lucie	Sta. 21+36.00 Ramp AB	Sta. 23+36.00 Ramp AB	30	4.00	Sag	200	90	50	37	37
St. Lucie	Sta. 27+20.00 Ramp AB	Sta. 30+20.00 Ramp AB	30	8.00	Crest	300	90	38	31	19
St. Lucie	Sta. 33+35.00 Ramp AB	Sta. 35+35.00 Ramp AB	30	3.80	Sag	200	90	53	37	37
St. Lucie	Sta. 10+25.00 Ramp A	Sta. 11+25.00 Ramp A	35	3.75	Sag	100	105	27	49	49
St. Lucie	Sta. 7+50.00 Ramp C	Sta. 9+00.00 Ramp C	40	2.70	Sag	150	120	56	64	64

**Information in the table above was extracted from the Existing Roadway Conditions Assessment Report (ERCAR, January 2017) for Palm Beach, Martin, and St. Lucie Counties.*

2.7.2 Horizontal Alignment

There are a total of 18 existing horizontal curves along the Turnpike within the project limits. There are also four existing interchanges with horizontal curve data available. The four interchanges are located at SW Martin Highway (SR 714), SE Becker Road, SW Port St. Lucie Boulevard / SR 716, and Okeechobee Road (SR 70). **Table 2-3** summarizes the existing horizontal alignment of the Turnpike and adjacent ramp facilities within the project limits.

Table 2-3: List of Horizontal Curves

County	PC (Mile Post (MP) and/or Station (Sta.))	PT (Mile Post (MP) and/or Station (Sta.))	Design Speed (mph)	Degree of Curvature	Radius (feet)	Min. Radius (10% super, feet)	Curve Length (feet)	FDOT Required Min. Curve Length (feet)	AASHTO Required Min. Curve Length (feet)
Martin	MP 120.421 Sta. 234+02.89	MP 120.896 Sta. 259+12.28	70	0° 30' 00"	11,459.16	1,630	2,509.39	1637	1,050
Martin	MP 124.044 Sta. 425+34.55	MP 125.350 Sta. 494+28.76	70	0° 40' 00"	8,594.37	1,630	6,894.21	1637	1,050
Martin	MP 125.810 Sta. 518+58.05	MP 126.653 Sta. 563+09.16	70	0° 30' 00"	11,459.16	1,630	4,451.11	1637	1,050
Martin	MP 129.012 Sta. 687+62.58	MP 129.721 Sta. 725+08.02	70	0° 30' 00"	11,459.16	1,630	3,745.44	1637	1,050
Martin	MP 130.194 Sta. 750+03.47	MP 130.553 Sta. 768+97.80	70	0° 30' 00"	11,459.16	1,630	1,894.33	1637	1,050
Martin	MP 136.854 Sta. 1101+67.48	MP 137.155 Sta. 1117+59.15	70	0° 30' 00"	11,459.16	1,630	1,591.67	1637	1,050
St. Lucie	MP 139.398	MP 139.778	70	0° 30' 00"	11,459.16	1,630	2,002.50	1637	1,050
St. Lucie	MP 141.653	MP 142.160	70	0° 30' 00"	11,459.16	1,630	2,681.67	1637	1,050
St. Lucie	MP 144.498	MP 144.836	70	0° 45' 00"	7,639.44	1,630	1,783.33	1637	1,050
St. Lucie	MP 144.962	MP 145.638	70	0° 45' 00"	7,639.44	1,630	3,566.67	1637	1,050

St. Lucie	MP 145.735	MP 146.031	70	0° 45' 00"	7,639.44	1,630	1,783.33	1637	1,050
St. Lucie	MP 148.577	MP 149.180	70	0° 45' 00"	7,639.44	1,630	3,183.33	1637	1,050
St. Lucie	MP 152.606	MP 152.727	70	0° 45' 00"	7,639.44	1,630	634.22	1637	1,050
St. Lucie	MP 153.129	MP 153.565	70	0° 44' 59.98"	7,639.49	1,630	2,381.41	1637	1,050
St. Lucie	MP 153.277	MP 153.548	70	0° 48' 170"	7,157.75	1,630	1,476.42	1637	1,050
St. Lucie	MP 153.277	MP 153.583	70	0° 42' 19.82"	8,121.23	1,630	840.56	1637	1,050
St. Lucie	MP 153.332	MP 153.547	70	0° 48' 37.40"	7,070.16	1,630	1,365.81	1637	1,050
St. Lucie	MP 153.332	MP 153.587	70	0° 41' 4.92"	8,368.01	1,630	1,397.45	1637	1,050
SW Martin Highway (SR 714) Interchange Ramps									
Martin	MP 134.193 RT. Sta. 961+18.27 Ramp 2	MP 0.068 Sta. 14+66.78 Ramp 2	Assumed 40	12° 43' 57"	450	410	387.16	400	N/A
Martin	MP 0.119 Sta. 17+38.94 Ramp 2	MP 0.158 Sta. 19+42.52 Ramp 2	Assumed 40	12° 19' 18"	465	410	203.58	400	N/A
Martin	MP 0.136 (Ramp 5) Sta. 17+20.90 Ramp 3	MP 0.103 Sta. 16+54.41 Ramp 3	Assumed 35	19° 05' 55"	300	292	654.41	400	N/A
Martin	MP 0.103 Sta. 16+54.41 Ramp 3	MP 0.144 Sta. 18+69.52 Ramp 3	Assumed 35	6° 00' 00"	954.93	292	215.11	400	N/A
Martin	MP 0.144 Sta. 18+69.52 Ramp 3	MP 134.685 RT. Sta. 975+63.51 Ramp 3	Assumed 35	3° 00' 00"	1,909.86	292	333.39	400	N/A
Martin	MP 134.523 LT. Sta. 973+30.49 Ramp 4	MP 0.074 Sta. 14+93.97 Ramp 4	Assumed 40	12° 43' 57"	450	410	414.16	400	N/A
Martin	MP 0.163 Sta. 18+60.58 Ramp 5	MP 0.230 Sta. 22+14.22 Ramp 5	Assumed 30	16° 22' 13"	350	200	353.64	400	N/A
Martin	MP 0.349 Sta. 28+42.30 Ramp 5	MP 0.478 Sta. 35+22.35 Ramp 5	Assumed 30	21° 32' 23"	266	200	680.35	400	N/A
Martin	MP 0.478 Sta. 35+22.35 Ramp 5	MP 0.569 Sta. 40+02.40 Ramp 5	Assumed 30	22° 55' 06"	250	200	479.76	400	N/A
Martin	MP 0.569 Sta. 40+02.40 Ramp 5	MP 134.373 LT. Sta. 968+69.69 Ramp 5	Assumed 30	6° 00' 00"	954.93	200	150	400	N/A
Martin	MP 134.373 LT. Sta. 968+69.69 Ramp 5	MP 134.345 LT. Sta. 967+19.84 Ramp 5	Assumed 30	3° 00' 00"	1,909.86	200	150	400	N/A
SE Becker Road Interchange Ramps									
St. Lucie	Sta. 100+00.00 Ramp A	Sta. 105+51.03 Ramp A	50	3° 00' 00"	1,910.00	694	551.03	400	N/A
St. Lucie	Sta. 202+08.65 Ramp B1	Sta. 207+91.16 Ramp B1	35	4° 44' 30"	1,208.38	292	583.11	400	N/A

St. Lucie	Sta. 218+10.20 Ramp B1	Sta. 232+34.85 Ramp B1	50	2° 00' 00"	2,865.00	694	1,421.65	400	N/A
St. Lucie	Sta. 300+00.00 Ramp B2	Sta. 304+42.69 Ramp B2	35	16° 45' 01"	342.06	292	442.69	400	N/A
St. Lucie	Sta. 304+42.69 Ramp B2	Sta. 308+78.84 Ramp B2	35	17° 45' 00"	322.79	292	436.15	400	N/A
St. Lucie	Sta. 400+99.60 Ramp C	Sta. 405+03.19 Ramp C	35	5° 30' 00"	1,041.74	292	403.6	400	N/A
St. Lucie	Sta. 408+45.40 Ramp C	Sta. 413+75.33 Ramp C	50	1° 29' 38"	3,835.00	694	529.93	400	3,835
St. Lucie	Sta. 417+82.12 Ramp C	Sta. 423+09.97 Ramp C	50	1° 30' 00"	3,820.00	594	527.86	400	3,835
SW Port St. Lucie Boulevard Interchange Ramps									
St. Lucie	Sta. 23+00.26 Ramp A	Sta. 25+44.45 Ramp A	50	4° 00' 00"	1,432.39	694	244.19	400	N/A
St. Lucie	Sta. 25+44.45 Ramp A	Sta. 29+38.07 Ramp A	Assumed 30	24° 54' 40"	230	200	393.62	400	N/A
St. Lucie	Sta. 29+38.07 Ramp AB	Sta. 36+37.89 Ramp AB	Assumed 30	23° 00' 37"	249	200	599.82	400	N/A
St. Lucie	Sta. 42+48.49 Ramp AB	Sta. 49+87.81 Ramp AB	Assumed 30	12° 49' 30"	446.75	200	739.33	400	N/A
St. Lucie	Sta. 127+04.11 Ramp B	Sta. 129+47.49 Ramp B	Assumed 30	21° 22' 44"	268	200	243.38	400	N/A
St. Lucie	Sta. 129+47.49 Ramp B	Sta. 131+04.11 Ramp B	50	6° 00' 00"	954.93	694	250	400	N/A
St. Lucie	Sta. 116+62.63 Ramp D	Sta. 118+62.63 Ramp D	50	8° 00' 00"	716.2	694	200	400	N/A
St. Lucie	Sta. 118+62.63 Ramp D	Sta. 121+07.77 Ramp D	Assumed 30	16° 00' 00"	358.1	200	245.14	400	N/A
St. Lucie	Sta. 121+07.77 Ramp D	Sta. 127+56.39 Ramp D	Assumed 30	19° 05' 55"	300	200	648.62	400	N/A
St. Lucie	Sta. 15+05.20 Ramp C	Sta. 22+56.47 Ramp C	35	9° 00' 00"	636.62	200	751.27	400	N/A
St. Lucie	Sta. 22+56.47 Ramp C	Sta. 29+06.62 Ramp C	35	8° 00' 00"	716.2	292	649.15	400	N/A
St. Lucie	Sta. 29+05.62 Ramp C	Sta. 31+05.62 Ramp C	Assumed 30	4° 00' 00"	1,432.39	200	200	400	N/A
St. Lucie	Sta. 53+87.81 Ramp AB	Sta. 54+93.72 Ramp AB	Assumed 30	26° 31' 33"	216	200	105.91	400	N/A
St. Lucie	Sta. 59+30.85 Access Rd.	Sta. 64+07.46 Access Rd.	30	20° 27' 46"	380	200	476.61	400	N/A
St. Lucie	Sta. 67+49.91 Access Rd.	Sta. 71+65.39 Access Rd.	30	18° 28' 57"	310	200	415.48	400	N/A
St. Lucie	Sta. 73+01.27 Access Rd.	Sta. 76+90.89 Access Rd.	30	18° 28' 57"	310	200	389.62	400	N/A
Okeechobee Road (SR 70) Interchange Ramps									
St. Lucie	Sta. 10+00.00 Ramp D	Sta. 14+06.68 Ramp D	Assumed 30	12° 41' 27.1"	451.47	200	451.47	400	N/A

St. Lucie	Sta. 16+42.47 Ramp D	Sta. 20+48.22 Ramp D	Assumed 30	11° 37' 14.5"	405.75	200	405.75	400	N/A
St. Lucie	Sta. 20+71.11 Ramp AB	Sta. 25+57.59 Ramp AB	Assumed 30	16° 22' 12.8"	350	200	486.48	400	N/A
St. Lucie	Sta. 0+00.00 Ramp C	Sta. 8+21.92 Ramp C	Assumed 30	19° 05' 54.9"	300	200	821.92	400	N/A
St. Lucie	Sta. 8+21.92 Ramp C	Sta. 9+57.97 Ramp C	Assumed 30	5° 59' 59.9"	954.93	200	136.05	400	N/A
St. Lucie	Sta. 9+57.97 Ramp C	Sta. 11+02.47 Ramp C	50	3° 06' 6.2"	1,909.86	694	144.5	400	N/A
St. Lucie	Sta. 31+68.77 Ramp AB	Sta. 37+87.39 Ramp AB	Assumed 30	23° 11' 48.0"	247	200	618.62	400	N/A
St. Lucie	Sta. 37+87.39 Ramp B	Sta. 42+41.00 Ramp B	Assumed 30	24° 54' 40.4"	230	200	453.61	400	N/A
St. Lucie	Sta. 42+41.00 Ramp B	Sta. 43+91.00 Ramp B	Assumed 30	5° 59' 59.9"	954.93	200	150	400	N/A
St. Lucie	Sta. 43+91.00 Ramp B	Sta. 45+41.00 Ramp B	Assumed 30	3° 44' 52.2"	1,528.77	200	126.39	400	N/A
St. Lucie	Sta. 4+03.37 Ramp A	Sta. 7+79.69 Ramp A	Assumed 30	5° 59' 59.9"	954.93	200	376.31	400	N/A
St. Lucie	Sta. 7+79.69 Ramp A	Sta. 10+47.46 Ramp A	Assumed 30	12° 11' 26.1"	470	200	267.78	400	N/A

**Information in the table above was extracted from the Existing Roadway Conditions Assessment Report (ERCAR, January 2017) for Palm Beach, Martin, and St. Lucie Counties.*

2.8 Pedestrian Accommodations

The Turnpike is a high-speed facility and therefore has no pedestrian accommodations along the mainline. There is curb and gutter and sidewalk located between the Exit 133 toll plaza and the terminus of the ramps at the SW Martin Highway (SR 714) intersection. New curb ramps and sidewalk were constructed in the southwest and southeast quadrants of the intersection at the terminus of the ramps. There is sidewalk on the west side of the ramp terminating at the FDOT Maintenance Yard parking lot. There are also existing sidewalks throughout the project study area on arterials that are being impacted due to interchange improvements. One location where this exists is on the north side of SW Martin Highway (SR 714) from SW 42nd Avenue to SW High Meadow Avenue. There are also existing sidewalks on both the north and south side of SE Becker Road from Flintstone Drive to the St. Lucie County Fire District #13 Station. The interchange improvements at SW Port St. Lucie Boulevard extend from SW Cameo Boulevard and SW Trenton Lane. There are existing sidewalks on both the north and south side of this arterial throughout the project study limits. The interchange improvements at Crosstown Parkway extend from SW Cameo Boulevard and SW Bayshore Boulevard. There are existing sidewalks on both the north and south side of this arterial throughout the project study limits. St. Lucie W Boulevard will also experience roadway improvements from the Home Depot parking lot to SW Bayshore Boulevard. There is an existing sidewalk on the south side of St. Lucie West Boulevard throughout the aforementioned limits. The last arterial where roadway improvements are being proposed is Okeechobee Road (SR 70). There is an existing sidewalk on Okeechobee Road (SR 70) from east of Coolidge Road to S Rock Road. At S Rock Road, the sidewalk narrows and extends to S Kings Highway within the project study limits.

2.9 Bicycle Facilities

There are no existing bicycle facilities along the mainline as this is a high-speed roadway where bicycles are not allowed. However, there are existing bicycle lanes along SW Martin Highway (SR 714) from SW 42nd Avenue to SW High Meadow Avenue. There are also existing sidewalks on both the north and south side of SE Becker Road beginning approximately 650 feet west of the Turnpike mainline and continuing west. There are also existing bicycle lanes on SE Becker Road from Flintstone Drive to the St. Lucie County Fire District #13 Station. The interchange improvements at Crosstown Parkway extend from SW Cameo Boulevard and SW Bayshore Boulevard. There are existing bicycle lanes on both the north and south side of this arterial throughout the project study limits. The last arterial that will be improved is Okeechobee Road (SR 70). There are existing bicycle lanes on Okeechobee Road (SR 70) from Gordy Road to S Kings Highway within the project improvement limits.

2.10 Transit Facilities

The limits of this project extend through three Florida counties. Each county's public transit service was evaluated to determine if any jurisdiction provides service along the Turnpike. The existing transit network in Palm Beach County consists of three main systems: Palm Tran, Tri-Rail, and Virgin Trains USA. Local circulator systems, such as trolleys shuttles, are also present throughout the county. Review of transit maps has indicated there are no transit services provided either along the Turnpike or any of the cross streets, within the Palm Beach County segment of project study area. Martin County Public Transit, MARTY, offers four fixed route services, and one commuter bus service connecting to both the Palm Beach County Palm Tran and the St. Lucie County Treasure Coast Connector public transit services, as well as an ADA eligible complimentary paratransit service, MARTY access. Review of transit maps indicated there are no transit services provided either along the Turnpike or any of the cross streets, within the Martin County segment of the project study area. St. Lucie County currently provides seven fixed route public bus services. There is no existing transit service provided along the Turnpike; however, three of the fixed route public bus services either cross the Turnpike or terminate service adjacent to the mainline. The two routes that cross over the Turnpike are Route 5, along SW Port St. Lucie Boulevard, and Route 6, along Prima Vista Boulevard. Route 3 runs along Okeechobee Road (SR 70), east of the Turnpike and terminates at Wheeler Terrace. Three park & ride lots are located near or adjacent to Florida's Turnpike (SR 91) mainline and its respective interchanges. The three lots include the SW Martin Highway and Turnpike Milepost 133 Park & Ride, the Council on Aging Park & Ride, and the Port St. Lucie Park & Ride. There is a Greyhound bus station located at the intersection of Okeechobee Road (SR 70) and S Kings Highway in the northwest quadrant.

2.11 Pavement Condition

The Florida Department of Transportation (FDOT) Pavement Condition Surveys, 2020, (PCS) for the Turnpike were reviewed to assess the existing condition of the facility. **Table 2-4** summarizes the cracking and ride rating for the Turnpike within the project study limits. A scale of one to ten is used to rate the pavement conditions for cracking and ride, where one is the worst condition and ten is the best; any rating less than six is considered deficient.

Table 2-4: Existing Pavement Cracking and Ride Ratings (2020)

County	Direction	Beginning Mile Post	Ending Mile Post	Condition Category	Rating (0-10)
Palm Beach	Northbound	116.3	117.5	Cracking	4.5*
				Ride	8.1
	Southbound	116.3	117.7	Cracking	4.5*
				Ride	7.5
	Northbound	117.5	117.9	Cracking	4.5*
				Ride	8.1
	Southbound	117.7	117.9	Cracking	7.0
				Ride	7.3
Martin	Northbound	117.9	125.7	Cracking	5.5*
				Ride	7.7
	Southbound	117.9	125.7	Cracking	7.5
				Ride	7.3
	Northbound	125.7	130.9	Cracking	5.5*
				Ride	7.4
	Southbound	125.7	130.9	Cracking	5.5*
				Ride	7.1
	Northbound	131.4	138.2	Cracking	5.5*
				Ride	7.3
	Southbound	131.4	138.2	Cracking	5.5*
				Ride	7.1
St. Lucie	Northbound	138.2	153.3	Cracking	6.5
				Ride	7.5
	Southbound	138.2	153.3	Cracking	4.5*
				Ride	7.8
	Northbound**	153.3	169.4	Cracking	4.5*
				Ride	7.9
	Southbound***	153.3	169.4	Cracking	4.5*
				Ride	7.4

** Indicates pavement deficient (Any rating < = 6)*
*** Indicates most recent pavement condition survey data from 2019*
**** Indicates most recent pavement condition survey data from 2018*

2.12 Traffic Volumes and Operational Conditions

Below a brief summary of the detailed information contained in the *Project Traffic Forecast Memorandum (PTFM),* June 2017. A more thorough discussion of the development of the existing and future year daily and peak hour traffic volumes, as well as the existing and future year peak hour traffic operations analyses that were conducted for this study are provided in the PTFM in **Appendix C.** The list below provides the existing interchanges and intersections analyzed in the PTFM:

- Interchanges along the Turnpike
  - SW Martin Highway (SR 714)
  - SE Becker Road
  - SW Port St. Lucie Boulevard
  - Okeechobee Road (SR 70)
- Intersections along SW Martin Highway (SR 714)
  - SW Citrus Boulevard
  - SW 42nd Avenue
  - Turnpike ramps / SW Martin Downs Boulevard
  - SW High Meadow Avenue
- Intersections along SE Becker Road
  - Turnpike southbound (SB) ramps
  - Turnpike northbound (NB) ramps
- Intersections along SW Port St. Lucie Boulevard
  - SW Cameo Boulevard
  - Turnpike ramps / SW Bayshore Boulevard
- Intersections along Okeechobee Road (SR 70)
  - Turnpike ramps / S King Highway
  - Crossroads Parkway
  - I-95 SB ramps
  - I-95 NB ramps

2.12.1 Existing Year Traffic Analysis

Traffic volumes for Turnpike were obtained from the Financial Year 2016 Service Plaza Survey data for the Port St. Lucie - Fort Pierce Service Plaza. Daily hose and intersection movement counts were collected. The data were collected at existing interchanges and cross-streets expected to be impacted by the proposed future interchanges. All data collection was conducted in accordance with the procedures from the FDOT *Manual on Uniform Traffic Studies (*MUTS), FDOT Manual Number 750-020-007. Growth, seasonal, and axle adjustment factors were applied to the data, where applicable. In order to calculate the existing (2016) Average Annual Daily Traffic (AADT) volumes, an analysis of the three-day traffic counts was conducted. Three-day averages were adjusted to account for seasonal variations and axle corrections to develop AADT volumes. The 2016 AADT volumes for the mainline are shown in **Table 2-5,** while the AADT volumes for the ramps are shown in **Table 2-6**. The annual average daily traffic for the Turnpike ranges from 42,000 vehicles per day (vpd) to 51,600 vpd. Traffic counts at the Port St. Lucie - Fort Pierce Service Plaza were

considered as controlling point and mainline volumes were balanced accordingly with the ramp data. Finally, the cross-street peak hour volumes were balanced and adjusted to ensure the intersection turning movements balanced with the ramp approach volumes.

Table 2-5: Existing Mainline Traffic Volumes (2016)

Begin Point	End Point	Annual Average Daily Traffic (AADT)	
		NB	SB
North of Jupiter / Indiantown Road (MP 116)	SW Martin Highway (MP 135)	24,300	20,200
SW Martin Highway (MP 135)	SE Becker Road (MP 138)	26,700	24,900
SE Becker Road (MP 138)	SW Port St. Lucie Boulevard (MP 142)	25,000	24,100
SW Port St. Lucie Boulevard (MP 142)	Okeechobee Road (SR 70) (MP 152)	21,600	20,400

**Information in the table above was extracted from the Project Traffic Forecast Memorandum (PTFM, June 2017) for Palm Beach, Martin, and St. Lucie Counties.*

Table 2-6: Existing Ramp Traffic Volumes (2016)

Interchange	Mile Post (MP)	Average Annual Daily Traffic (AADT)			
		Ramps			
		NB Off	NB On	SB Off	SB On
SW Martin Highway	135	2,300	4,700	6,400	1,700
SE Becker Road	138	2,400	700	300	1,100
SW Port St. Lucie Boulevard	142	5,500	2,100	1,900	5,600
Okeechobee Road (SR 70)	152	9,100	3,300	7,700	3,800

**Information in the table above was extracted from the Project Traffic Forecast Memorandum (PTFM, June 2017) for Palm Beach, Martin, and St. Lucie Counties.*

The study area AM and PM peak hour volumes were calculated using data for the four highest consecutive 15-minute periods in the morning and evening at each count location. Seasonal adjustment factors were applied accordingly. An annual growth rate of 3% was applied where necessary to develop a 2016 peak hour traffic profile. The traffic data were combined and adjusted for continuity of flow.

2.12.1.1 Freeway Segment Analysis

The 2016 AM and PM peak hour traffic volumes were evaluated in each direction for freeway segments: basic and merge/diverge influence areas. The Highway Capacity Software (HCS) Version 6.70 was used to identify Level of Service (LOS) along freeway segments. The HCS is based on 2010 Highway Capacity Manual (HCM) methodologies. The HCM estimates LOS based on density – a function of flow rate (volumes) and travel speed – for uninterrupted flow facilities such as basic freeway segments, merge and diverge segments, and freeway weaving segments. Density is measured in passenger cars per mile per lane (pcpmpl). HCS results are summarized in **Table 2-7**. All of the Turnpike segments currently operate at LOS D or better.

Table 2-7: Existing (2016) Peak Hour HCS Freeway Segment Level of Service

Segment	Segment Type	Lanes	Volume (vph)		LOS / Density	
			AM	PM	AM	PM
Northbound						
Upstream of SR 714 Off-Ramp	Basic	2	1,619	2,704	B/14	C/25
Upstream of SR 714 Off-Ramp	Diverge	2	1,619	2,704	B/19	D/31
SR 714 Off-Ramp to On-Ramp	Basic	2	1,449	2,444	B/12	C/22
SR 714 On-Ramp to Becker Road Off-Ramp	Merge	2	1,859	3,324	B/19	D/34
SR 714 On-Ramp to Becker Road Off-Ramp	Basic	2	1,859	3,324	B/16	D/35
SR 714 On-Ramp to Becker Road Off-Ramp	Diverge	2	1,859	3,324	B/15	D/31
Becker Road Off-Ramp to On-Ramp	Basic	2	1,779	2,902	B/15	D/28
Becker Road On-Ramp to Port St. Lucie Boulevard Off-Ramp	Merge	2	1,853	2,957	B/17	D/29
Becker Road On-Ramp to Port St. Lucie Boulevard Off-Ramp	Basic	2	1,853	2,957	B/16	D/29
Becker Road On-Ramp to Port St. Lucie Boulevard Off-Ramp	Diverge	2	1,853	2,957	B/15	C/27
Port St. Lucie Boulevard Off-Ramp to On-Ramp	Basic	2	1,584	2,161	B/14	C/19
Port St. Lucie Boulevard Off-Ramp to SR 70 Off-Ramp	Merge	2	1,776	2,292	B/20	C/25
Port St. Lucie Boulevard Off-Ramp to SR 70 Off-Ramp	Basic	2	1,776	2,292	B/15	C/20
Port St. Lucie Boulevard Off-Ramp to SR 70 Off-Ramp	Diverge	2	1,776	2,292	B/17	C/23
SR 70 Off-Ramp to On-Ramp	Basic	2	1,172	1,544	A/10	B/13
Downstream of SR 70 On-Ramp	Merge	2	1,325	1,721	A/10	B/14
Downstream of SR 70 On-Ramp	Basic	2	1,325	1,721	B/11	B/15
Southbound						
Upstream of SR 70 Off-Ramp	Basic	2	895	1,341	A/8	B/12
Upstream of SR 70 Off-Ramp	Diverge	2	895	1,341	A/6	B/11
SR 70 Off-Ramp to On-Ramp	Basic	2	614	1,022	A/5	A/9
SR 70 On-Ramp to Port St. Lucie Boulevard Off-Ramp	Merge	2	1,106	1,637	A/7	B/12
SR 70 On-Ramp to Port St. Lucie Boulevard Off-Ramp	Basic	2	1,106	1,637	A/10	B/14
SR 70 On-Ramp to Port St. Lucie Boulevard Off-Ramp	Diverge	2	1,106	1,637	A/9	B/15
Port St. Lucie Off-Ramp to On-Ramp	Basic	2	991	1,398	A/9	B/12
Port St. Lucie Boulevard On-Ramp to Becker Road Off-Ramp	Merge	2	1,908	1,734	B/20	B/18
Port St. Lucie Boulevard On-Ramp to Becker Road Off-Ramp	Basic	2	1,908	1,734	B/16	B/15
Port St. Lucie Boulevard On-Ramp to Becker Road Off-Ramp	Diverge	2	1,908	1,734	B/18	B/16
Becker Road Off-Ramp to On-Ramp	Basic	2	1,888	1,650	B/16	B/14
Becker Road On-Ramp to SR 714 Off-Ramp	Merge	2	2,377	1,794	C/23	B/18
Becker Road On-Ramp to SR 714 Off-Ramp	Basic	2	2,377	1,794	C/21	B/15
Becker Road On-Ramp to SR 714 Off-Ramp	Diverge	2	2,377	1,794	D/28	C/22
SR 714 Off-Ramp to On-Ramp	Basic	2	1,396	1,454	B/12	B/12
Downstream of SR 714 On-Ramp	Merge	2	1,611	1,592	B/14	B/14
Downstream of SR 714 On-Ramp	Basic	2	1,611	1,592	B/14	B/14

**Information in the table above was extracted from the Project Traffic Forecast Memorandum (PTFM, June 2017) for Palm Beach, Martin, and St. Lucie Counties.*

2.12.1.2 Ramp Capacity Analysis

Capacity on the ramp roadways was assessed by comparing it with existing demand. The ramp Volume-to-Capacity (V/C) analysis is summarized in **Table 2-8**. Results show that all of the ramp roadways within the study area are currently operating under capacity (V/C < 1.0).

Table 2-8: Existing (2016) Peak Hour HCS Ramp Capacity Analysis

Interchange	Ramp	Lanes	Volume (vph)		Capacity (vph)	V/C	
			AM	PM		AM	PM
SW Martin Highway (SR 714)	Southbound Off-Ramp	1	981	340	1,530	0.6	0.2
	Northbound On-Ramp	1	410	880	1,490	0.3	0.6
	Southbound On-Ramp	1	216	138	1,490	0.1	0.1
	Northbound Off-Ramp	1	170	260	1,530	0.1	0.2
SE Becker Road	Southbound Off-Ramp	1	20	84	1,530	0.0	0.1
	Northbound On-Ramp	1	74	55	1,530	0.0	0.0
	Southbound On-Ramp	1	488	144	1,530	0.3	0.1
	Northbound Off-Ramp	1	80	422	1,490	0.1	0.3
SW Port St. Lucie Boulevard	Southbound Off-Ramp	1	115	239	1,530	0.1	0.2
	Northbound On-Ramp	1	192	131	1,530	0.1	0.1
	Southbound On-Ramp	1	917	336	1,490	0.6	0.2
	Northbound Off-Ramp	1	269	796	1,490	0.2	0.5
Okeechobee Road (SR 70)	Southbound Off-Ramp	1	281	319	1,530	0.2	0.2
	Northbound On-Ramp	1	153	177	1,490	0.1	0.1
	Southbound On-Ramp	1	492	615	1,490	0.3	0.4
	Northbound Off-Ramp	1	604	748	1,530	0.4	0.5

**Information in the table above was extracted from the Project Traffic Forecast Memorandum (PTFM, June 2017) for Palm Beach, Martin, and St. Lucie Counties.*

2.13 Intersection Layout and Traffic Control

2.13.1 Existing Interchanges

Within the project limits, there are four roadway facilities that share an interchange with Florida's Turnpike (SR 91). The four facilities include SW Martin Highway (SR 714), SE Becker Road, SW Port St. Lucie Boulevard, and Okeechobee Road (SR 70). The existing year (2016) traffic analysis includes all four of the previously mentioned facilities as well as 12 intersections located along these facilities. **Figure 2-3** to **Figure 2-6,** provide existing (2016) intersection configuration, lane assignment, and AM (PM) Peak Hour Volumes. The intersections shown were included in the traffic analysis completed in the *PTFM, June 2017*. The following is a description of the roadway facilities with existing interchanges within the study limits:

- SW Martin Highway (SR 714) is a four-lane divided minor arterial with a posted speed limit of 45 mph. The Turnpike interchange has a trumpet configuration with ramps that connect to SW Martin Highway (SR 714) at a single intersection.

- SE Becker Road is a four-lane divided minor arterial that forms a partial cloverleaf interchange with the Turnpike. The posted speed limit within the interchange is 40 mph.

- SW Port St. Lucie Boulevard is a six-lane divided principal arterial with a posted speed limit of 45 mph. The Turnpike interchange has a trumpet configuration. The Turnpike ramps connect to SW Port St. Lucie Boulevard at a single intersection.

- Okeechobee Road (SR 70) is a divided principal arterial with six lanes to the east of the Turnpike ramps / S Kings Highway intersection and four lanes to the west. The posted speed limit is 45

mph. The Turnpike interchange has a trumpet configuration with ramps that connect to Okeechobee Road (SR 70) at a single intersection.

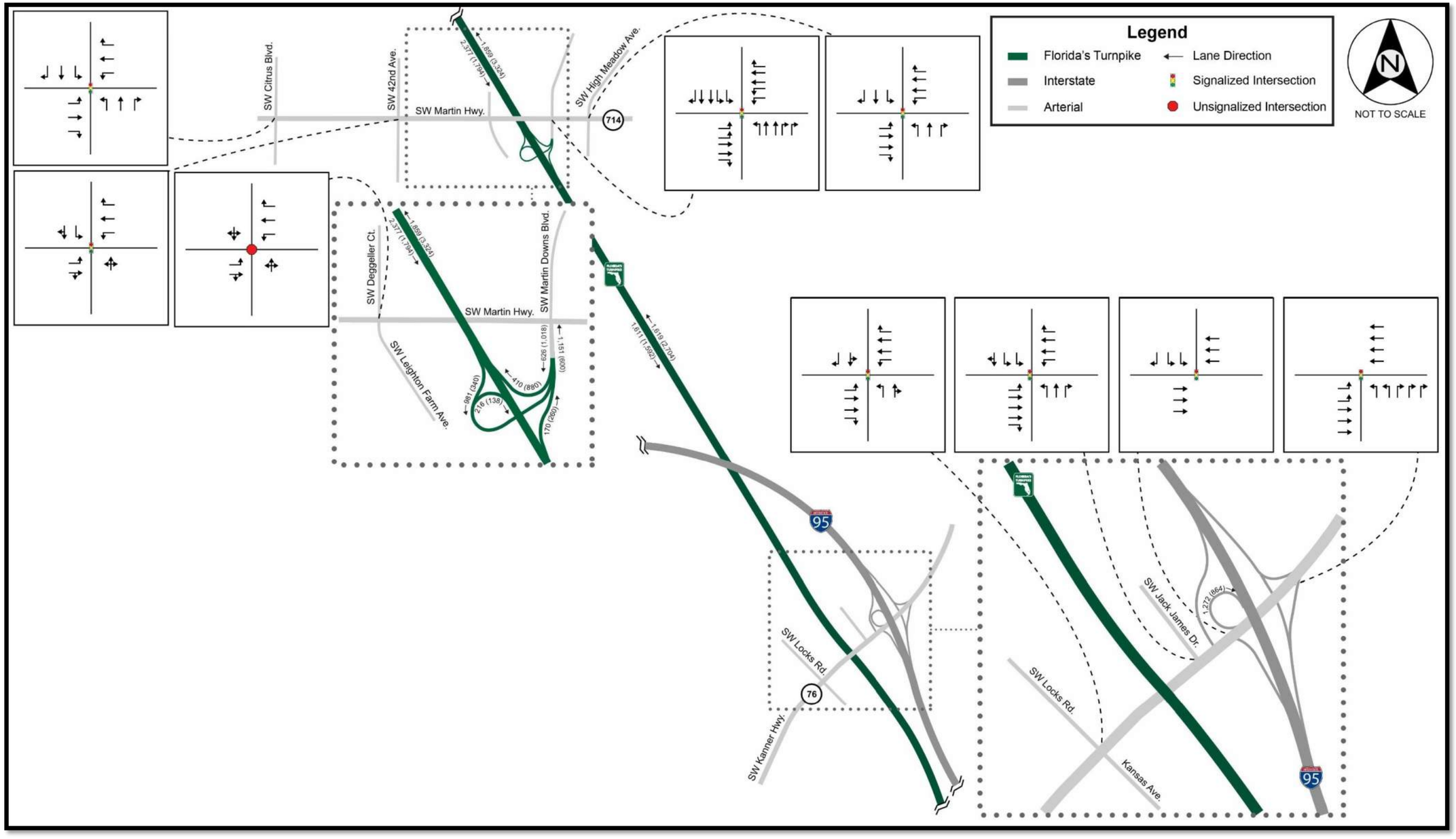


Figure 2-3: SW Kanner Highway to SW Martin Highway (SR 714) Existing Intersection Configuration

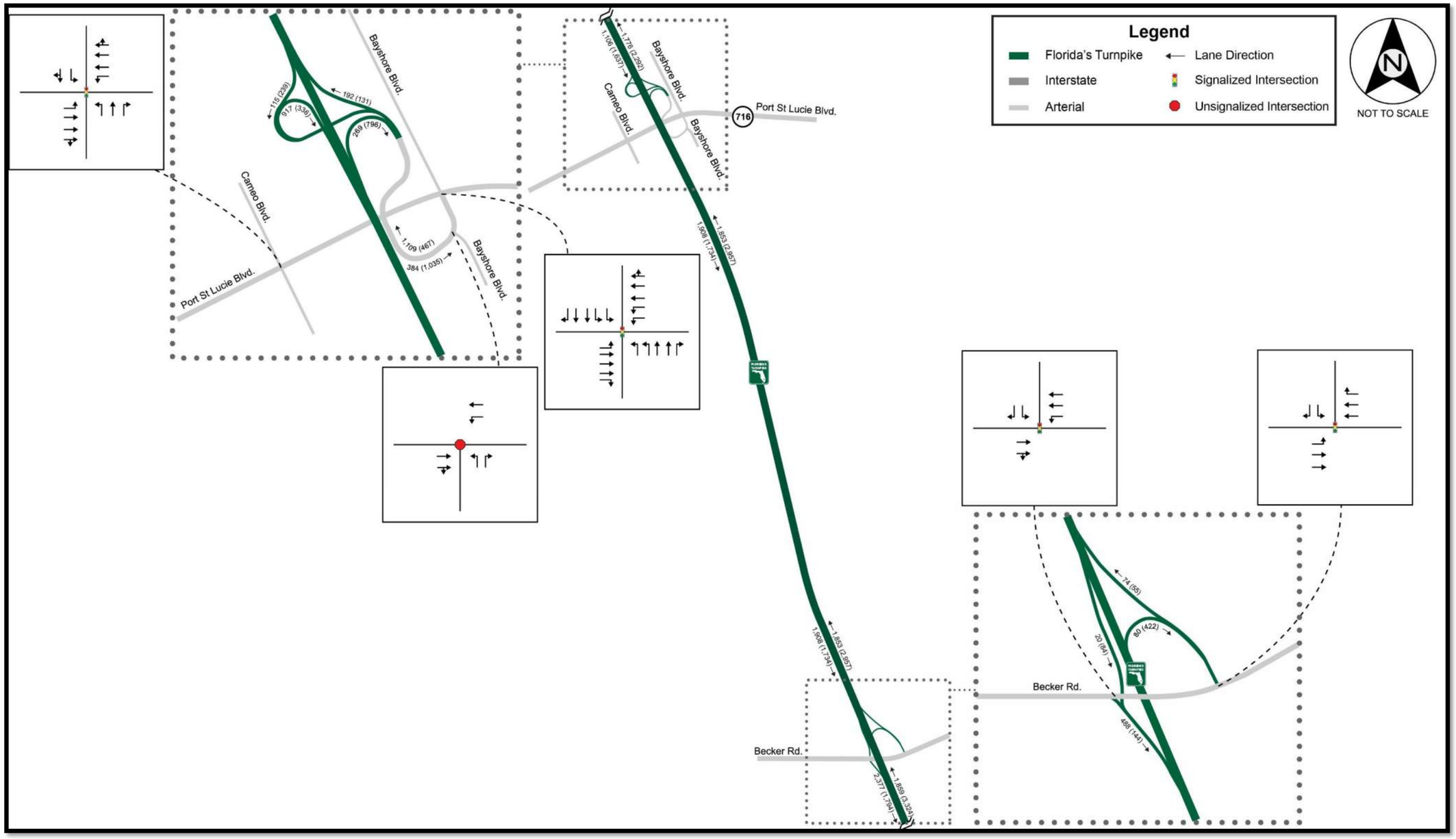


Figure 2-4: SE Becker Road to SW Port St. Lucie Boulevard Existing Intersection Configuration

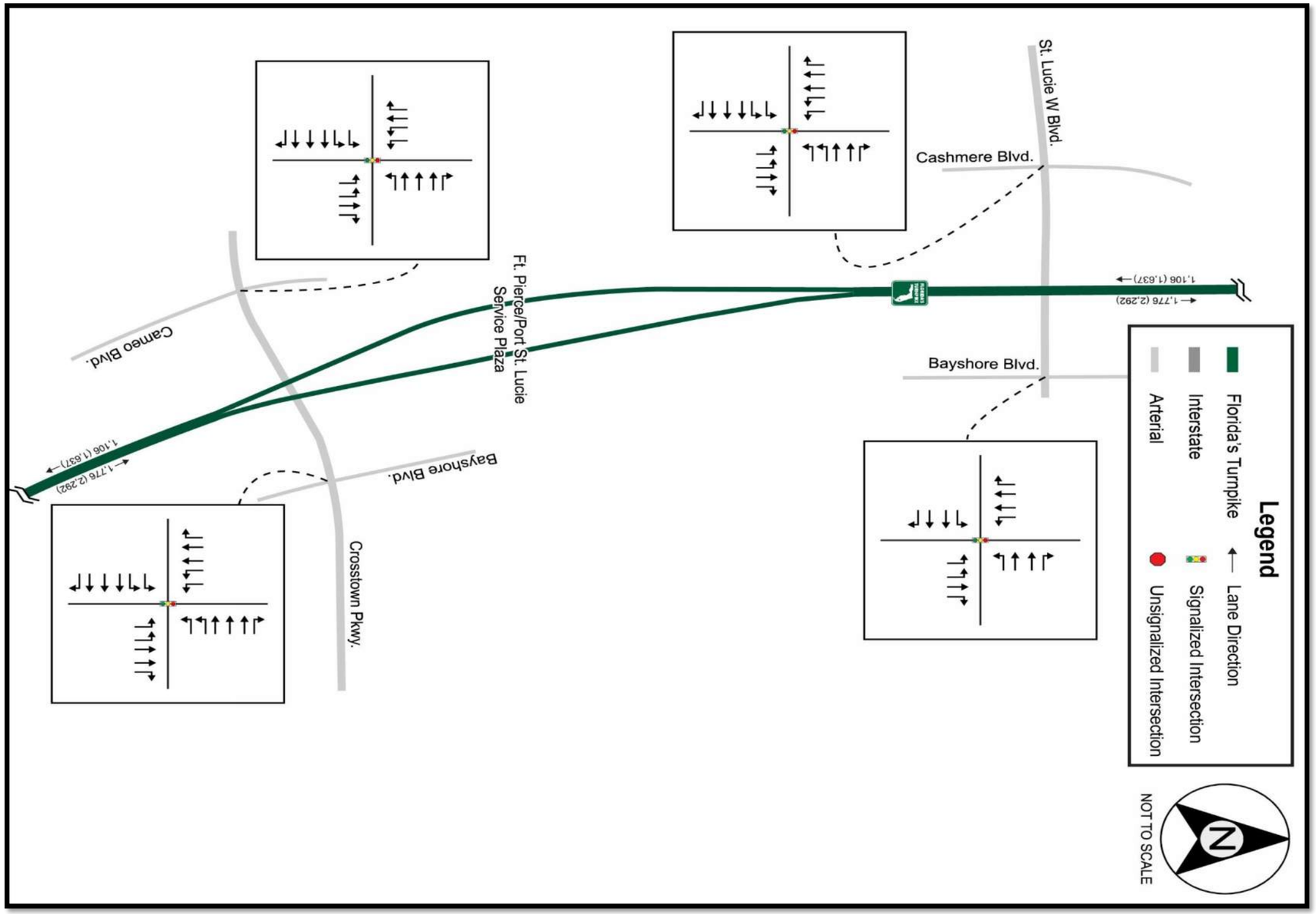


Figure 2-5: Crosstown Parkway to St. Lucie West Boulevard Existing Intersection Configuration

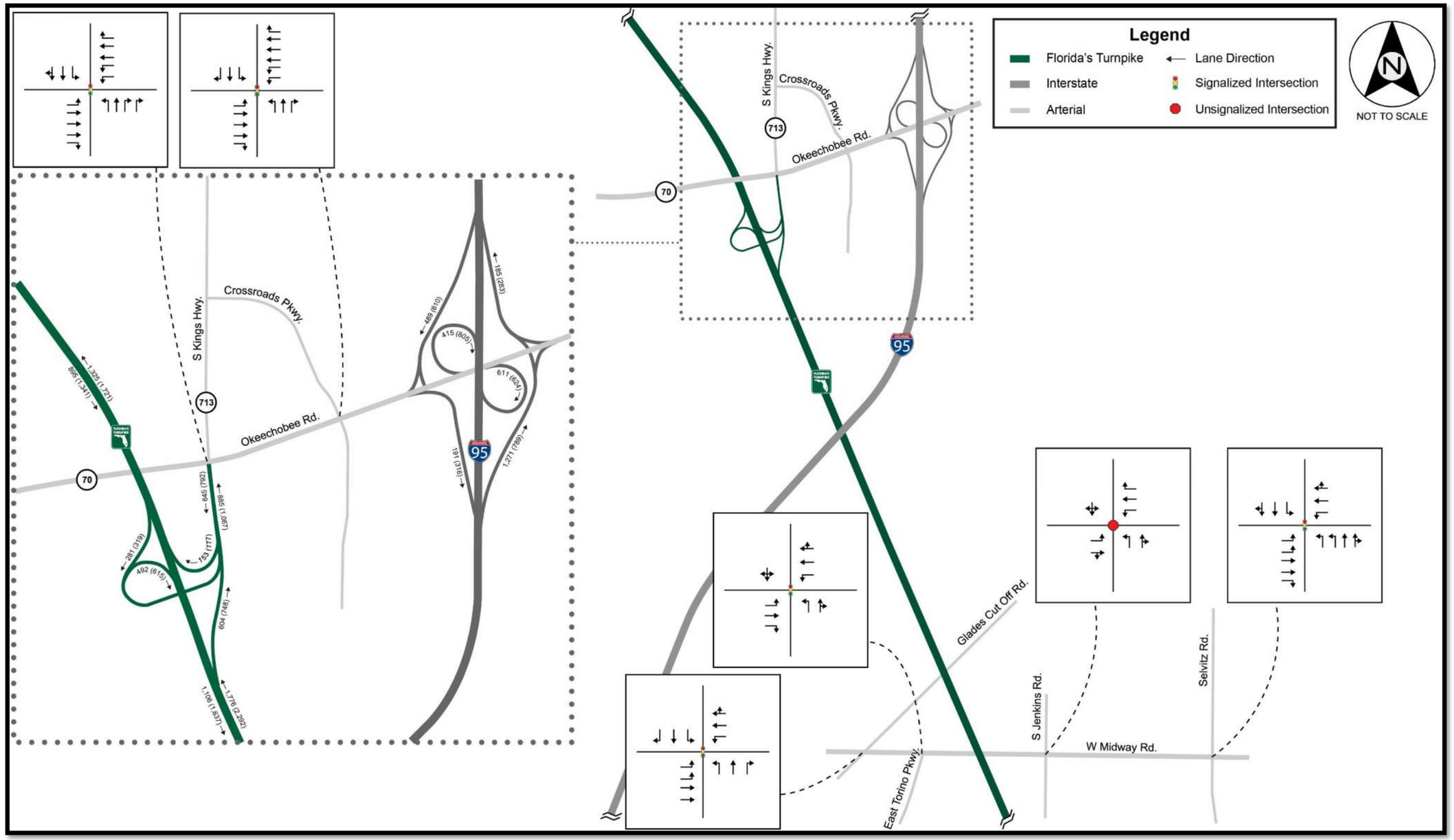


Figure 2-6: W Midway Road to Okeechobee Road (SR 70) Existing Intersection Configuration

2.13.2 Intelligent Transportation System (ITS)

Florida's Turnpike Enterprise strives to provide its roadways with safe and efficient travel through the use of Intelligent Transportation Systems (ITS). FTE utilizes ITS along the highway to: obtain real-time data; monitor weather conditions along the roadway; detect and observe traffic incidents; process and react to the information gathered by altering emergency responders and informing motorists through the use of Dynamic Message Signs (DMS), highway advisory radios, and the FL511 system. The existing ITS infrastructure for the project consists of ITS infrastructure currently deployed, ITS infrastructure currently being implemented, and ITS infrastructure currently in design for future deployment. A brief description of the existing ITS infrastructure along the Turnpike is provided below. An *ITS Technical Memorandum,* October 2020, was prepared under separate cover and provides a detailed inventory of the existing ITS infrastructure along the Turnpike.

2.13.2.1 Fiber Optic Communications Network

The existing fiber optic communications network consists of 96-count and 144-count single-mode (SM) fiber optic backbone cables installed along the Turnpike. The backbone cable along the Turnpike is located on the west side of the roadway throughout the project limits. Each ITS device cabinet is connected to the fiber optic backbone cable by way of a 12-count SM fiber optic drop cable or a 24-count SM fiber optic drop cable. The connections between the fiber optic backbone cable and fiber optic drop cables occur within splice vaults at the device locations.

2.13.2.2 Power Subsystem

The existing power system consists of electrical service points, conduit, pull boxes, electrical service wires, step-up/step-down transformers, and emergency generators. This system will need to be updated to support the replaced and additional devices.

2.13.2.3 Closed Circuit Television (CCTV) Camera Subsystem

The CCTV cameras planned and installed along the Turnpike provide two types of operations: incident management and Dynamic Message Sign (DMS) verification. The incident management CCTV cameras along the Turnpike are typically located on the west side of the roadway and spaced approximately every mile. The placement of the incident management CCTV cameras emphasizes viewing 100 percent of the roadway. Most of the CCTV cameras are installed on CCTV camera poles with lowering devices, mounted a minimum of 50 feet above ground, and utilize pole-mounted cabinets. To minimize the number of poles, some of the CCTV camera poles also have Microwave Vehicle Detection System (MVDS) or Bluetooth devices on the poles.

The DMS verification CCTV cameras provide the ability to confirm the messages posted on the DMSs are correct. The DMSs with verification CCTV cameras include DMSs and arterial DMSs and Arterial Dynamic Messaging Signs (ADMSs). The DMS message verification CCTV cameras are located within the DMSs' cone of vision. In addition, DMS message verification CCTV cameras are typically installed on prestressed concrete poles and have a mounting height of approximately 20 feet, which provides an optimal view of the DMSs. A verification CCTV camera uses a ground-mounted cabinet that is shared

with the DMS. The DMS message verification CCTV cameras typically connect to the ITS network using cabinets shared with the DMSs that are connected to the fiber optic cable.

2.13.2.4 Microwave Vehicle Detection System (MVDS) Subsystem

The MVDSs installed along the Turnpike provide incident detection and traffic data collection. The MVDSs along the Turnpike are typically located on the west side of the roadway and spaced approximately every 1/2-mile. The MVDSs are collocated with CCTV cameras where possible or installed on stand-alone concrete poles with pole-mounted cabinets.

2.13.2.5 Vehicle Detection System – Automatic Vehicle Identification (VDS-AVI) Subsystem

The VDS-AVIs are traffic data probes that use Bluetooth technology to facilitate the calculation of travel times. The travel times are posted on the DMSs installed along the Turnpike. The VDS-AVIs are typically located at DMS sites and at interchanges. The VDS-AVIs are typically mounted to DMS structures, or MVDS or CCTV camera poles. If a DMS structure or CCTV camera or MVDS pole could not be utilized, a standalone pole with pole-mounted cabinet is utilized.

2.13.2.6 Dynamic Message Signs (DMS) Subsystem

There are two existing DMSs currently within the project limits. There are five additional DMSs that will be deployed in other projects within the project limits before this project goes to design. The DMSs provide the traveling public messaging related to the general toll facilities. All DMSs utilize ground-mounted cabinets that are located within the DMS's cone of vision, which allows the maintenance personnel the ability to see the DMS while working in the cabinet.

The DMSs are located on the Turnpike in advance of interchanges. The messages typically posted to the DMSs include travel times to upcoming interchanges, travel conditions, and express lane availability. The locations of the two existing DMSs are:

- Southbound Turnpike north of Indiantown Road (SR 706)
- Northbound Turnpike south of SW Martin Highway (SR 714)

There is a planned project that will deploy five additional DMSs that will be considered existing for this project's timeline:

- Southbound Turnpike north of SW Martin Highway (SR 714)
- Northbound Turnpike south of SW Port St. Lucie Boulevard
- Northbound Turnpike south of the Port St. Lucie - Fort Pierce Service Plaza
- Southbound Turnpike north of the Port St. Lucie - Fort Pierce Service Plaza
- Northbound Turnpike south of W Midway Road

2.13.2.7 Highway Advisory Radio Warning Sign (HARWS) Subsystem

The HARWS assembly includes the transmitter, digital recorder and playback unit, HAR sign, and flashing beacons. There are three HARWS Subsystems currently maintained by Florida's Turnpike System. These existing HARWS Subsystems will be replaced. The locations of the three impacted HARWS Subsystems are:

- Northbound Turnpike south of SW Kanner Highway
- Southbound Turnpike north of SE Becker Road
- Northbound Turnpike south of W Midway Road

2.14 Railroad Crossings

Although there are no at-grade railroad crossings within the project limits, there is one location where the railroad passes underneath the Turnpike. 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 of the Turnpike. The Primary Operating Railroad is the Florida East Coast Railroad Company (FEC) with a FDOT Crossing Inventory Number of 272254P. Based on information received from the Department of Transportation Federal Railroad Administration, there are a total of four trains during the day (6:00 AM – 6:00 PM) and four trains during the night (6:00 PM – 6:00 AM). The trains travel at speeds between 30 and 40 miles per hour (mph).

2.15 Crash Data and Safety Analysis

All of the data presented in the section below was extracted from the *Safety Analysis Report*, March 2019. Five years of available vehicular crash data from Signal Four Analytics, for the years 2012 to 2016, were utilized for the crash analysis of the Turnpike from Jupiter (Indiantown Road (SR 706) to Okeechobee Road (SR 70). The purpose of the crash analysis was to identify safety deficiencies along the facility that should be addressed. Collected crash data was compared to the statewide average to determine if there was a safety issue. The study area segments consist of the Turnpike interchanges from south of SW Kanner Highway to north of Okeechobee Road (SR 70), as well as I-95 interchanges at SE Becker Road and I-95 interchanges from south of SE Bridge Road to north of SW Kanner Highway. For the purpose of this *Preliminary Engineering Report*, the crash and safety analysis section will focus on the project study limits.

Crash data was obtained from Signal Four Analytics for years 2012 through 2016 and extracted by roadway segment name to create a higher confidence of geolocation accuracy. There was a total of 516 crashes reported and observed for the study area over a five-year period.

2.15.1 Crash Density

Figure 2-7 and **Figure 2-8** show the crash density along the Turnpike from 2012 through 2016 in the northbound and southbound directions, respectively**.** The highest crash density was observed to occur in the northbound direction, south of SW Martin Highway (SR 714).

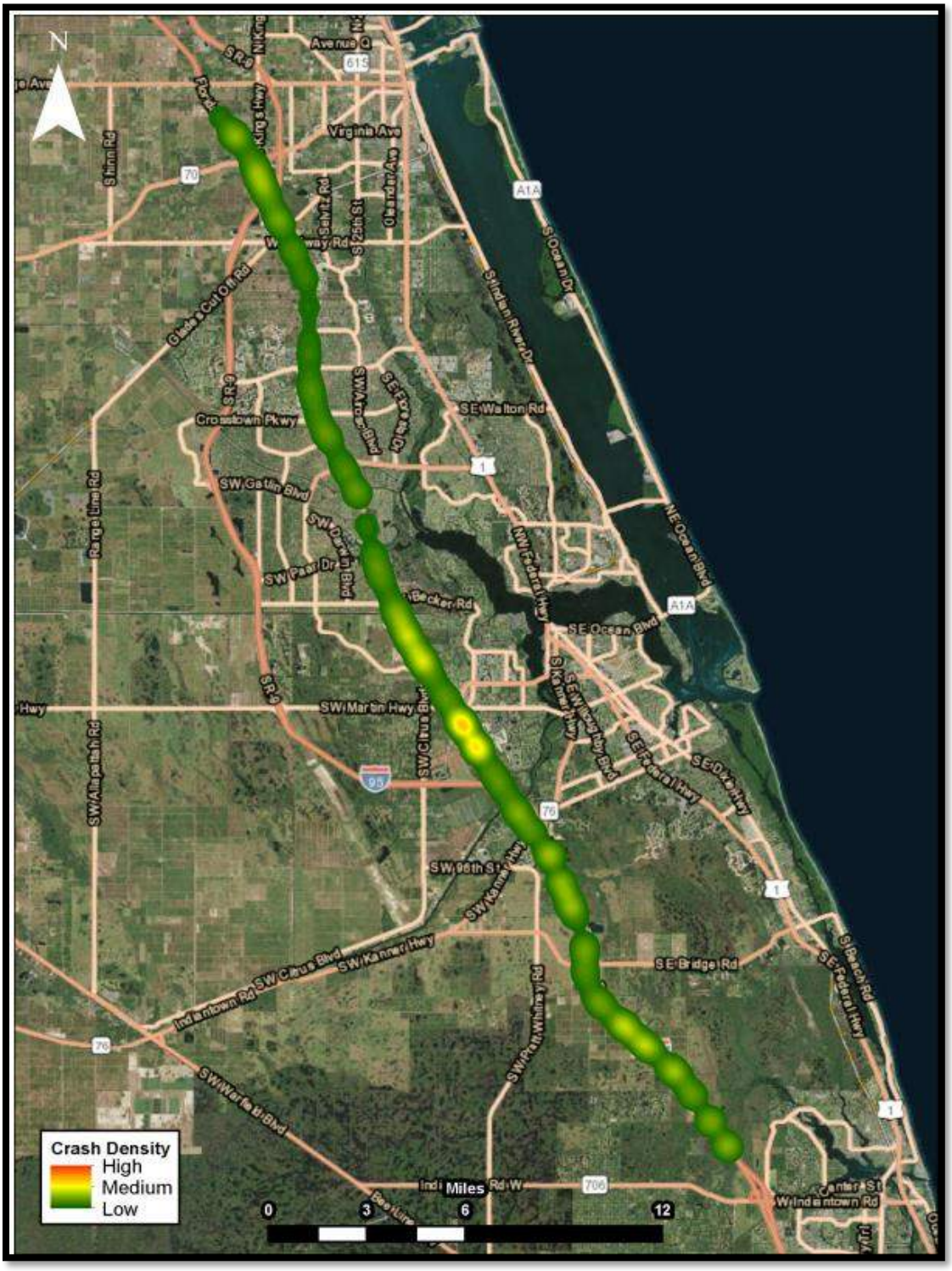


Figure 2-7: Crash Density along Northbound Florida's Turnpike (SR 91)

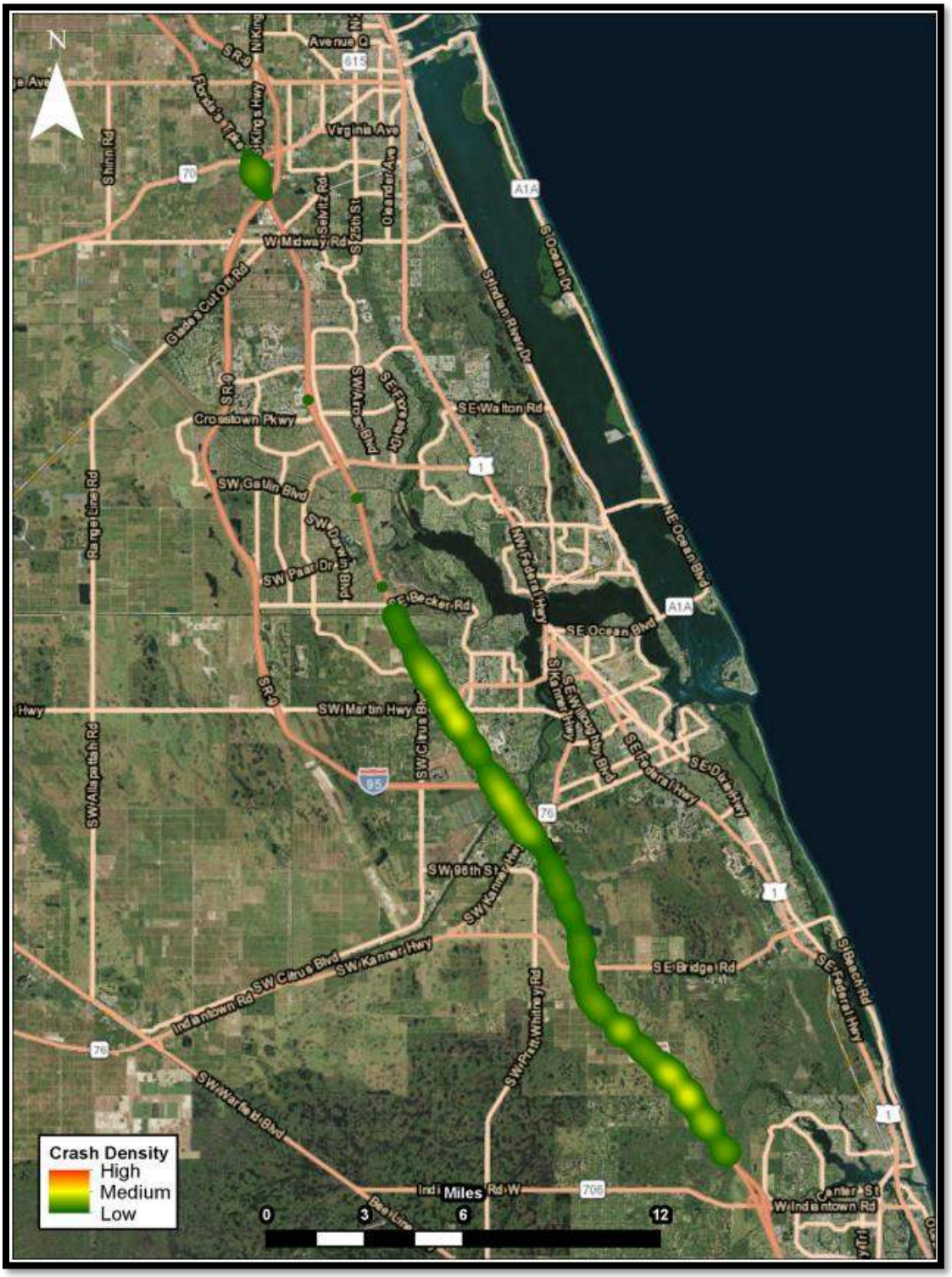


Figure 2-8: Crash Density along Southbound Florida's Turnpike (SR 91)

Figure 2-9 shows the crash density at ramp termini within the project study area from 2012 through 2016. The highest crash densities were observed to occur along SW Port St. Lucie Boulevard, followed by St. Lucie W Boulevard and SW Martin Highway (SR 714).

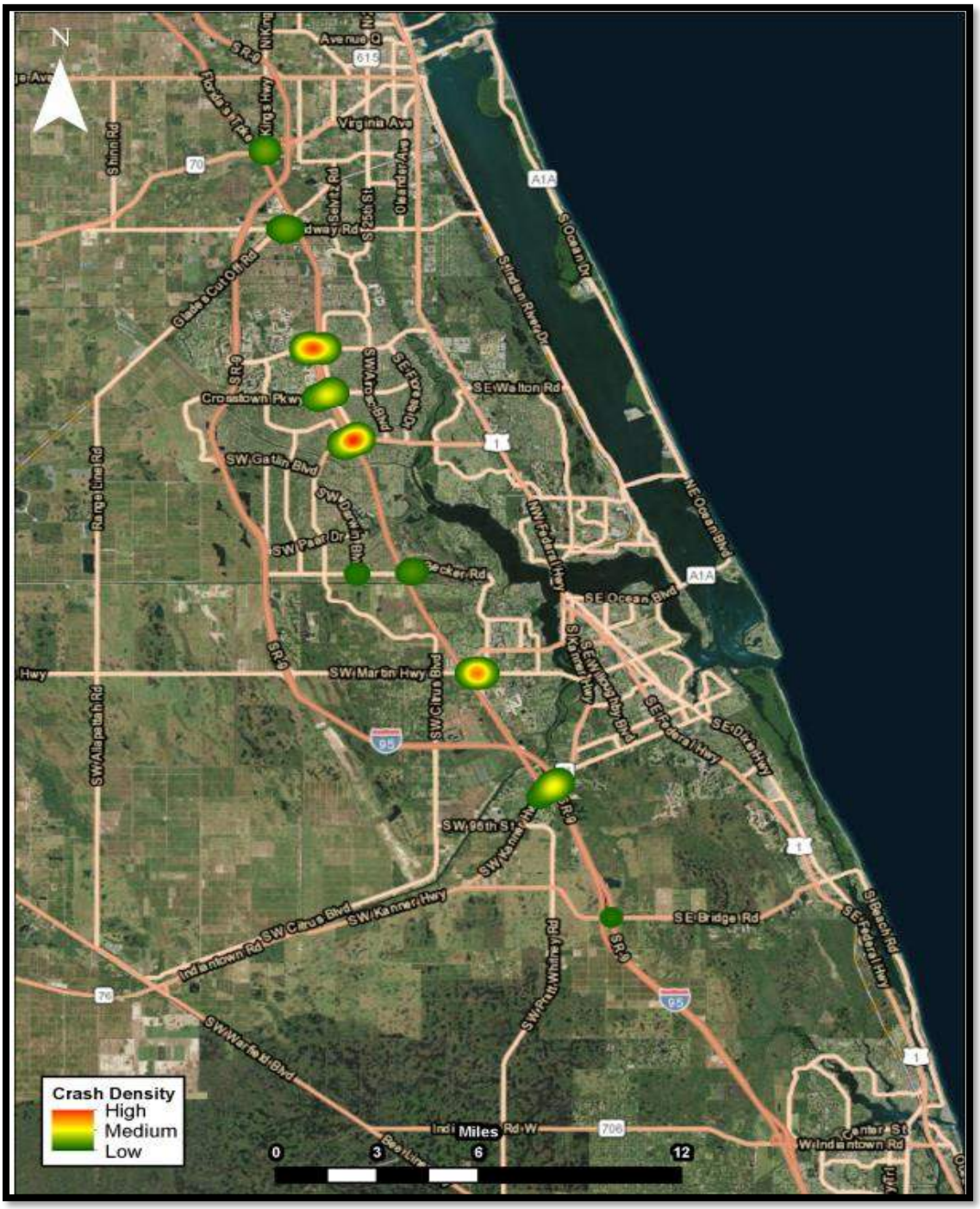


Figure 2-9: Crash Densities at Major Intersections within the Project Study Area

2.15.2 Crash Severity

Table 2-9 summarizes the crash experience within the project limits by severity type. For the five-year study period, 516 crashes were reported, with nine of those resulting in at least one fatality and 182 (38%) resulting in at least one injury. There was a total of 325 "Property Damage Only" crashes.

Table 2-9: Crash Severity along Florida's Turnpike (SR 91)

Segment	Length (miles)	Property Damage Only	Minor Injury	Moderate Injury	Severe Injury	Fatal	Total Crashes
Northbound							
PBC Line to S of SW Martin Highway	16.1	94	22	20	6	3	145
N of SW Martin Highway to S of SW Becker Road	3.5	27	7	4	1	2	41
S of SW Port St Lucie Boulevard to S of Okeechobee Road	8.7	8	6	4	2	1	21
NB Off Ramp to SW Martin Highway	0.4	6	3	3	2	0	14
N of SW Becker Road to S of SW Port St. Lucie Boulevard	3.8	5	2	1	0	1	9
N of Okeechobee Road	1.7	4	1	4	0	0	9
NB On Ramp from Okeechobee Road	0.4	4	0	0	0	0	4
NB Off Ramp to SE Becker Road	0.4	4	0	0	0	0	4
NO Off Ramp to Okeechobee Road	0.4	2	0	1	0	0	3
NB On Ramp from SW Martin Highway	0.4	3	0	0	0	0	3
NB Off Ramp to SW Port St. Lucie Boulevard	0.4	1	1	0	0	0	2
NB On Ramp from SE Becker Road	0.4	2	0	0	0	0	2
NB On Ramp from SW Port St. Lucie Boulevard	0.4	0	1	0	0	0	1
Total	**37.0**	**160**	**43**	**37**	**11**	**7**	**258**
Southbound							
S of SW Martin Highway to PBC Line	16.2	101	22	23	9	0	155
N of SW Martin Highway to S of SW Becker Road	3.3	17	5	7	2	0	31
S of Okeechobee Road to N of SW Port St. Lucie Boulevard	8.9	20	0	5	3	2	30
S of SW Port St. Lucie Boulevard to N of SW Becker Road	4	5	2	3	1	0	11
SB Off Ramp to SW Martin Highway	0.3	7	1	1	0	0	9
SB On Ramp from Okeechobee Road	0.3	5	0	1	0	0	6
N of Okeechobee Road	1.6	3	0	0	1	0	4
SB On Ramp from SW Martin Highway	0.3	3	1	0	0	0	4
SB Off Ramp to Okeechobee Road	0.3	1	1	1	0	0	3
SB Off Ramp to SE Becker Road	0.6	2	0	0	0	0	2
SB On Ramp from SE Becker Road	0.6	1	1	0	0	0	2
SB Off Ramp to SW Port St. Lucie Boulevard	0.4	0	0	1	0	0	1
Total	**36.8**	**165**	**33**	**42**	**16**	**2**	**258**
Florida's Turnpike Total		***325***	***76***	***79***	***27***	***9***	***516***

**Information in the table above was extracted from the Safety Analysis Report (SAR, March 2019) for Palm Beach, Martin, and St. Lucie Counties.*

Table 2-10 summarizes the crash experience, at study intersections, by severity type. For the five year study period, 570 crashes were reported, with three of those resulting in at least one fatality and 247 (44%) resulting in at least one injury. There was a total of 320 "Property Damage Only" crashes.

Table 2-10: Crash Severity at Study Intersections

Intersection	Property Damage Only	Minor Injury	Moderate Injury	Severe Injury	Fatal	Total Crashes
SW Port St. Lucie Boulevard at SW Bayshore Boulevard	45	29	6	3	0	83
St. Lucie W Boulevard at SW Cashmere Boulevard	46	25	5	2	0	78
St. Lucie W Boulevard at NW Bayshore Boulevard	26	19	5	1	0	51
SW Martin Highway at SW Martin Downs Boulevard	22	14	10	0	1	47
SW Martin Highway at SW High Meadow Avenue	27	15	4	0	0	46
SW Port St. Lucie Boulevard at SW Cameo Boulevard	21	14	4	3	1	43
Crosstown Parkway at SW Bayshore Boulevard	19	12	6	1	1	39
Okeechobee Road at Florida Turnpike Ramp Terminal	23	2	0	0	0	25
Crosstown Parkway at SW Cameo Boulevard	16	5	2	1	0	24
SW Kanner Highway at I-95 NB Ramp Terminal	11	6	4	2	0	23
SW Kanner Highway at Correntree Drive	10	7	2	0	0	19
SW Kanner Highway at I-95 SB Ramp Terminal	13	3	3	0	0	19
W Midway Road at NW East Torino Parkway	6	5	4	0	0	15
SW Becker Road at Southbend Boulevard	7	6	1	0	0	14
SW Kanner Highway at SW Locks Road	6	2	4	0	0	12
W Midway Road at Glades Cut-Off Road	7	2	1	0	0	10
SW Becker Road at SW Kestor Drive	6	2	1	0	0	9
SE Bridge Road at I-95 SB Ramp Terminals	3	1	1	0	0	5
SW Becker Road at Florida Turnpike SB Ramp Terminals	2	0	0	1	0	3
SW Becker Road at Florida Turnpike NB Ramp Terminals	2	0	0	0	0	2
SE Bridge Road at I-95 NB Ramp Terminals	2	0	0	0	0	2
W Midway Road at NW Milner Drive	0	0	1	0	0	1
Total	**320**	**169**	**64**	**14**	**3**	**570**

**Information in the table above was extracted from the Safety Analysis Report (SAR, March 2019) for Palm Beach, Martin, and St. Lucie Counties.*

2.15.3 Crash Types

Table 2-11 summarizes the crash experience within the project limits by crash type. For the five year study period 516 crashes were reported. Front to Rear constituted 103 (20%) of the total crashes along the Turnpike from 2012 to 2016. Concrete Traffic Barrier was the second highest crash type with 77 (15%), while Miscellaneous Other Crash, Guardrail Face, and Sideswipe Same Direction finished off the top five with 53 (10%), 58 (11%), and 58 (11%) respectively. There were also two pedestrian related crashes, with one resulting in a fatality observed in the southbound direction at W Midway Road. Upon investigation of the long form, the fatality was not a result of design or operational deficiencies.

Table 2-11: Crash Types along Florida's Turnpike (SR 91)

Crash Types	2012	2013	2014	2015	2016	Total
Northbound						
Front to Rear	11	14	8	11	8	52
Concrete Traffic Barrier	14	9	3	6	10	42
Other Non-Collision	11	2	3	5	4	25
Guardrail Face	11	6	2	3	3	25
Sideswipe, same direction	11	2	5	3	4	25
Miscellaneous Other Crash	6	3	5	1	8	23
Other Non-Fixed Object	6	5	2	3	1	17
Other	4	0	4	5	4	17
Overturn/Rollover	2	2	2	3	0	9
Struck by Falling, Shifting Cargo, etc.	3	0	3	1	1	8
Angle	2	0	4	1	1	8
Parked Motor Vehicle	1	1	0	2	0	4
Ran into Water/Canal	1	0	0	1	0	2
Front to Front	1	0	0	0	0	1
Total	**84**	**44**	**41**	**45**	**44**	**258**
Southbound						
Front to Rear	13	9	10	10	9	51
Concrete Traffic Barrier	10	6	7	10	4	37
Guardrail Face	8	8	9	4	4	33
Miscellaneous Other Crash	13	5	8	3	4	33
Sideswipe, same direction	7	2	1	11	10	31
Other Non-Collision	8	4	4	0	3	19
Other Non-Fixed Object	4	1	3	4	3	15
Overturn/Rollover	5	2	1	4	2	14
Other	1	0	0	2	5	8
Struck by Falling, Shifting Cargo, etc.	1	1	0	1	4	7
Angle	1	1	1	1	1	5
Parked Motor Vehicle	0	0	1	0	1	2
Pedestrian	0	0	1	0	1	2
Ran into Water/Canal	1	0	0	0	0	1
Total	**72**	**39**	**46**	**50**	**51**	**258**
Florida's Turnpike Total	***156***	***83***	***87***	***95***	***95***	***516***

**Information in the table above was extracted from the Safety Analysis Report (SAR, March 2019) for Palm Beach, Martin, and St. Lucie Counties.*

Table 2-12 summarizes the crash experience, at the study intersections, by crash type. The most common crash type was Front to Rear 301 (53%), followed by Angle Crashes 84 (15%), and Sideswipe Crashes in the same direction 49 (9%). There were also six bicycle and four pedestrian related crashes observed within the project area, which occurred at the locations listed in **Table 2-13.**

Table 2-12: Crash Type at Study Intersections

Crash Types	2012	2013	2014	2015	2016	Total
Northbound						
Front to Rear	22	33	98	70	78	301
Angle	9	12	17	19	27	84
Sideswipe, same direction	3	4	14	13	15	49
Miscellaneous Other Crash	7	4	12	6	10	39
Other	3	4	4	8	8	27
Unknown	17	5	0	0	0	22
Front to Front	2	2	6	6	3	19
Parked Motor Vehicle	4	6	1	2	1	14
Bicycle	1	1	0	1	3	6
Pedestrian	1	0	3	0	0	4
Overturn/ Rollover	0	0	0	1	1	2
Other Non-Collision	1	0	0	1	0	2
Other Non-Fixed Object	1	0	0	0	0	1
Total	**71**	**71**	**155**	**127**	**146**	**570**

**Information in the table above was extracted from the Safety Analysis Report (SAR, March 2019) for Palm Beach, Martin, and St. Lucie Counties.*

Table 2-13: Bicycle and Pedestrian Related Crashes at Study Intersections (2012 – 2016)

Intersection	Bicycle Related Crashes	Pedestrian Related Crashes
St. Lucie West Blvd. at SW Cashmere Blvd.	2	1
SW Port St. Lucie Blvd. at SW Bayshore Blvd.	1	2
SW Kanner Hwy. at I-95 NB Ramp Terminal	1	0
St. Lucie West Blvd. at NW Bayshore Blvd.	1	0
Crosstown Pkwy. at SW Cameo Blvd.	1	0
SW Martin Hwy. at SW Martin Downs Blvd.	0	1

**Information in the table above was extracted from the Safety Analysis Report (SAR, March 2019) for Palm Beach, Martin, and St. Lucie Counties.*

2.15.4 Crash Ratios

The crash ratios along the Turnpike and at the signalized intersections within the project limits are summarized in **Table 2-14** and **Table 2-15** respectively. Crash ratios cannot be computed for unsignalized intersections because statewide average crash rates apply only to signalized intersections. Therefore, the following three intersections were excluded from the crash ratio analysis:

- SE Bridge Road at I-95 NB Ramp Terminals
- SE Bridge Road at I-95 SB Ramp Terminals
- W Midway Road at NW Milner Drive

A crash ratio greater than 1.0 represents a location with a crash rate higher than the statewide average for similar facility types. All portions of the Turnpike within the project limits contain crash rates lower than the statewide average. The following study intersections contain crash rates higher than the statewide average:

- SW Martin Highway (SR 714) at SW High Meadow Avenue
- St. Lucie West Boulevard at SW Cashmere Boulevard

Crashes that took place on the Turnpike ramps were not aggregated into the crash totals for the crash ratio analysis due to the difficulty of comparing ramp crashes to any standard crash rate.

Table 2-14: Crash Ratios along Florida's Turnpike (SR 91)

Segment	Crash Rate	Statewide Average	Crash Ratio
Northbound			
NB Off Ramp to SW Martin Highway	0.824	0.924	0.892
N of SW Martin Highway to S of SW Becker Road	0.401	0.924	0.434
NB On Ramp from Okeechobee Road	0.351	0.924	0.380
Palm Beach County(PBC) Line to S of SW Martin Highway	0.281	0.924	0.304
N of Okeechobee Road	0.276	0.924	0.299
NB Off Ramp to Okeechobee Road	0.208	0.924	0.225
NB Off Ramp to SE Becker Road	0.194	0.924	0.210
NB On Ramp from SW Martin Highway	0.190	0.924	0.206
NB Off Ramp to SW Port St. Lucie Boulevard	0.113	0.924	0.122
NB On Ramp from SE Becker Road	0.101	0.924	0.109
NB On Ramp from SW Port St. Lucie Boulevard	0.063	0.924	0.068
N of SW Becker Road to S of SW Port St. Lucie Boulevard	0.052	0.924	0.056
N of SW Port St. Lucie Boulevard to S of Okeechobee Road	0.046	0.924	0.050
Southbound			
SB Off Ramp to SW Martin Highway	0.598	0.924	0.647
SB On Ramp from Okeechobee Road	0.497	0.924	0.538
S of SW Martin Highway to PBC Line	0.317	0.924	0.343
SB On Ramp from SW Martin Highway	0.316	0.924	0.342
SB Off Ramp to Okeechobee Road	0.299	0.924	0.324
N of SW Martin Highway to S of SW Becker Road	0.155	0.924	0.168
N of Okeechobee Road	0.102	0.924	0.110
SB Off Ramp to SE Becker Road	0.081	0.924	0.088
SB On Ramp from SE Becker Road	0.08	0.924	0.087
SB Off Ramp to SW Port St. Lucie Boulevard	0.078	0.924	0.084
S of Okeechobee Road to N of SW Port St. Lucie Boulevard	0.055	0.924	0.060
S of SW Port St. Lucie Boulevard to N of SW Becker Road	0.048	0.924	0.052
SB On Ramp from SW Port St. Lucie Boulevard	0	0.924	-
Total	**6**	**23**	**6**

**Information in the table above was extracted from the Safety Analysis Report (SAR, March 2019) for Palm Beach, Martin, and St. Lucie Counties*

Table 2-15: Crash Ratios at Study Intersections

Intersection	Crash Rate	Statewide Average	Crash Ratio
SW Martin Highway at SW High Meadow Avenue	0.923	0.587	1.572
St. Lucie W Boulevard at SW Cashmere Boulevard	0.796	0.587	1.356
SW Becker Road at Southbend Boulevard	0.544	0.587	0.927
St. Lucie W Boulevard at NW Bayshore Boulevard	0.505	0.587	0.860
SW Becker Road at SW Kestor Drive	0.474	0.587	0.807
Crosstown Parkway at SW Bayshore Boulevard	0.422	0.587	0.719
SW Martin Highway at SW Martin Downs Boulevard	0.785	1.187	0.661
W Midway Road at NW East Torino Parkway	0.362	0.562	0.644
SW Kanner Highway at Correntree Drive	0.369	0.587	0.629
SW Port St. Lucie Boulevard at SW Cameo Boulevard	0.511	0.826	0.619
Crosstown Parkway at SW Cameo Boulevard	0.354	0.587	0.603
SW Port St. Lucie Boulevard at SW Bayshore Boulevard	0.7	1.187	0.590
SW Kanner Highway at SW Bayshore Boulevard	0.288	0.587	0.491
W Midway Road at Glades Cut-Off Road	0.195	0.587	0.332
Okeechobee Road at Florida Turnpike Ramp Terminal	0.46	1.511	0.304
SW Kanner Highway at I-95 SB Ramp Terminal	0.312	1.511	0.206
SW Kanner Highway at I-95 NB Ramp Terminal	0.222	1.511	0.147
SW Becker Road at Florida Turnpike SB Ramp Terminals	0.089	1.511	0.059
SW Becker Road at Florida Turnpike NB Ramp Terminals	0.055	1.511	0.036

**Information in the table above was extracted from the Safety Analysis Report (SAR, March 2019) for Palm Beach, Martin, and St. Lucie Counties.*

2.16 Drainage

Throughout the project limits, stormwater runoff sheet flows from the roadway to roadside ditches that flow to existing culverts and cross drains throughout the corridor. The culverts and cross drains discharge into existing canals or creeks, which carry the flow to three main water bodies: the Loxahatchee River, the South Fork St. Lucie River, and the North Fork St. Lucie River. All three rivers discharge into the Atlantic Ocean. The general flow of surface water within the project limits is from west to east.

The project is located within the jurisdiction of the South Florida Water Management District (SFWMD) and falls within the jurisdiction of five local water districts: Hobe St. Lucie Conservancy District, Loxahatchee River Environmental Control District, North St. Lucie River Water Control District, North Palm Beach Water Control District, and Northern Palm Beach County Improvement District. The project is divided into 75 sub-basins based on the existing roadway profile, roadside ditch profiles, and culvert and cross drain locations. 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*, June 2021 (PSR) estimated the volume required to mitigate FDOT and SFWMD stormwater requirements. Three pond site alternatives were identified for each basin between MP 133 and MP 142. Pond sizing calculations were provided for the remainder of the basins within the project limits. Given the high seasonal groundwater table (SHGWT) throughout the project corridor, wet

detention ponds were recommended. The Loxahatchee River is classified as an Outstanding Florida Water (OFW); however, only direct discharge to the river requires additional treatment.

From SE Becker Road to the C-24 Canal, the Turnpike 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.

Federal Emergency Management Agency (FEMA) floodplains are prevalent throughout the corridor. There are three regulatory floodways within this study limits: Loxahatchee River, Roebuck Creek, and Tenmile Creek. Improvements to the bridges over regulatory floodways will require a No-Rise Certification from FEMA during the design phase. Floodplain compensation sites will be necessary to offset the floodplain impacts from the proposed improvements and will be further analyzed in the design phase. Please refer to the *Location Hydraulics Report (LHR)*, June 2021, for additional information on the anticipated floodplain impacts. FDOT Design Manual (FDM) Section 211.9 requires the mainline travel lanes for all Turnpike facilities be above the 100-year floodplain elevation. Survey confirmed that the edge of pavement in an area north of the Thomas B. Manuel Bridge (MP 132.5) is lower than the FEMA floodplain elevation. It is recommended that this area be reviewed during the design phase to ensure the proposed profile grade meets the requirements of the FDM. There are 23 existing culverts and 16 existing bridge culverts within the PD&E study limits. To accommodate the recommended widening, almost all culverts will need to be extended. Several culverts are located within the 100-year floodplain and may require additional compensation. New cross drains are proposed at interchanges to accommodate new configurations.

2.17 Soils and Geotechnical Data

Based on review of the Natural Resource Conservation Service (NRCS), Soil Survey for Palm Beach County, Florida, there are seven primary soil-mapping units along the project corridor. Based on a review of the NRCS Soil Survey for Martin County, Florida and the Soil Survey for St. Lucie County, Florida, there are 14 primary soil-mapping units for each county along the project corridor.

In general, the vast majority of the soil types consist of sandy soils (A-3 to A-2) to depths extending to 80 inches below the natural ground surface. Some soil units along the project corridor are expected to contain clayey (plastic) soils at depths of 12 to 36 inches below grade. In addition, some soil units along the corridor are identified as having a cemented layer often referred to as “hardpan”. These hardpan materials are often dense/hard. Excavations of these materials in cut areas may be difficult and may require specialized equipment and construction methods. Variations in the depth and relative density of hardpan materials should be anticipated. The Seasonal High Groundwater Table (SHGWT) for the soils along the project corridor are reported to range from above the ground surface to a depth of six feet below natural grades. The majority of the soils are reported to have a SHGWT at depths ranging from six inches to 18 inches below grade. Roadway base to groundwater clearance will need to be evaluated to ensure minimum separation between the base and the SHGWT is maintained. In areas where the existing SHGWT is above grade, the SHWGT will have to be established by the project biologist utilizing biological indicators. Additionally, drainage design will need to consider the impact of shallow groundwater levels on stormwater

management facilities. In general, the sandy soils are suitable for supporting proposed roadway embankments after proper subgrade preparation.

2.18 Utilities

The existing utility facilities include power, gas, water, sewer, and communications. A list of the existing Utility Agency Owners (UAOs) was obtained by contacting Sunshine 811. The existing UAOs, the identified UAO contacts and facility type are summarized in **Table 2-16**. A preliminary plan set with aerial background was sent to all Utility Agency Owners (UAO) identified by Sunshine 811 as having utility facilities in the project area for their use in identifying their facilities.

Table 2-16: Utility Agency Owners

Utility Agency Owner	Contact	Utility Type	Comments
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	Marked plans provided
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	Marked plans provided
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	Marked plans provided
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	Marked plans provided
Crown Castle 1601 NW 136 Ave, Suite A-200 Sunrise, FL 33323	Danny Haskett 786-610-7073 danny.haskett@crowncastle.com	Communications	No response provided
Deltacom 1530 Delta Com Drive Anniston, AL 36207	John McGuffey 256-241-6438 John.mcguffey@elink.com	Communications	No response provided
Florida City Gas 4045 NW 97 Ave Doral, FL 33178	Maria Paula Lopez 786-332-8913 maria.lopez@nexteraenergy.com	Gas	Marked plans provided
Florida Gas Transmission 2405 Lucien Way, Suite 200 Maitland, FL 32751	Joseph E. Sanchez 407-838-7171 Joseph.E.Sanchez@energytransfer.com	Gas Pipeline	Facilities Confirmed
Ft. Pierce Utility Authority (FPUA) **Water & Sewer** 1701 South 37th Street Fort Pierce, FL 34947	James Carnes 772-466-1600 jcarnes@fpua.com	Water and Sewer	Marked plans provided

Ft. Pierce Utility Authority Electric 1701 South 37th Street Fort Pierce, FL 34947	Jason Mittler 772-466-1600 jmittler@fpua.com	Electric	No facilities
Ft. Pierce Utility Authority Fiber 1701 South 37th Street Fort Pierce, FL 34947	Jason Mittler 772-466-1600 jmittler@fpua.com	Communications	Marked plans provided
Ft. Pierce Utility Authority Gas 1701 South 37th Street Fort Pierce, FL, 34947	Jason Mittler 772-466-1600 jmittler@fpua.com	Gas	Atlas map provided
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	Marked plans provided
FPL Transmission 15430 Endeavor Drive Jupiter, FL 33478	Tricia D'Annunzio 561-904-3560 tricia.dannunzio@fpl.com	Electric	Marked plans provided
Hometown Communications (Blue Stream Fiber) 1982 SW Hayworth Ave Port St. Lucie, FL 34987	Steve Lencse 954-699-0900 slencse@mybluestream.com	Communications	No response provided
Hotwire Communications 10360 USA Today Way Miramar, FL 33025	Walter Sancho-Davilla 954-699-0900 walter.sancho-davila@hotwirecommunication.com	Communications	No facilities
ITS Fiber (Indiantown Telephone) 15925 SW Warfield Blvd Indiantown, FL 34956	Eddie Richeson 229-507-1308 eddier@itsfiber.net	Communications	Marked plans provided
Martin County Utilities 2378 SE Ocean Blvd Stuart, FL 34995	Steve Vandersluis 772-221-1437 svaners@martin.fl.us	Water and Sewer	Marked plans provided
St. Lucie County Utilities 2300 Virginia Ave Fort Pierce, FL 34982	Raymond Murankus 772-462-5221 murankusr@stlucieco.org	Water and Sewer	No facilities
St. Lucie West Services District 450 SW Utility Drive Port St. Lucie, FL 33309	Joshua Miller 772-340-0220 jmiller@slwsd.org	Water	No facilities
TECO Peoples Gas 5101 NW 21st Ave, Suite 460 Ft. Lauderdale, FL 33309	Max Chamorro 954-453-0812 mjchamorro@tecoenergy.com	Gas	Marked plans provided
Town of Jupiter 17403 Central Blvd Jupiter, FL 33458	Amanda Barnes 561-741-2537 amandab@jupiter.fl.us	Water	Marked plans provided
Tropicana Products Douglas Pipeline Pittsburgh, PA 15234	c/o Douglas Pipeline, Andi Shacklett 412-531-2440 ashacklett@douglaspipeline.com	Pipeline	Facility description provided

The general location of the existing utility facilities described below are based on the UAOs response through the utility contact process. Exact locations of the existing utilities and the extent of impacts will be determined during the project's design phase. Coordination with known UAOs during the design phase will assist in minimizing relocation adjustments and disruptions of service to the public.

The majority of the utility facilities cross the Turnpike at the local cross streets. **Table 2-17** provides a summary of the existing utility facilities within the project limits. All stations provided are approximate.

Table 2-17: Existing Utility Information

Utility Type	Corridor	Station	General Location	Size
AT&T Corp.				
BT	Mainline	3625+00 to 3696+50	Center of Turnpike	2-2"
BT	Mainline	100+00 to 2014+00	Center of Turnpike	2-2"
AT&T Florida				
OFO	Mainline	1157+25 to 1174+75	East Right-of-way (R/W)	#216
BFO	Mainline	1174+75 to 1179+80	East R/W	#216
BT	Mainline	1535+75	Crossing Turnpike	100 PR Copper
BT	Mainline	1535+75 to 1549+00	West Side of Service Plaza	100 PR Copper
BT	Mainline	1933+70	West R/W	N/A
BFO	Mainline	1945+50	East R/W	50 PR Copper
BFO	Mainline	1945+50 to 1958+00	East R/W	50 PR Copper
BT	SE Bridge Rd	499+00	SE Bridge Rd south side	1-4" PVC
BT	SE Bridge Rd	499+00	SE Bridge Rd south side	1-100 PR
BT	SE Bridge Rd	499+00	SE Bridge Rd south side	48 FOC
BT	SE Bridge Rd	498+90	SE Bridge Rd south side	1-4"
BFO	SE Bridge Rd	499+00	SE Bridge Rd south side	#48
BT	SE Bridge Rd	499+10	SE Bridge Rd south side	100 PR Copper
BT	SW Kanner Hwy	739+80	South side crossing Turnpike	9-4"
BFO	SE Becker Rd	1179+80 R	East R/W	#216
BFO	SE Becker Rd	1182+10	North side crossing Turnpike	(2) # 216, (1) # 48 & 100 PR Copper
BFO	SW Port St. Lucie Blvd	1426+20	South side crossing Turnpike	(16) 4"
BT	SW Port St. Lucie Blvd	1600+99	Crossing Turnpike	6-4"
BFO	W Midway Rd	1811+20	South side crossing Turnpike	#144 & #72
BT	W Midway Rd	1813+10 to 1820+00	East R/W	50 PR Copper
BT	Glades Cut-Off Rd	1830+90	South side crossing Turnpike	200 PR Copper
BFO	Glades Cut-Off Rd	1831+10	South side crossing Turnpike	#144
BFO	Glades Cut-Off Rd	1833+50	North side crossing Turnpike	#48
BT	Okeechobee Rd	1961+00	South Side crossing Turnpike	12-4"
City of Port St. Lucie				
FM	Mainline	1275+00	Crossing Turnpike	30" HDPE
Reclaimed WM	Mainline	1275+20	Crossing Turnpike	30" HDPE
Fiber	Mainline	1277+40	Crossing Turnpike	1-2"
FM	Mainline	1289+30	Crossing Turnpike	8"

WM	Mainline	1289+50	Crossing Turnpike	24"
WM	Mainline	1470+10	Crossing Turnpike	16"
FM	Mainline	1477+00	Crossing Turnpike	12"
FM	Mainline	1537+70	Crossing Turnpike	6" Private (TPK)
WM	Mainline	1545+60 (SW South Macedo Blvd)	East R/W	6" to Meter assembly
FM	Mainline	1673+40	Crossing Turnpike	30"
Fiber	Mainline	1673+35	Crossing Turnpike	1-2"
WM	Mainline	1698+00	Crossing Turnpike	12"
Concentrate Main	Mainline	1698+10	Crossing Turnpike	16"
FM	Mainline	1698+20	Crossing Turnpike	12"
WM	Mainline	1753+00	Crossing Turnpike	12"
Fiber	SE Becker Rd	1180+20	South side east of Turnpike	1-2"
Fiber	SE Becker Rd	1180+20	North side crossing Turnpike	1-2"
FM	SE Becker Rd	1180+20	South side crossing Turnpike	20"
WM	SE Becker Rd	1180+20	North side crossing Turnpike	20"
FM	SW Port St. Lucie Blvd	1426+20	South side crossing Turnpike east to SE Bayshore Blvd	8"
WM	SW Port St. Lucie Blvd	1426+70	South side crossing Turnpike east to SE Bayshore Blvd	16" Abandoned
WM	SW Port St. Lucie Blvd	1427+70	North side crossing Turnpike east to SE Bayshore Blvd	16"
FM	SW Port St. Lucie Blvd	1418+00 to 1427+50 (Bayshore Blvd)	West R/W	12"
WM	SW Port St. Lucie Blvd	1425+20	Crossing Bayshore Blvd	6"
FM	SW Port St. Lucie Blvd	1418+00 to 1433+00 (Bayshore Blvd)	East R/W	12"
WM	SW Port St. Lucie Blvd	1431+00 (Bayshore Blvd)	Crossing Bayshore Blvd	6"
FM	SW Port St. Lucie Blvd	1426+00 to 1433+00 (Bayshore Blvd)	East R/W	4"
Fiber	SW Port St. Lucie Blvd	1426+00 to 1433+00 (Bayshore Blvd)	East R/W	1-2"
Fiber	SW Port St. Lucie Blvd	1427+90	North side crossing Turnpike east to SE Bayshore Blvd	1-2"
WM	Crosstown Pkwy	1519+70	North side crossing Turnpike	18"
Fiber	Crosstown Pkwy	1518+90	North side crossing Turnpike	1-2"
FM	St. Lucie West Blvd	1600+00	Median crossing Turnpike	16"
WM	St. Lucie West Blvd	1599+50	South side crossing Turnpike	16"
Fiber	St. Lucie West Blvd	1599+45	South side crossing Turnpike	1-2"
WM	W Midway Rd	1811+60	South side crossing Turnpike	16"
Comcast				
Aerial	SW Kanner Hwy	739+00	South side crossing Turnpike	Fiber

Fiber	SW Kanner Hwy	740+00	East side of Turnpike heading east	1-4"
Aerial	SW Martin Hwy	981+40	South side crossing Turnpike continuing east	N/A
Crown Castle				
No Response Provided				
Deltacom				
No Response Provided				
Florida City Gas				
GM	Mainline	1595+90	Crossing Turnpike	8" Steel
GM	Mainline	1595+90	Crossing Turnpike	8" Steel
GM	Mainline	1595+90 to 1698+20	West R/W	8" Steel
GM	SE Becker Rd	1180+50	South side crossing Turnpike	6"
GM	SW Port St. Lucie Blvd	1427+75	North side crossing Turnpike (attached to bridge)	6" Steel
Florida Gas Transmission				
GM	Mainline	3625+00 to 3696+50	East R/W	18", 24" & 30"
GM	Mainline	97+50+ to 1980+00	East R/W	18", 24" & 30"
Ft. Pierce Utility Authority (FPUA) - Water & Sewer				
WM	Okeechobee Rd	1962+20	North side crossing Turnpike	12"
FM	Mainline	1876+00	Crossing Turnpike	6" HDPE
FM	Glades Cut-Off Rd	1832+20	Crossing Turnpike	6" PVC
Ft. Pierce Utility Authority (FPUA) - Gas				
GM	Glades Cut-Off Rd	1832+80	North side Crossing Turnpike	8"
Ft. Pierce Utility Authority (FPUA) - Fiber				
Fiber	Mainline	1810+45 L to 1960+23 L	West R/W	1-4"
Fiber	W Midway Rd	1810+40	South side crossing Turnpike	1-4"
Fiber	Okeechobee Rd	1960+20	South side crossing Turnpike	1-4"
FPL Distribution				
UE	Mainline	3635+40	Crossing Turnpike	2-6" 23kv
OE	Mainline	174+75	Crossing Turnpike	1-1/OT 23kv
OE	Mainline	731+80 R to 761+50 R	East R/W	568T 23kv
OE	Mainline	838+00 R to 861+90 R	East R/W	1-1/OT 7.6kv
OE	Mainline	886+00 L to 998+80 L	West R/W	1-1/OT 13kv
OE	Mainline	1014+00	Crossing Turnpike	3-3/OT 13kv
OE	Mainline	1000+00 R to 1179+50 R	East R/W	3-3/OT 23kv
UE	Mainline	1288+30	Crossing Turnpike	3-6" PVC Only
OE	Mainline	1334+80	Crossing Turnpike	3-3/OT 23kv
OE	Mainline	1329+50 R to 1422+50 R	East R/W	3-3/OT 23kv
UE	Mainline	1537+20	Crossing Turnpike	3-1000A XPE
OE	Mainline	1545+00	Crossing Turnpike	3-568T 23kv

OE	Mainline	1551+00	Crossing Turnpike	3-568T 23kv
OE	Mainline	1530+50 L to 1562+50 L	West R/W	3-1/OT 23kv
OE	Mainline	1813+00 R to 1820+00 R	East R/W	3-568T 23kv
OE	Mainline	1814+00 L to 1825+70 L	West R/W	1-1/OT 7.6kv
OE	Mainline	1833+75	Crossing Turnpike	3-568T 23kv
UE	Mainline	1841+00	Crossing Turnpike	3-1000A XPE
OE	Mainline	1988+00	Crossing Turnpike	3-568T 23kv
OE	Mainline	1991+00	Crossing Turnpike	3-568T 23kv
OE	Mainline	1885+50 R to 1997+25 R	East R/W	3-568T 23kv
OE	Mainline	1889+50 L to 1996+00 L	West R/W	3-568T 23kv
OE	SE Bridge Road	498+75	South side crossing Turnpike	3-3/OT 23kv
OE	SW Kanner Hwy	739+25	South side crossing Turnpike	3-3/OT 23kv
OE	SW Martin Hwy	981+20	South side crossing Turnpike	3-568T
UE	SE Becker Rd	1182+20	South side crossing Turnpike	3-3/OT 23kv
OE	SW Port St. Lucie Blvd	1422+00	South side crossing Turnpike	3-568T 23kv
UE	St. Lucie West Blvd	1601+60	Crossing Turnpike	(2) 1000A XPE 23kv
UE	W Midway Rd	1811+00	South side crossing Turnpike	3-1000A XPE 23kv
FPL Transmission				
OE	Mainline	512+00	Crossing Turnpike	230kv
OE	Mainline	667+80	Crossing Turnpike	230kv
OE	Mainline	935+00 R to 962+50 R	East R/W	230kv
OE	Mainline	962+50	Crossing Turnpike	230kv
OE	Mainline	963+00 L to 998+20 L	West R/W	230kv
OE	Mainline	998+20	Crossing Turnpike	230kv
OE	Mainline	997+30 R to 1423+00 R	East R/W	230kv
OE	Mainline	1432+00 R to 1441+20 R	East R/W	230kv
OE	Mainline	1452+00 R to 1715+00 R	East R/W	230kv
OE	Mainline	1715+00 to 1718+50	Crossing Turnpike	(4) 230kv
OE	Mainline	1833+90	Crossing Turnpike	230kv
OE	Mainline	1841+75 to 1843+00	Crossing Turnpike	(3) 138kv
UE	SW Port St. Lucie Blvd	1426+00 (Bayshore Blvd)	East R/W	230kv
UE	SW Port St. Lucie Blvd	1480+00 to 1445+00 (Bayshore Blvd)	East R/W	230kv
Hometown Communications (Blue Stream Fiber)				
No Response Provided				
ITS Fiber (Indiantown Telephone)				
BT	SW Martin Hwy	981+20	South side crossing Turnpike	N/A
Martin County Utilities				
WM	Mainline	721+50	Crossing Turnpike	12" in 24" casing
RWM	Mainline	721+50	Crossing Turnpike	12" in 24" casing

RWM (IQ)	Mainline	721+50	Crossing Turnpike	8" in 18" casing
WM	Mainline	724+00	Crossing Turnpike	24" HDPE
FM	Mainline	724+00	Crossing Turnpike	20" HDPE
FM	Mainline	724+00	Crossing Turnpike	16" HDPE
RWM	Mainline	724+00	Crossing Turnpike	18" HDPE
FM	Mainline	788+50	Crossing Turnpike	6" PVC
WM	Mainline	788+50	Crossing Turnpike	8" PVC
FM	Mainline	1036+00	Crossing Turnpike	6" PVC
WM	Mainline	1036+00	Crossing Turnpike	12" in 24" casing
WM	Mainline	1052+50	Crossing Turnpike	12" in 20" casing
TECO Peoples Gas				
GM	SW Martin Hwy	981+00	South side crossing Turnpike	6"
Town of Jupiter				
WM	Mainline	3634+00	Crossing Turnpike	24" HDPE, 18" HDPE
Tropicana Products (Douglas Pipeline)				
GM	Glades Cut-off Rd	1834+00	North side crossing Turnpike	Douglas Pipeline

**Information in the table above was extracted from the Utility Assessment Package, February 2021.*
**Utility Type Legend: BT=Buried Telephone; OFO=Overhead Fiber Optic; BFO=Buried Fiber Optic; FM=Force Main; WM=Water Main; GM=Gas Main; UE=Underground Electric; OE=Overhead Electric; RWM=Reclaimed Water Main*
**Size Legend: PR=Pairs; PVC=Polyvinyl Chloride; FOC=Fiber Optic Cable; HDPE=High Density Polyethylene; A=Buried Aluminum; T=Overhead Aluminum; XPE=Cross-linked Polyethylene; kV=kilovolt*

2.19 Lighting

2.19.1 Palm Beach County

There is no existing lighting along the Florida's Turnpike within the project limits in Palm Beach County.

2.19.2 Martin County

There is existing lighting along the ramps at the interchange for SW Martin Highway (SR 714) (Exit 133). There is also lighting along the mainline in the area of the interchange. The SW Martin Highway interchange uses Cobra Head light poles, and the toll plaza parking lot uses Mongoose light poles.

There are five bridges crossing over the Turnpike within the project limits. The length of the spans of these bridges do not require an evaluation of tunnel or daytime lighting, and there are no pedestrian walkways or unusual roadway geometry beneath these bridges. Therefore, underdeck lighting is not recommended to be added. It was noted that none of the exit off- or on-ramps along the mainline meet the Florida's Turnpike Design Handbook (TDH) (January 2021) Section 7.3.1 requirement of having transition lighting after the interchange. There are three overhead cantilevers within the project limits with existing sign lighting. The panels were evaluated for condition and will need to be replaced. The *Existing Roadway Conditions Assessment Report* (*ERCAR)*, January 2017, for Martin County, provides a detailed inventory of the existing lighting as well as their condition and recommendations, along the Turnpike and the adjoining ramps.

The overall evaluation of the lighting is that it is in good condition. No noticeable bright or dark spots were identified, including at the toll plaza. The ERCAR, January 2017, recommended the addition of transition

lighting at the SW Martin Highway interchange to meet the criteria shown in the Turnpike's Guide Drawing Sheet 203 for Interchange Lighting Limits.

2.19.3 St. Lucie County

A combination of Mongoose and Cobra Head conventional light poles can be found along the ramps and interchange at both the SE Becker Road (Exit 138) and Okeechobee Road (SR 70) (Exit 152) interchanges. The SW Port St. Lucie Boulevard (Exit 142) interchange and ramps have a high mast lighting system composed of seven high mast poles, as well as underdeck luminaires at each of the overpasses. The high mast lighting is in good condition and no notable defects to either the poles or foundations were found. Conventional light poles are also found between the toll plaza and the intersection at SW Port St. Lucie Boulevard.

Conventional light poles and high mast lighting are only found at these three interchanges within the project limits. There are no dark areas of less than 0.5 miles in length along the mainline and all ramps are properly illuminated. SE Becker Road interchange does not have existing lighting along the mainline. The ERCAR, March 2017, for St. Lucie County, recommended the addition of light poles at the SE Becker Road interchange to meet Florida's Turnpike Design Handbook (TDH) (January 2021) requirements. For a detailed inventory of the existing lighting as well as their condition and recommendations, please refer to the ERCAR, March 2017, for St. Lucie County.

2.20 Signs

A brief summary of the existing sign inventory along the Turnpike mainline and ramps is provided below. The information presented was extracted from each respective county's *Existing Roadway Conditions Assessment Report (ERCAR)* as well as verified through field reviews conducted in December 2020. Refer to each respective ERCAR for a full detailed evaluation of the existing sign inventory and photo log. **Table 2-18** provides an existing inventory of all of the overhead sign structures along the Turnpike, within the project limits.

General roadway signs along the Turnpike have been installed or updated through a number of different projects. A majority of the signs are approaching or have exceeded the sign sheeting manufacturer's design life of ten years; however, most of the existing signs exhibit an acceptable level of retro-reflectivity as observed during the nighttime field review. As a result of the investigation, a blanket sign replacement is not recommended. It is recommended that the Critical and Optional Sign Replacement Only option be utilized for this project for all signs meeting the criteria for sign replacement. This recommendation is based on the determination that less than 38% of the existing signs were in need of being replaced or relocated as well as the type of signs being evaluated. Therefore, it is not considered economical to replace all of the signs.

2.20.1 Palm Beach County

Within the project study limits, Palm Beach County does not have any existing overhead sign structures.

2.20.2 Martin County

Within the project study limits, Martin County has a total of five overhead sign structures, including three cantilever structures and two span structures. The three cantilever sign structures were designed in 1988 under State Project 97864-3301 using the January 1987 Roadway and Traffic Design Standards. The two span DMS structures were designed in 2001 using the January 2000 Roadway and Traffic Design Standards. The cantilever sign structures (89T001, 89T002, 89T003) do not meet the current FDOT Design Standards. Therefore, replacement of these structures is recommended.

2.20.3 St. Lucie County

Within the project study limits, St. Lucie County has a total of eight overhead sign structures, including seven cantilever structures and one span structure. All of the sign structures are owned and maintained by Florida's Turnpike Enterprise. The recommendation for the majority of the existing sign structures does not require replacement; however, two sign structures (94T009 and 94T019) recommend that guardrail be constructed.

Table 2-18: Existing Sign Inventory

County	Sign Structure No. (Inventory Sign No.)	Type of Structure	Mile Post (MP)	Year of Design	Without Additional Loading	With Additional Loading	Minimum Offset to Upright (feet)	Guardrail/ Offset Behind Guardrail	Offset Criteria (feet)	Upright Shielded	Minimum Vertical Clearance (feet)	Grout Pad/ Distance Above Grade
Martin	89T004	Span	119.3	2001	May Remain	-	37.25	No	36	No	19.17	Yes, 6"
Martin	89T005	Span	133.2	2001	May Remain	-	39.75	No	36	Only on SB	17.50	Yes, 6"
Martin	89T001	Cantilever	134.1	1988	Replace	Replace	18.00	No	24	No	17.00	Yes, 6"
Martin	89T003	Cantilever	134.3	1988	Replace	Replace	18.00	No	24	No	17.00	Yes, 6"
Martin	89T002	Cantilever	134.5	1988	Replace	Replace	24.00	No	10	No	17.50	Yes, 0"
St. Lucie	94T021	Cantilever	143.5	2018	-	-	-	Yes, 5.9'	4	-	-	-
St. Lucie	94T003	Cantilever	144.9	-	-	-	25.50	No	24	-	-	-
St. Lucie	94T020	Cantilever	145.6	2018	-	-	18.30	No	24	-	-	-
St. Lucie	94T009	Span	153.1	-	-	-	22.2 (Outside) 7.9 (Median)	No	14 (Outside) 10 (Median)	-	-	-
St. Lucie	94T012	Cantilever	152.6	-	-	-	32.40	No	24	-	-	-
St. Lucie	94T014	Cantilever	153.2	-	-	-	-	Yes, 7.0'	4	-	-	-
St. Lucie	94T018	Cantilever	143.1	-	-	-	-	Yes, 7.8’	4	-	-	-
St. Lucie	94T019	Cantilever	144.2	-	-	-	18.40	No	10	-	-	-

**Information in the table above was extracted from the respective Existing Roadway Conditions Assessment Report (ERCAR, January 2017) for Palm Beach, Martin, and St. Lucie Counties.*

2.21 Aesthetics Features

Florida's Turnpike Enterprise has invested heavily in creating a unique aesthetic brand that greatly enhances the traveler's experience using the Mainline Toll System. The importance of aesthetics was emphasized when FTE created the "Landscape Program Master Plan". Significant amounts of landscape plantings have been invested at interchanges. For the full landscape plans and drawings, refer to the *Aesthetic Plan Report,* July 2020, prepared under separate cover. Four interchanges that were reviewed have benefited from these landscape improvements installed approximately five years ago. These interchanges are SW Martin Highway (SR 714), SE Becker Road, SW Port St. Lucie Boulevard, and Okeechobee Road (SR 70). The two proposed interchanges have little existing planting improvements. These interchanges are Crosstown Parkway and W Midway Road. A brief description of the existing aesthetic features for each of the existing and proposed interchanges is provided below.

2.21.1 SW Martin Highway (SR 714)

The Turnpike Plaza facilities contain parking lots, buildings, maintenance structures and existing trees and shrub plants consisting of pine, sabal palm, Southern red cedar, yaupon holly, fan palm and oak. A narrow landscape strip containing a hedge and tree canopy buffers the plaza building from the ramp travel lanes. Sabal palms, magnolia, and Paurotis palms are located on the east side of the gantry post structure. This interchange has been heavily landscaped within the last five years. Installed planting species include Bismarck, Paurotis, Pindo, royal, wild date, ribbon, European fan, and Washingtonia and thatch palms. Trees include live oak, gumbo limbo, yellow tabebuia, and Florida slash pine. These improvements are of a major significance receiving a High-Level rating where date palms are located in strategic areas. These plantings are important to the aesthetics of the original design and in maintaining consistency with the other three existing interchanges.

2.21.2 SE Becker Road

Within the interchange, three automatic electronic tolling (AET) gantries are located at the ramps. A wet retention pond is located within the looped ramp. Installed plant species include: Bismarck, wild date, ribbon, Florida royal, thatch, montgomery and red latan palms. Trees include royal poinciana, yellow poinciana and Florida slash pine. These improvements are of a major significance receiving a High-Level rating where date palms are located in strategic areas. The ramps are elevated from the intersection at SE Becker Road. Extensive plantings are located on both sides of these ramps. The north side embankments of SE Becker Road contain newly planted material and some mature oaks. These plantings are important to the aesthetics of the original design and in keeping consistent with the other three existing interchanges.

2.21.3 SW Port St. Lucie Boulevard

Within the interchange is the Turnpike sub-station to the south and a full gantry with parking lot. Two wet retention ponds are present, one between the sub-station and the other at the loop ramp from SE Bayshore Boulevard and at the northwest quadrant of the Turnpike and SW Port St. Lucie Boulevard. Dry ponds are located at the northwest quadrant of the Turnpike and SW Port St. Lucie Boulevard and within the two looped ramps. Grouping of mature pines, oaks and sabal palms are located inside the large loop north of SW Port St. Lucie Boulevard and corners of FTE land. The north side of SW Port St. Lucie Boulevard

embankments are landscaped with date and Washingtonia palms and expansive shrub beds that will not be impacted and should remain. This interchange has been heavily landscaped within the last five years. Installed planting species include Bismarck, Pindo, wild date, Florida royal, ribbon, European fan, Washingtonia, and thatch palms. Trees include live oak, yellow poinciana, Japanese privet, yellow tabebuia and Florida slash pine. These improvements are of a major significance receiving a High-Level rating where date palms are located in strategic areas. These plantings are important to the aesthetics of the original design and in maintaining consistency with the other three existing interchanges.

2.21.4 Crosstown Parkway

There is natural vegetation north of the SW Cameo Boulevard northerly terminus. This interchange is considered as a High-Level aesthetic rating based on it being a gateway and the location of a Service Plaza. Sign and buffer plantings exist both east and west of the Turnpike travel lanes. Two "City of Port St. Lucie" sign features are centered between the north and south median at the Crosstown Parkway overpass, making this interchange a gateway to the Port St. Lucie community. An oak and sabal palms are located behind the north facing sign with no plants at the south facing sign. This "Community Aesthetic Feature" is an important governmental cultural structure. This will be considered a "High Level" focal point. Short linear segments of tree buffers line both sides along the limited access right-of-ways. They consist of pine, oak, cypress and scrub vegetation ranging from 40' - 90' offset from the travel lanes. Not all linear groupings are in the same healthy condition as others. In some cases, there are "missing" trees within the groupings. On the west side, there is a dense continuous buffer of oaks, pines and scrub located along the Limited Access right-of-way line. These buffers are a vital feature to screen or enhance views strongly in keeping with the "Landscape Program Master Plan" and have a High aesthetic value. The existing healthy stand of dense oaks buffering the adjacent residential community should be outside of the impact area of the roadway widening.

2.21.5 W Midway Road

There are patches of wetlands paralleling the Turnpike and along W Midway Road in all four quadrants at the base of the embankments, some of which are linear in nature. There is a variety of wetlands species typical with natural progression of growth. Scrub vegetation along the north and south sides of W Midway Road consist of small oaks, pines, sabal palms and miscellaneous understory trees. There are no improved landscape plantings observed at this interchange. The plantings along the embankments along W Midway Road are a variety of oaks, sabal palms and scrub. Some indication of old remnant plants was observed at this interchange, but they are significantly overgrown. There is little value for most of the existing vegetation, except in the cases where existing vegetation along the Turnpike and W Midway Road screens the roadway from the residential lots on the south side and industrial facilities on the north side.

2.21.6 Okeechobee Road (SR 70)

The interior of the interchange consists of large wetland areas, natural vegetation of oaks and scrub, ponds and improved plantings. Wetlands or ponds of varying sizes are located in the southeast quadrant; to the east and south of the proposed northbound exit ramp; at the southwest corner of the southwest quadrant; and within the southbound exit loop and along both sides of the Turnpike north of Okeechobee Road. There is a cell tower in the southeast quadrant east of the northbound exit ramp. A full-service gantry and structure

with associated parking is located at the northbound Turnpike exit ramp. This interchange has been heavily landscaped within the last five years. The installed planting species include Bismarck, Paurotis, Pindo, wild date, ribbon, Chinese fan and Washingtonia palms. Trees include live oak, red maple, yellow poinciana, Japanese privet, yellow tabebuia and Florida slash pine. These landscaping improvements are of a major significance, receiving a High-Level rating where date palms are located in strategic areas. These plantings are important to the aesthetics of the original design and in maintaining consistency with the other three existing interchanges. The gantry facilities include sabal palms and pygmy date palms. A narrow landscape strip contains a hedge of viburnum and yaupon and a tree canopy buffers the plaza building from the ramp vehicle travel lanes. These same materials, in addition to ornamental grasses, are located on the opposite side of the gantry structure.

2.22 Bridges and Structures

The existing structures information was obtained from as-built drawings, the FDOT's Structural Inventory Detail Report, and the most current bridge inspection reports. There are 46 existing bridges within the project limits, one in Palm Beach County, 22 in Martin County, and 23 in St. Lucie County. Sixteen of the bridge structures are box culverts over various drainage ditches or canals. There are 14 mainline structures, four of which are pairs. The remaining 16 bridges carry facilities that cross over the Turnpike. However, of the 16 overpasses within the project limits, five are excluded from this document. I-95 overpasses at MP 131.6 (Bridge Nos. 890122 and 890121) and MP 151.9 (Bridge Nos. 940126 and 940127) will require federal oversight and will be analyzed independently of this PD&E Study. W Midway Road overpass at MP 150.4 (Bridge No. 940050) will also be excluded as it is currently being reconstructed by District 4 (FPID No. 231440-4-52-01) and incorporates the widened Turnpike section as proposed in this PD&E Study. Pertinent information is summarized in **Tables 2-19** (Existing Bridges) and **2-20** (Existing Box Culverts).

A majority of the mainline bridges and bridge box culverts were originally constructed in the mid-to-late 1950s and some were reconstructed between 1988 and 2007. Two exceptions include the northbound Turnpike bridge over St. Lucie Canal (Bridge No. 891000) and the Turnpike over Okeechobee Road (SR 70) (Bridge Nos. 940134 and 940135) which were both built more recently (2003 and 1991, respectively). Ten of the bridges have substandard load ratings and therefore cannot be widened without meeting additional strength requirements or variations. The mainline bridges include the Turnpike over Loxahatchee River (Bridge No. 930241), Cypress Creek (Bridge No. 890079), Phipp Canal (Bridge No. 890082), and Bessey Creek (Bridge No. 890085) as well as the Turnpike over Glades Road / SR 709 and FEC Railroad (Bridge Nos. 940076 and 940951) and three bridge box culverts (Bridge Nos. 890067, 890070, 940061). The remaining substandard load rating is at SW Martin Highway ramp (Bridge No. 890068). Minimum vertical clearance requirements include 16.5 feet over roadway and 23.5 feet over railroad. The bridges that do not meet vertical clearance requirements include Bridge Nos. 890119, 890126, 940121, 949902, 940951, 940053. Note, Bridge No. 940951 does not meet the vertical clearance requirements over a railroad.

Table 2-19: Existing Bridges

County	Roadway	Facility Crossed	Bridge No.	Direction	Length (ft.)	Mile Post (MP)	Number of Spans	Bridge Width (ft.)	Superstructure Type	Sufficiency Rating	Deck Rating	Super Rating	Substr. Rating	Inv. Rating (tons)	Op Rating (tons)	Vertical Clearance (ft.)	Year of Construction	Reconstruction
Palm Beach	SR 91	Loxahatchee Creek	930241	NB & SB	180.4	117.5	4	90.8	AASHTO Type II	87.3	7	8	6	35.6	45.7	-	1956	1991
Martin	SR 91	Cypress Creek #2	890079	NB & SB	180.4	119.1	4	90.8	AASHTO Type II	92.8	7	9	6	36.4	46.8	-	1956	1991
Martin	SE Bridge Rd / CR 708	SR 91	890119	EB & WB	182	125.5	2	92.8	AASHTO Type IV	97.8	7	7	7	40.4	62.5	16.2	1986	N/A
Martin	SR 91	Phipp Canal	890082	NB & SB	80	126.5	4	90.5	CIP Flat Slab	83.1	6	6	7	33.6	57.4	-	1957	1990
Martin	SW Kanner Hwy / SR 76	SR 91	890126	EB & WB	188	130	2	92.8	AASHTO Type IV	90	8	7	8	47.5	51.1	16.4	1987	N/A
Martin	SR 91 Thomas B. Manuel Bridge	St. Lucie Canal	891000	NB	2989.3	131	21	59.1	Florida Bulb-T 78	93.1	7	7	8	36	60.5	-	2003	N/A
			890066	SB	2745.8	131	32	63.1	WF Steel Girders	93.1	7	7	6	43.6	72.8	-	1957	2004
Martin	I-95	SR 91	890122	NB	398.8	131.6	4	66.8	AASHTO Type IV	94.4	7	8	7	35.9	60.0	16.6	1987	N/A
			890121	SB	386.1	131.7	4	66.8	AASHTO Type IV	93.4	7	8	8	56.2	64.7	16.5	1987	N/A
Martin	SW Martin Hwy / SR 714 Ramp	SR 91	890068	EB & WB	166.8	134.3	4	41.3	WF Sections	88.4	6	6	7	28.1	46.8	16.5	1957	N/A
Martin	SW Martin Hwy / SR 714	SR 91	890159	EB & WB	198.2	134.6	2	67.1	AASHTO Type V	84	7	7	7	66.8	99.9	18	1999	N/A
Martin	SR 91	Bessey Creek	890085	NB & SB	163.9	135.6	6	90.8	CIP Flat Slab	81	6	6	7	30.9	51.5	-	1957	1990
Martin	SR 91	Canal C-23	890083	NB & SB	327.2	138.1	7	103	WF Steel Girders	85	7	7	7	36.7	61.6	-	1957	2007
St. Lucie	SE Becker Rd	SR 91	941001	EB & WB	196.8	138.5	2	96	AASHTO Type IV	93	7	7	8	37.4	38.5	16.9	2007	N/A
St. Lucie	SR 91	Canal C-24	940049	SB	291	142.2	6	45.4	WF Steel Girders	96.9	6	6	7	46.4	77.4	-	1958	1991
			940082	NB	291	142.2	6	45.4	WF Steel Girders	96.9	6	7	6	46.4	77.4	-	1956	1991
St. Lucie	SW Port. St. Lucie Blvd	SR 91	940142	EB & WB	260.3	143	3	115.5	AASHTO Type IV	81	7	7	7	58.1	96.9	17.3	1995	N/A
St. Lucie	Ramp to SW Port St. Lucie Blvd	SR 91	940121	EB & WB	224.5	143.3	4	46.3	AASHTO Types	89.7	7	8	7	54.1	90.1	16.3	1975	N/A
St. Lucie	Crosstown Pkwy	SR 91	944018	EB & WB	598	144.8	6	135	AASHTO Type IV	95.9	8	8	8	36.7	48.6	16.8	2007	N/A
St. Lucie	St. Lucie West Blvd	SR 91	949901	WB	217	146.4	2	51.6	AASHTO Type IV	98	7	8	8	77.9	99.0	16.7	1988	2000
			949902	EB	217	146.5	2	54.5	AASHTO Type IV	81.6	7	7	8	82.3	99.0	16.4	2001	N/A
St. Lucie	SR 91	Glades Rd / CR 709 and FEC Railroad	940076	NB	244.4	150.7	4	45.5	WF Steel Girders	91.9	7	7	7	35.7	59.4	23.8	1959	1990
			940951	SB	244.4	150.7	4	45.5	WF Steel Girders	91.9	7	7	7	35.7	59.4	23.4	1956	1992
St. Lucie	SR 91	Tenmile Creek	940072	NB & SB	163.1	152.5	3	90.75	WF Steel Girders	83	7	7	7	59.4	99.0	-	1956	1986
St. Lucie	I-95	SR 91	940126	SB	208.0	151.9	2	58.8	AASHTO Type IV	95.2	8	7	7	64.6	110.0	16.2	1982	2005
			940127	NB	208.0	152.0	2	58.8	AASHTO Type IV	95.2	7	7	8	64.6	105.6	16.2	1982	N/A
St. Lucie	Ramp to Okeechobee Rd / SR 70	SR 91	940053	EB & WB	173.5	152.9	4	44.1	AASHTO Types	85.7	7	7	7	44.6	54.4	15.7	1956	N/A
St. Lucie	SR 91	Okeechobee Rd / SR 70	940134	SB	210.4	153.2	3	55.3	AASHTO Types	99	7	7	7	40.3	60.1	17.1	1991	N/A
			940135	NB	210.4	153.1	3	59	AASHTO Types	99	8	8	8	38.9	63.0	17.1	1991	N/A

**Information in the table above was extracted from the Bridge Analysis Technical Memorandum, January 2023.*

Table 2-20: Existing Bridge Culverts

County	Bridge No.	Length (ft.)	MP	Number of Barrels	Width (ft.)	Height (ft.)	Sufficiency Rating	Inv. Rating (tons)	Op. Rating (tons)	Year of Construction	Reconstruction
Martin	890072	59.5	118	2	10	9	76.2	43.4	72.4	1957	1990
Martin	890073	101.5	120.3	2	12	7	76.2	43.4	72.4	1957	N/A
Martin	890074	97.5	123.9	2	12	4.5	70	43.4	72.4	1957	N/A
Martin	890084	141	124.6	2	11.2	8.5	70	43.4	72.4	1956	N/A
Martin	890075	65	125.2	2	11	7	76.9	43.4	72.4	1957	N/A
Martin	890076	101.5	125.9	2	12.1	7.2	76.2	43.4	72.4	1959	N/A
Martin	890077	121.5	127.3	2	11.2	7	70	47.4	79.1	1957	N/A
Martin	890078	128	127.9	2	11.2	7	70	43.4	72.4	1957	N/A
Martin	890067	141	134.1	3	10	9	77.5	31	51.6	1957	N/A
Martin	890070	131.3	137.3	3	9	5.9	67.1	31	51.6	1957	N/A
St. Lucie	940061	131.3	139.7	3	10	6.9	82.7	31.7	52.8	1957	N/A
St. Lucie	940104	75.5	144.6	2	11.5	7.2	98.4	43.4	72.4	1956	N/A
St. Lucie	940105	75.5	144.6	2	10.3	7.2	95.7	43.4	72.4	1956	N/A
St. Lucie	940106	131	147.7	2	11.5	7.2	77.1	43.4	72.4	1956	N/A
St. Lucie	941000	115	148.2	2	10	12	70	75.3	99	1956	N/A
St. Lucie	940064	190.5	153.7	2	11.2	7	78.6	68.8	99	1963	N/A

**Information in the table above was extracted from the Bridge Analysis Technical Memorandum, January 2023.*

3.0 PROJECT DESIGN CONTROLS & CRITERIA

3.1 Roadway Context Classification

The project study limits extend through three separate counties and encompass approximately 36.7 miles. Florida's Turnpike (SR 91) is functionally classified as a Limited Access Facility; however, it maintains a few roadway context classifications within the project study limits. From the southern project study limit, just north of Indiantown Road / SR 706 to SW Kanner Highway, the majority of land is sparsely developed and includes agricultural land, grassland, woodland, and wetlands. This segment of the Turnpike is classified as a C2, Rural. From north of SW Kanner Highway to W Midway Road, the majority of land is residential with large blocks and a disconnected roadway network. Residential developments are heaviest in St. Lucie County, primarily in proximity to the SW Port St. Lucie Boulevard Interchange and Port St. Lucie - Fort Pierce Service Plaza area. This segment of the Turnpike is classified as a C3R, Suburban Residential. From north of W Midway Road to the northern project study limit, at Okeechobee Road (SR 70), the majority of land use shifts from Residential to Rural. This segment of the Turnpike is classified as C2, Rural.

3.2 Design Control and Criteria

The Design Criteria for the proposed Turnpike mainline widening adhere to the *FDOT Design Manual* (FDM) (January 2020), the *Turnpike Design Handbook* (TDH) (January 2020) and/or *A Policy on Geometric Design of Highways and Streets* (AASHTO, 2011). The proposed design speed along the project corridor is 70 mph and the design year for the proposed improvements is 2045. The design criteria used for this PD&E study are listed in **Table 3-1**.

Table 3-1: Design Criteria

DESIGN CRITERIA REPORT SUMMARY		
DESIGN ELEMENT	**DESIGN CRITERIA**	**SOURCE**
General		
Design Year	2045	Project Scope of Services
Functional Classification	Urban Expressway *	FDM Table 200.2.1
Design Control	Interstate	TDH Section 201.7
Access Classification	Class Area 1	FDM Table 201.4.1
Design Vehicle	**WB-62FL** (**Tandem Tractor Trailer WB-109D** for Tandem Truck Routes & Service Plaza)	FDM Section 201.6
Type of Stormwater Management Facilities		PD&E Manual 3.2.3.3
Design High Water		PD&E Manual 3.2.3.3
TYPICAL SECTION		
Design/Posted Speed - Mainline	70 MPH / 70 MPH	TDH Section 201.5.1

Design Speed - Ramps	30 MPH Loop/Semi Direct 35 MPH Outer Cloverleaf 50 MPH Direct Connection 40 MPH Intermediate Portions of Long Ramps	FDM Table 201.5.2
Number of Through Lanes per Direction, Mainline	4	Typical Section
Ramp Terminal (Entrance & Exit)	Parallel **	TDH Section 211.13
Travel Lane Widths	Mainline: 12' Ramps: 15' One Lane, 24' Two Lanes	FDM Table 210.2.1, Table 211.2.1
Cross Slopes - Mainline	2 Inside Lanes Sloped to Median at 0.02'/' 2 Outside Lanes Sloped to Outside at 0.02'/'	As presented and accepted by FTE to enable future widening and reduce initial construction costs.
Cross Slopes - Ramps	0.02'/' for One & Two Lanes 0.03'/' for 2 Lane Ramp in Gore Areas	TDH Section 211.2.2 FDM Figure 211.2.1
Median Widths	26' (Includes 2' Barrier)	FDM Table 211.3.1
Shoulders:		
Mainline Outside	12' Full/10' Paved (12' paved where truck DDHV exceeds 250), at 0.06'/'	TDH Section 211.4 / FDM Table 211.4.1
Mainline Inside	12' Full/12' Paved, at 0.06'/'	TDH Section 211.4 / FDM Table 211.4.1
One Lane Ramp - Outside	6' Full / 4' Paved, at 0.06'/'	FDM Table 211.4.1, Section 211.4.2
One Lane Ramp - Inside	6' Full / 2' Paved (4' to be evaluated per TDH Section 211.4), at 0.05'/'	TDH Section 211.4 / FDM Table 211.4.1
2 or more Lane Ramp - Outside	12' Full / 10' Paved, at 0.06'/'	FDM Table 211.4.1, Section 211.4.2
2 or more Lane Ramp - Inside	8' Full / 4' Paved, at 0.05'/'	FDM Table 211.4.1, Section 211.4.2
Mainline Structure	10' Inside & Outside (12' where truck DDHV exceeds 250)	TDH Section 211.4
One Lane Ramp Structure	6' Inside & Outside	FDM Figure 260.1.1
2 or more Lane Ramp Structure	6' Inside / 10' Outside	FDM Figure 260.1.1
Maximum Algebraic Difference in Cross Slope at Turning Roadway Terminals	5%	FDM Table 211.2.2
Maximum Change in Cross Slope between Adjacent Travel Lanes	4%	FDM Figure 211.2.1
Maximum Shoulder "Roll-Over"	7%	FDM Figure 211.4.1
Clear Zone:		
Mainline	36'	FDM Table 215.2.1
Ramps at 30 MPH	10' Single Lane / 12' Multilane	FDM Table 215.2.1
Ramps at 35 MPH	10' Single Lane / 14' Multilane	FDM Table 215.2.1
Ramps at 40 MPH	10' Single Lane / 18' Multilane	FDM Table 215.2.1
Ramps at 50 MPH	14' Single Lane / 24' Multilane	FDM Table 215.2.1

Minimum Lateral Offset Criteria (Mainline):		
Light Poles	20' from Travel Lane, 14' from Aux. Lane, or Clear Zone width, whichever is less	FDM Table 215.2.2
Other elements ITS Poles, Trees, Above ground Utilities, Overhead Sign Structures, Bridge Piers & Abutments	Outside Clear Zone (CZ)	FDM Table 215.2.2
Minimum Lateral Offset Criteria (Overpass):		
Light Poles	4’	FDM Table 215.2.2
ITS Poles, Trees, Above ground Utilities	4’	FDM Table 215.2.2
Overhead Sign Structures	Outside Clear Zone	FDM Table 215.2.2
Bridge Piers & Abutments	16’ from Edge of Travel Lane 4’ from Face of Curb 6’ from Edge of Auxiliary Lane, whichever is greatest	FDM Table 215.2.2
Lateral Offset Criteria for Canal Hazards	60' from Edge of Travel Lane, aux. lane, or ramp	FDM Figure 215.3.1
Border Width - Mainline	94'	FDM Section 211.6
Roadside Slopes	1:6 (for 0' to 5'), 1:6 to CZ then 1:4 (for 5'-10'), 1:6 to CZ then 1:3 (for 10'-20'), 1:2 with Guardrail (>20' fill height)	FDM Table 215.2.3
Back Slopes	1:4 or 1:3 with Std. Width Trapezoidal Ditch & 1:6 Front Slope (for all fill heights)	FDM Table 215.2.3
HORIZONTAL		
Minimum Stopping Sight Distance	Mainline: 820' Ramps: 200' (30 MPH), 250' (35 MPH), 305' (40 MPH), 425' (50 MPH)	FDM Table 211.10.1, Table 211.10.2
Decision Sight Distance	Mainline: 1445' Ramps: 620' (30 MPH), 720' (35 MPH), 825' (40 MPH), 1030' (50 MPH)	2018 AASHTO, Table 3-5
Maximum Deflection Without Curve	Mainline: 0°45'00" Ramps: 0°45'00" (>40 MPH) 2° 00' 00" (≤40 MPH)	FDM Section 211.7.1
Length of Horizontal Curve:		
Mainline (Desirable/Min.)	2100' / 1050'	FDM Table 211.7.1
Ramps (Desirable/Min.)	450'/400' (30 MPH), 525'/400' (35 MPH), 600'/400' (40 MPH), 1500'/750' (50 MPH)	FDM Table 211.7.1
Maximum Degree of Curve / Min. Radius:		
Mainline	3° 00' / 1,910'	FDM Table 210.9.1
Ramps	24° 45'/232' (30 MPH), 17° 45'/323' (35 MPH), 13° 15'/432' (40 MPH), 8° 15'/695' (50 MPH)	FDM Table 210.9.1
Superelevation Transition: On Tangent On Curve	 80% 20%	FDM Section 210.9.1

Superelevation Transition Rate	Mainline: 1:190 Ramps: 1:175 (≤ 40 MPH), 1:200 (50 MPH)	FDM Table 210.9.3
Maximum Superelevation Rate	10%	FDM Section 210.9
Maximum Curvature without Superelevation (Min. Radii)	Mainline: 14,714' Ramps: 3,349' (30 MPH), 4,384' (35 MPH), 5,560' (40 MPH), 8,337' (50 MPH)	FDM Table 210.9.1
VERTICAL		
Minimum K value for Crest Vertical Curves	Mainline: 506 Ramps: 31 (30 MPH), 47 (35 MPH), 70 (40 MPH), 136 (50 MPH)	FDM Table 211.9.2
Minimum Lengths of Crest Vertical Curves	Mainline: 1000' Open Highway (1,800' in Interchange) Ramps: 90' (30 MPH), 105' (35 MPH), 120' (40 MPH), 300' (50 MPH)	FDM Table 211.9.3
Minimum K value for Sag Vertical Curves	Mainline: 206 Ramps: 37 (30 MPH), 49 (35 MPH), 64 (40 MPH), 96 (50 MPH)	FDM Table 211.9.2
Minimum Lengths of Sag Vertical Curves	Mainline: 800' Ramps: 90' (30 MPH), 105' (35 MPH), 120' (40 MPH), 200' (50 MPH)	FDM Table 211.9.3
Maximum Profile Grade	Mainline: 3% Ramps: 7% (30 MPH), 6% (35 MPH), 6% (40 MPH), 5% (50 MPH)	FDM Table 211.9.1
Maximum change without Vertical Curve	Mainline: 0.2% Ramps: 1.0% (30 MPH), 0.9% (35 MPH), 0.8% (40 MPH), 0.6% (50 MPH)	FDM Table 210.10.2
Minimum Base Clearance	Mainline = 3' Ramps: 2' (1' in Low Points at Cross Roads)	FDM Section 210.10.3
Minimum Vertical Clearance for Roadway/Railroad Bridges over the Turnpike	16.5'	FDM Table 260.6.1
Minimum Vertical Clearance for Bridges over Railroad	23.5'	FDM Table 260.6.1
Minimum Vertical Clearances for Overhead Sign Structure	17.5'	FDM Section 210.10.3
Minimum Vertical Clearances for Overhead Dynamic Message Signs (DMS)	19.5’	FDM Section 210.10.3
CROSS ROADS	**Design Speed (Posted Speed), MPH**	**Applicable Design Manual**
SE Bridge Road / CR 708	60 (55)	FDOT Design Manual (FDM)
SW Kanner Highway / SR 76	55 (45 - 50)	FDOT Design Manual (FDM)
SW Martin Highway / SR 714	45 (35 - 45)	FDOT Design Manual (FDM)
SE Becker Road	45 (40)	FDOT Design Manual (FDM)
SW Port St. Lucie Blvd.	45 (45)	FDOT Design Manual (FDM)
Crosstown Parkway	45 (45)	N/A - no proposed design changes
St. Lucie West Blvd.	45 (40)	FDOT Design Manual (FDM)
W Midway Road / CR 712	45 (45)	FDOT Design Manual (FDM)
Okeechobee Road / SR 70	45 (45)	FDOT Design Manual (FDM)

* Functional Classification is Rural Expressway from MP 120 to MP 129 in Martin County.

** Unless project specific circumstances warrant the need for tapered design.

4.0 ALTERNATIVES ANALYSIS

4.1 Previous Planning Studies

There were a few studies completed on different roadways within the project limits. Some of these studies are described below.

Midway Road Interchange Concept Study

The *Midway Road Interchange Concept Study* (December 2005) was completed by Florida's Turnpike Enterprise. This study evaluated the need for adding an interchange from the Turnpike onto W Midway Road. The addition of this interchange would increase the roadway network and allow users an alternate method to switch between I-95 and the Turnpike. Additionally, traffic volumes along Florida's Turnpike (SR 91) mainline have increased by 46 percent from 1998 to 2005. The W Midway Road Interchange Study supported the inclusion of a new interchange at W Midway Road as part of this PD&E Study. The study provides support for population growth trends within the Treasure Coast Region, which includes Palm Beach, Martin, St. Lucie and Indian River Counties, which have been increasing with increased traffic volumes along the Turnpike.

At the time this study was completed, the existing land uses in the vicinity of the proposed W Midway Road interchange included industrial, residential, and vacant. There are also parcels adjacent to the Turnpike that belong to the City of Port St. Lucie.

There were multiple concepts considered before the selection of a preferred interchange at W Midway Road. The Concept Study included evaluations of traffic, environmental, physical design, and cost and revenue issues.

Comparing the maps in the Concept Study to recent aerial photography, the area around the proposed W Midway Road Interchange has not changed. There has not been any additional development to adjacent parcels nor has there been removal of existing structures.

Port St. Lucie Interchange Concept Evaluation

The purpose of the Port St. Lucie Interchange Concept Evaluation was to summarize the traffic operations of potential Transportation Systems Management and Operations (TSM&O) improvements at the intersection of the Turnpike ramps at SW Bayshore Boulevard and at SW Port St. Lucie Boulevard. These improvements would reduce traffic delays and improve level of service (LOS). There were two recommendations from this study:

1) Modify the existing painted separator to maintain the 12- foot ramp lane width through the access intersection.
2) Extend the skip striping north of the intersection an additional 65 feet to better define the lane configuration.

These two recommendations addressed safety concerns at this intersection, but queues along the ramp roadway and excessive intersection delay were not addressed. Additional traffic data was collected and shown in the *Port St. Lucie Interchange Concept Evaluation* study, and four alternatives were presented. The purpose of this study was to show that there are traffic concerns at this particular intersection that need to be addressed.

The *Port St. Lucie Interchange Concept Evaluation* was completed in 2015. Since then, the roadway has been resurfaced with improved pavement markings that modified the existing painted separator and defined lane configuration. The two recommended improvements from the *Port St. Lucie Interchange Concept Evaluation* were implemented.

4.2 No-Build (No-Action) Alternative

The No-Build alternative assumes that no action will be taken to widen the Turnpike within the project limits. This alternative also assumes that no action will be taken to improve the four roadway facilities that share existing interchanges with the Turnpike within the project limits. The four facilities include SW Martin Highway (SR 714), SE Becker Road, SW Port St. Lucie Boulevard, and Okeechobee Road (SR 70). This alternative also assumes no action will be taken to construct new interchanges at Crosstown Parkway and W Midway Road. This involves leaving the existing roadway is it is, with only routine maintenance as required. Advantages of the No-Build alternative include:

- No construction costs
- No disruption to traffic due to construction
- No disruption to the adjacent property owners due to construction
- No right-of-way acquisitions or relocations
- No degradation or disruption of environmental resources due to construction.

Disadvantages of the No-Build alternative include:

- Does not meet the purpose and need for the project
- Increased traffic congestion causing increased road user costs due to travel delay
- Increased emergency evacuation travel times
- Increased potential for vehicular crashes due to congested lanes, interchanges, and intersections
- Increased emergency vehicle response times
- Increased vehicle emission pollutants due to higher levels of traffic congestion

The No-Build alternative is a worst-case scenario for traffic operations that would not provide additional capacity to the Turnpike, as well as to entrance and exit ramps at the interchanges within the project area. This alternative would have no environmental or community impacts and would provide significant monetary savings; however, it would result in increased vehicle, pedestrian, or bicyclist delay and reduce roadway safety. The No-Build alternative remains a viable alternative for consideration until the conclusion of this PD&E Study.

4.3 Transportation Systems Management and Operations Alternative

Transportation Systems Management and Operations (TSM&O) alternatives are defined as low capital cost transportation improvements designed to maximize the utilization and efficiency of the existing transportation system through improved system management. The various forms of TSM&O alternatives include:

- Traffic signal improvements
- Intersection improvements
- Widening of parallel arterials
- Ridesharing programs
- High occupancy vehicle lanes
- Reversible flow roadway systems
- Transit improvements
- Intelligent Transportation System
- Improvements to signing, marking, and roadway lighting

With future population growth and regional mobility needs, a TSM&O only alternative does not address design year traffic, the need for new systems connections, or the need for additional lanes on Florida's Turnpike (SR 91).

4.4 Future Conditions

Future lane requirements were evaluated to provide an estimated timeline for the onset of capacity deficiencies along the mainline and ramp roadways. Turnpike mainline and ramp Level of Service (LOS) thresholds were based on the FDOT System Planning Office Estimation of Capacities on Florida Freeways Report, dated September 2014 and prepared by the Transportation Research Center, University of Florida. Under No-Build conditions, the Turnpike mainline will require three lanes of travel in each direction by year 2035 north of SW Port St. Lucie Boulevard, by year 2042 between SE Becker Road and SW Port St. Lucie Boulevard, and by year 2025 south of SE Becker Road. Four lanes will be required between SW Martin Highway and SE Becker Road by year 2033. For the SW Martin Highway interchange, the southbound off-ramp will require two lanes by year 2039 and the northbound on-ramp will require two lanes by year 2037. Single-lane ramps will provide acceptable operations at other locations beyond the design year (2045).

Under Build conditions, the Turnpike mainline will require three lanes within the study area between years 2027 and 2036, except for the segments between SW Martin Highway and SE Becker Road and to the south of the proposed Turnpike interchange with I-95 near SE Bridge Road, which will require four lanes by year 2035. The proposed Turnpike interchange with I-95 is being addressed under a separate PD&E study and is not part of this study. At the SW Martin Highway interchange, the southbound off-ramp will require two lanes by year 2036 and the northbound on-ramp will require two lanes by year 2035. Single-lane ramps will

provide acceptable operations at other locations beyond the design year (2045). **Table 4-1** and **Table 4-2** below provide AADT volumes for Build and No-Build scenarios for the horizon year, 2045.

Table 4-1: Future Mainline Traffic Volumes (2045)

Build Scenario		No-Build (2045)	Build (2045)
Begin Point	End Point	Annual Average Daily Traffic (AADT)	Annual Average Daily Traffic (AADT)
		Mainline	Mainline
SE Bridge Road (I-95)	SW Martin Highway	77,300	71,400
SW Martin Highway	SE Becker Road	87,900	86,100
SE Becker Road	SW Port St. Lucie Boulevard	81,100	81,200
SW Port St. Lucie Boulevard	Crosstown Parkway	73,800	81,400
Crosstown Parkway	St. Lucie West Boulevard	73,800	72,700
St. Lucie West Boulevard	W Midway Road	73,800	76,100
W Midway Road	Okeechobee Road (SR 70)	73,800	75,300

**Information in the table above was extracted from the Project Traffic Forecast Memorandum (PTFM, June 2017) for Palm Beach, Martin, and St. Lucie Counties.*

Table 4-2: Future Ramp Traffic Volumes (2045)

Build Scenario		No-Build (2045)				Build (2045)			
Interchange	Mile Post (MP)	Annual Average Daily Traffic (AADT)				Annual Average Daily Traffic (AADT)			
		Ramps				Ramps			
		NB Off	NB On	SB Off	SB On	NB Off	NB On	SB Off	SB On
SW Martin Highway	135	1,060	2,250	2,250	1,060	840	2,370	2,370	-
SE Becker Road	138	1,120	500	-	1,120	1,010	560	-	1,010
SW Port St. Lucie Boulevard	142	-	830	-	1,490	-	810	-	790
Crosstown Parkway	145	-	-	-	-	-	-	-	790
St. Lucie West Boulevard	146	-	-	-	-	-	310	-	-
W Midway Road	150	-	-	-	-	-	430	-	420
Okeechobee Road (SR 70)	152	1,690	870	870	1,690	1,490	510	510	1,490

**Information in the table above was extracted from the Project Traffic Forecast Memorandum (PTFM, June 2017) for Palm Beach, Martin, and St. Lucie Counties.*

4.5 Build Alternative(s)

4.5.1 Alternative Analysis

Within the project limits, there are four roadway facilities that share an interchange with the Turnpike. The four facilities include: SW Martin Highway (SR 714), SE Becker Road, SW Port St. Lucie Boulevard, and Okeechobee Road (SR 70). An *Interchange Feasibility Technical Memorandum*, March 2020, was developed in order to analyze potential new interchange locations along the Turnpike. There were four potential new interchange locations along the Turnpike that were evaluated. These locations are:

- SW Kanner Highway (MP 130), Martin County
- Crosstown Parkway (MP 145), St. Lucie County
- St. Lucie West Boulevard (MP 146), St. Lucie County
- W Midway Road (MP 150), St. Lucie County

4.5.2 Analysis Methodology

All alternatives were analyzed based on specific criteria. There were three categories and sixteen design parameters evaluated for each alternative analysis. The categories included: engineering; environmental and community; and cost considerations. There were 16 design parameters that included traffic operations, local road impacts, overall interchange performance, floodplain and wetland impacts, potential residential and business relocations, right-of-way and Florida Gas Transmission (FGT) impacts, right-of-way and construction costs, and benefit/cost (B/C) ratio just to name a few. The 16 design parameters are distributed among three categories as follows: engineering (7 parameters); environmental and community (5 parameters); and cost (4 parameters).

4.5.3 Analysis Summary

Alternatives were broken down into individual tiers for evaluation. A total of 18 potential interchange alternatives were evaluated for the four new interchange locations as part of Tier 1. Only 11 were considered for further evaluation as Tier 2 alternatives. No new interchange alternatives were considered further for the proposed locations of SW Kanner Highway and St. Lucie West Boulevard. The design intent for these respective crossroads is for the existing overpass bridges and roadway approaches to be reconstructed to accommodate the widening of the Turnpike. As part of the Tier 2 analysis, seven of the remaining alternatives were eliminated from further evaluation, while four were carried forward into the Tier 3 analysis. Those alternatives carried forward included two at Crosstown Parkway and two at W Midway Road. These four remaining alternatives were further vetted in Tier 3 and evaluated based on the 16 design parameters previously discussed. The four potential alternatives for the two new interchange locations, as well as alternative improvements for the four existing interchange located in the project area are described below. The evaluation of a new I-95 direct connection interchange 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). All of the graphics, **Figure 4-1** to **Figure 4-12**, presented below have been extracted from the *Interchange Feasibility Technical Memorandum* for the Florida's Turnpike (SR 91) PD&E Study from North of Jupiter (Indiantown Road / SR 706) to North of Fort Pierce (Okeechobee Road (SR 70)).

The intent of the figures is to provide graphical representations of the lane configurations for each of the respective interchange alternatives.

4.5.4 SW Martin Highway (SR 714)

4.5.4.1 Alternative 7B

Approximately 3,500 feet south of SW Martin Highway, the northbound off-ramp diverts from the Turnpike and curves to the right. The ramp splits into two, one-lane ramps that intersect SW Martin Highway at SW Martin Downs Boulevard. The outside ramp provides drivers with the ability to make a right turn onto SW Martin Highway while the inside ramp provides drivers with the ability to continue through onto SW Martin Downs Boulevard, as well as turn left onto SW Martin Highway. The two-lane northbound on-ramp begins at the SW Martin Highway and SW Martin Downs Boulevard intersection and loops from the south to the north, to tie into the Turnpike approximately 1,900 feet north of SW Martin Highway. Approximately 750 feet north of SW Martin Highway, the southbound off-ramp diverts from the Turnpike and curves to the right. The ramp travels underneath the SW Martin Highway overpass before splitting into a one-lane and two-lane ramp. A single-lane ramp continues to the west until ending at SW Leighton Farm Avenue at a proposed roundabout. SW Leighton Farm Avenue will be realigned to intersect SW Martin Highway at SW Deggeller Court. Drivers can turn left or right onto SW Martin Highway or continue through on SW Deggeller Court. At the southbound off-ramp split, a two-lane ramp curves from the west to the east, crossing at a bridge over the Turnpike, until it loops to the north to intersect SW Martin Highway at SW Martin Downs Boulevard. Drivers can continue through onto SW Martin Downs Boulevard or turn right onto SW Martin Highway. The southbound on-ramp begins approximately 800 feet east of Florida's Turnpike (SR 91), at SW Martin Downs Boulevard, and curves to the west, crossing at a bridge over the Turnpike, before looping around to tie into the Turnpike approximately 3,500 feet south of SW Martin Highway. Between SW High Meadow Avenue and SW Armellini Avenue, SW Martin Highway will be widened from the existing four-lane typical section to a six-lane typical section with three lanes in each direction. West of SW Armellini Avenue until SW Deggeller Court, SW Martin Highway will be widened from the existing two-lane typical section to a six-lane typical section with three lanes in each direction. The SW Martin Highway bridge over the Turnpike will be reconstructed to accommodate the proposed widening of the Turnpike.

4.5.4.2 Alternative 7S

Approximately 4,500 feet south of SW Martin Highway, the northbound off-ramp diverts from the Turnpike and curves to the right. The ramp continues east until it intersects SW High Meadow Avenue at a new proposed signalized intersection approximately 2,200 feet south of SW Martin Highway. The two-lane northbound on-ramp begins at the SW Martin Highway and SW Martin Downs Boulevard intersection and loops from the south to the north, to tie into the Turnpike approximately 1,900 feet north of SW Martin Highway. Approximately 750 feet north of SW Martin Highway, the southbound off-ramp diverts from the Turnpike and curves to the right. The ramp travels underneath the SW Martin Highway overpass before splitting into a one-lane and two-lane ramp. A single-lane ramp continues to the west until ending at SW Leighton Farm Avenue at a proposed roundabout. SW Leighton Farm Avenue will be realigned to intersect SW Martin Highway at SW Deggeller Court. Drivers can turn left or right onto SW Martin Highway or continue through on SW Deggeller Court. At the southbound off-ramp split, a two-lane ramp curves from

the west to the east, crossing at a bridge over the Turnpike, until it loops to the north to intersect SW Martin Highway at SW Martin Downs Boulevard. Drivers can continue through onto SW Martin Downs Boulevard or turn right onto SW Martin Highway. The southbound on-ramp begins at the new proposed signalized intersection on SW High Meadow Avenue, approximately 2,200 feet south of SW Martin Highway. The ramp curves from the west to the south, crossing at a bridge over the Turnpike, until it ties into the Turnpike approximately 5,700 feet south of SW Martin Highway. Along SW High Meadow Avenue, from the driveway entrance to the Palm City Business Park until the new proposed signalized intersection, the existing two-lane undivided typical section will be widened to a four-lane divided typical section with two lanes in each direction. From the new proposed signalized intersection to SW Martin Highway, the existing two-lane undivided typical section will be widened to a six-lane divided typical section with three lanes in each direction. Between SW High Meadow Avenue and SW Armellini Avenue, SW Martin Highway will be widened from the existing four-lane typical section to a six-lane typical section with three lanes in each direction. West of SW Armellini Avenue until SW Deggeller Court, SW Martin Highway will be widened from the existing two-lane typical section to a six-lane typical section with three lanes in each direction. The SW Martin Highway Bridge over the Turnpike will be reconstructed to accommodate the proposed widening of the Turnpike.

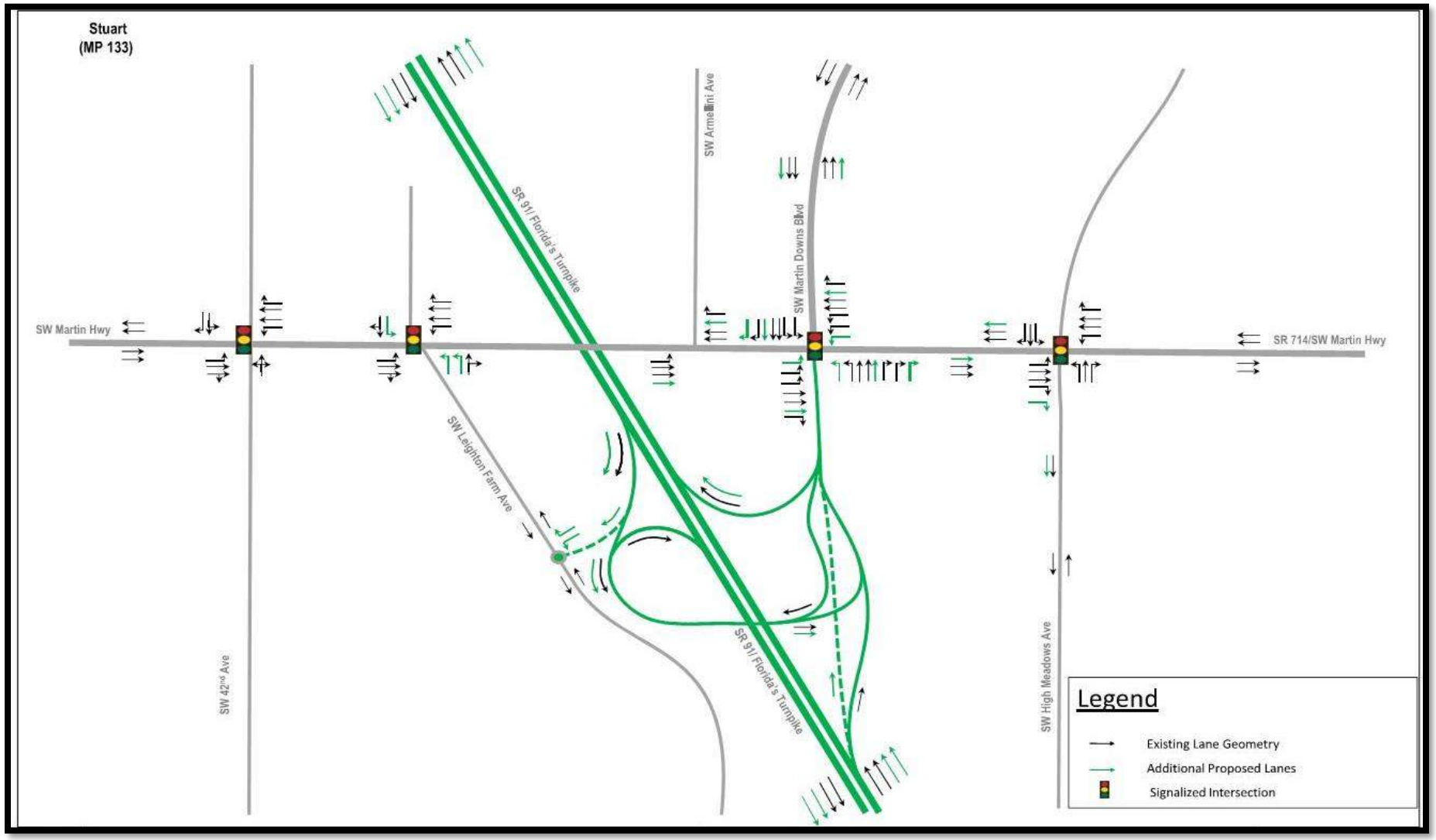


Figure 4-1: SW Martin Highway (SR 714) Lane Configuration – Alternative 7B

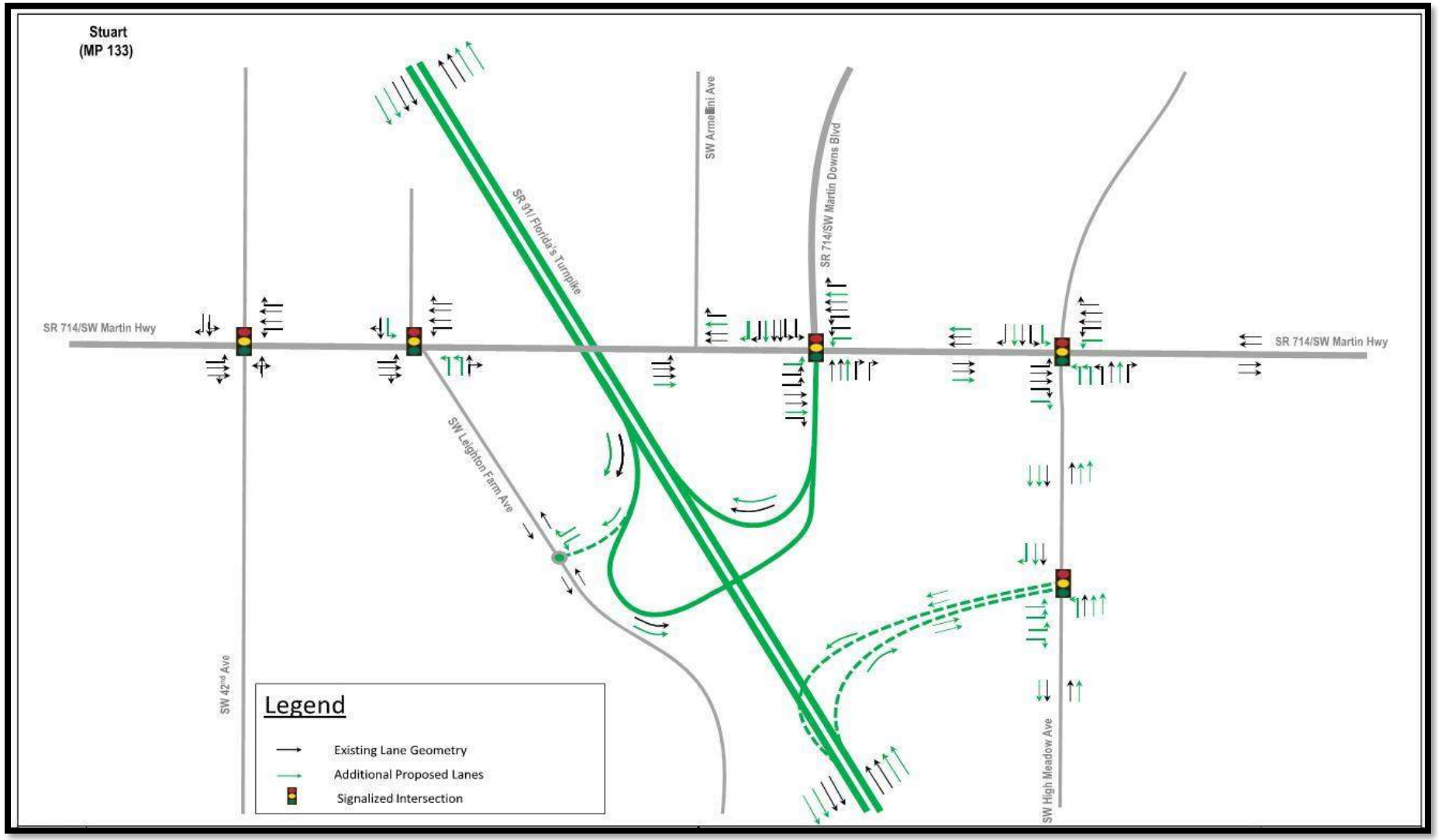


Figure 4-2: SW Martin Highway (SR 714) Lane Configuration – Alternative 7S

4.5.5 SE Becker Road

4.5.5.1 Alternative 1

The alignment of the northbound off-ramp will remain as existing. Approximately 700 feet north of SE Becker Road, the northbound off-ramp will be widened to accommodate a dedicated right turn lane. The alignment of the northbound on-ramp will remain as existing. The initial 415 feet of the northbound on-ramp will be widened to accommodate an additional lane before tapering down to one lane. Approximately 3,000 feet north of SE Becker Road, the southbound off-ramp diverts from the Turnpike and curves to the right until it intersects SE Becker Road at an existing signalized intersection, approximately 325 feet west of the Turnpike. The southbound on-ramp begins at the same location and provides a two-lane ramp for approximately 900 feet before tapering down to one lane. The southbound on-ramp ties into the Turnpike approximately 1,265 feet south of SE Becker Road. The alignment of SE Becker Road, between the St. Lucie County Fire Station Number 13 and SW Bradshaw Circle, will shift approximately 38 feet to the north to accommodate the construction of a new bridge over the Turnpike. The SE Becker Road bridge over the Turnpike will be reconstructed to accommodate the proposed widening of the Turnpike.

4.5.5.2 Alternative 3

The alignment of the northbound off-ramp will remain as existing. Approximately 700 feet north of SE Becker Road, the northbound off-ramp will be widened to accommodate a dedicated right-turn lane. The alignment of the northbound on-ramp will remain as existing. The initial 415 feet of the northbound on-ramp will be widened to accommodate an additional lane before tapering down to one lane. Approximately 1,600 feet north of SE Becker Road, the southbound off-ramp diverts from the Turnpike and curves to the right. The ramp continues south until it intersects SE Becker Road at a directional median opening, approximately 800 feet west of the Turnpike. For drivers travelling west, the southbound on-ramp begins at the same location and curves from north to south and ties into the Turnpike approximately 3,100 feet south of SE Becker Road. For drivers travelling east, the southbound on-ramp begins approximately 350 feet west of the Turnpike and continues south until it ties into the Turnpike approximately 3,100 feet south of SE Becker Road. The alignment of SE Becker Road between the St. Lucie County Fire Station Number 13 and SW Bradshaw Circle will shift approximately 38 feet tothe north to accommodate the construction of a new bridge over the Turnpike. The SE Becker Road Bridge over the Turnpike will be reconstructed to accommodate the proposed widening of the Turnpike.

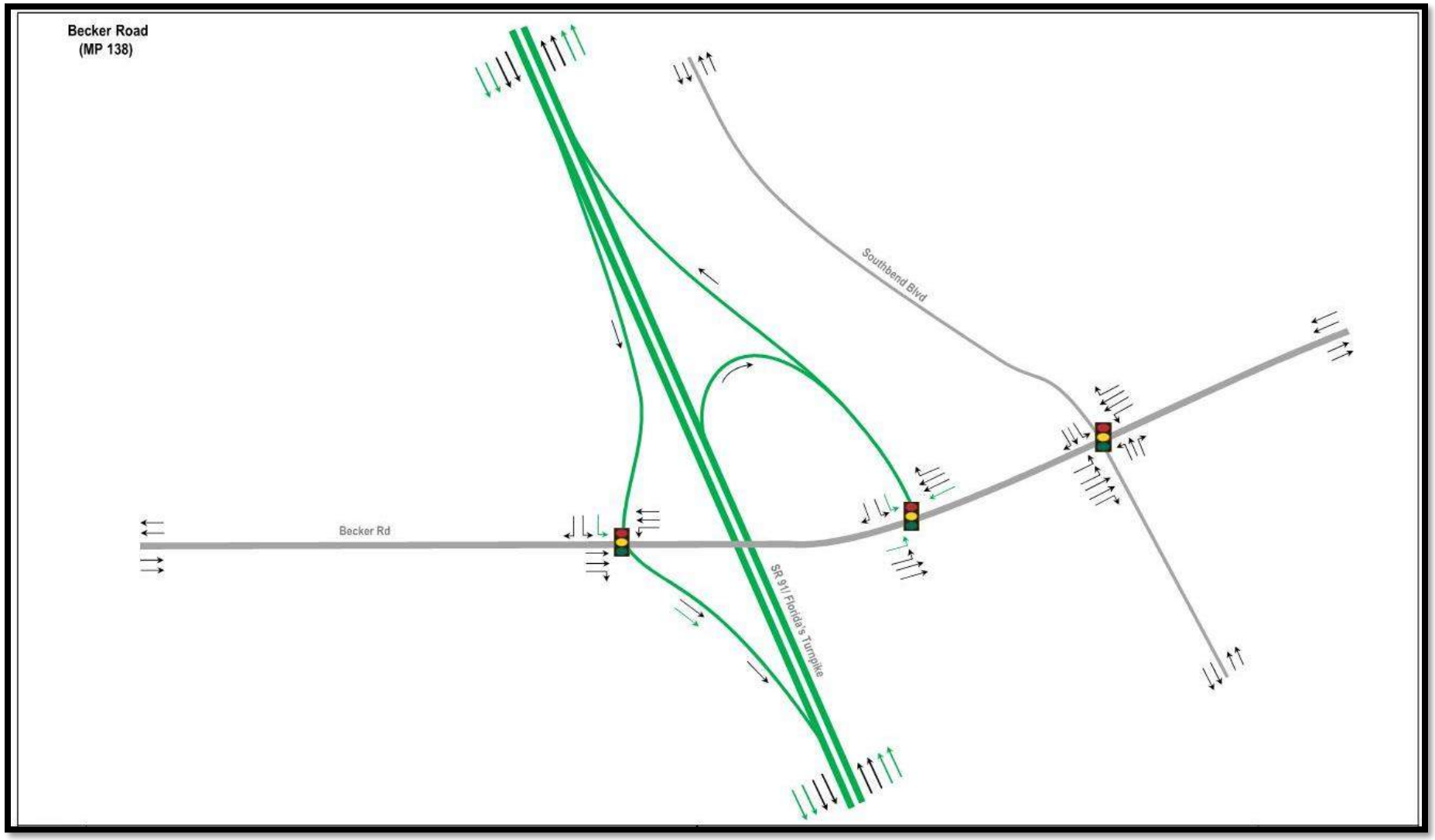


Figure 4-3: SE Becker Road Lane Configuration – Alternative 1

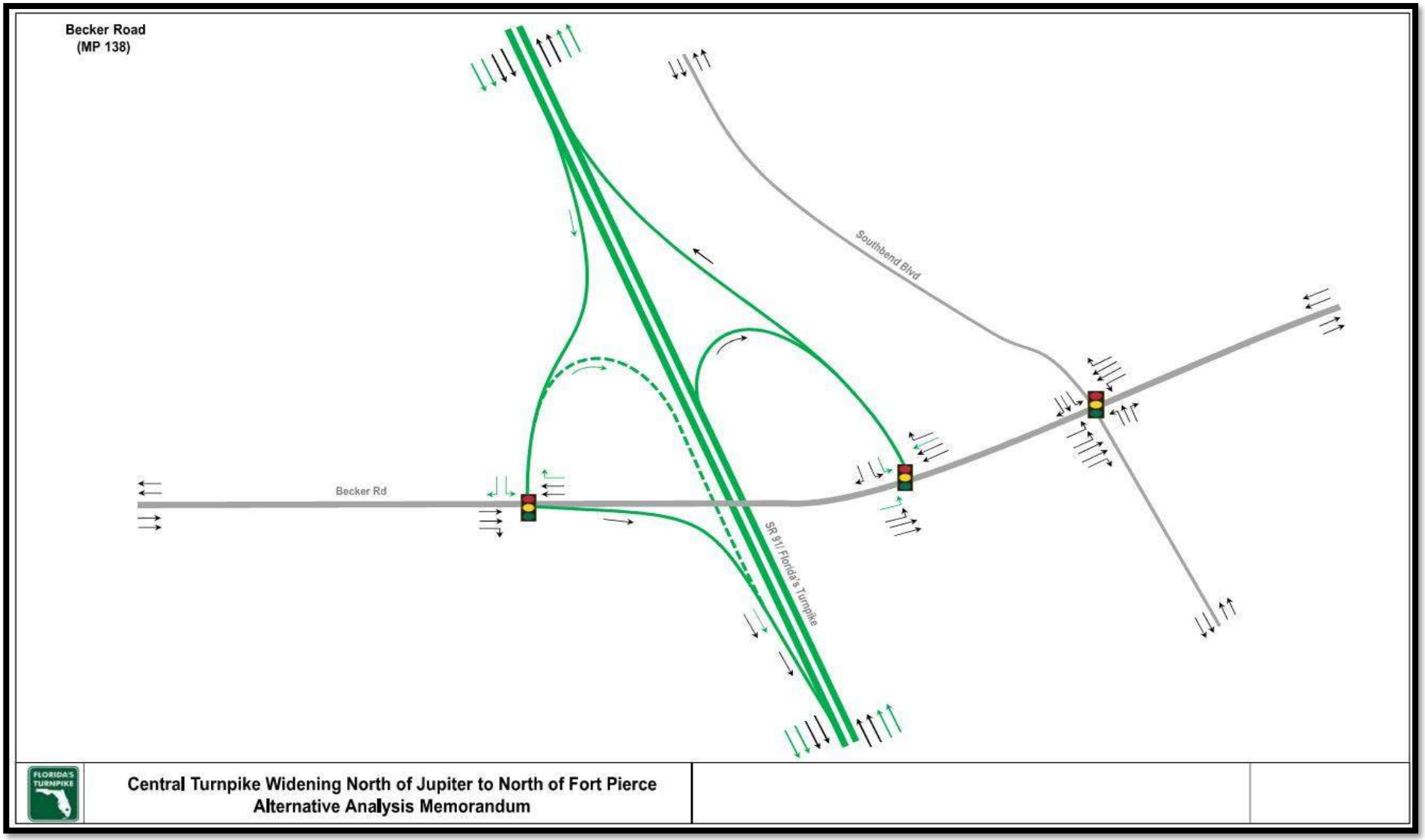


Figure 4-4: SE Becker Road Lane Configuration – Alternative 3

4.5.6 SW Port St. Lucie Boulevard

4.5.6.1 Alternative 1

Approximately 2,750 feet south of SW Port St. Lucie Boulevard, the northbound off-ramp diverts from the Turnpike and travels parallel to the mainline until it intersects SW Port St. Lucie Boulevard at a proposed signalized intersection. Approximately 1,500 feet south of SW Port St. Lucie Boulevard, the off-ramp will begin to rise in elevation in order to intersect the elevated bridge section of SW Port St. Lucie Boulevard. The northbound on-ramp begins at a proposed signalized intersection on SW Bayshore Boulevard, approximately 1,250 feet north of SW Port St. Lucie Boulevard. The ramp begins travelling west and curves to the north, tying into the Turnpike approximately 1,950 feet north of SW Port St. Lucie Boulevard. The southbound off-ramp diverts from the Turnpike approximately 2,200 feet north of SW Port St. Lucie Boulevard and curves to the right. The ramp then curves from the south to the east, crossing at a bridge over the Turnpike before intersecting SW Bayshore Boulevard at a proposed signalized intersection approximately 1,250 feet north of SW Port St. Lucie Boulevard. For drivers travelling east, the southbound on-ramp begins approximately 900 feet west of the Turnpike and curves to the right. The ramp continues south until it ties into the Turnpike approximately 2,800 feet south of SW Port St. Lucie Boulevard. For drivers travelling west, the southbound on-ramp begins approximately 650 feet east of the Turnpike. Following the SW Port St. Lucie Boulevard Bridge over the Turnpike, the ramp loops around and continues south until it intersects the Turnpike approximately 2,800 feet south of SW Port St. Lucie Boulevard. Between SW Bayshore Boulevard and SW Cameo Boulevard, SW Port St. Lucie Boulevard will be widened to accommodate seven-foot buffered bicycle lanes in each direction. The alignment of SW Port St. Lucie Boulevard will shift approximately 20 feet to the north to accommodate the construction of a new bridge over the Turnpike. The SW Port St. Lucie Boulevard Bridge over the Turnpike will be reconstructed to accommodate the proposed widening of the Turnpike.

4.5.6.2 Alternative 2

Approximately 2,750 feet south of SW Port St. Lucie Boulevard, the northbound off-ramp diverts from the Turnpike and travels parallel to the mainline for approximately 1,500 feet before curving to the right and tying into the existing SW Bayshore Boulevard, on the south side of SW Port St. Lucie Boulevard. The northbound on-ramp begins at a proposed signalized intersection on SW Bayshore Boulevard, approximately 1,250 feet north of SW Port St. Lucie Boulevard. The ramp begins travelling west and curves to the north, tying into the Turnpike approximately 1,950 feet north of SW Port St. Lucie Boulevard. The southbound off-ramp diverts from the Turnpike approximately 2,200 feet north of SW Port St. Lucie Boulevard and curves to the right. The ramp then curves from the south to the east, crossing at a bridge over the Turnpike before intersecting SW Bayshore Boulevard at a proposed signalized intersection approximately 1,250 feet north of SW Port St. Lucie Boulevard. For drivers travelling east, the southbound on-ramp begins approximately 900 feet west of the Turnpike and curves to the right. The ramp continues south until it ties into the Turnpike approximately 2,800 feet south of SW Port St. Lucie Boulevard. For drivers travelling west, the southbound on-ramp begins approximately 650 feet east of the Turnpike. Following the SW Port St. Lucie Boulevard bridge over the Turnpike, the ramp loops around and continues south until it intersects the Turnpike approximately 2,800 feet south of SW Port St. Lucie Boulevard. Between SW Bayshore Boulevard and SW Cameo Boulevard, SW Port St. Lucie Boulevard will be widened

to accommodate seven-foot buffered bicycle lanes in each direction. The alignment of SW Port St. Lucie Boulevard will shift approximately 20 feet to the north to accommodate the construction of a new bridge over the Turnpike. The SW Port St. Lucie Boulevard bridge over the Turnpike will be reconstructed to accommodate the proposed widening of the Turnpike.

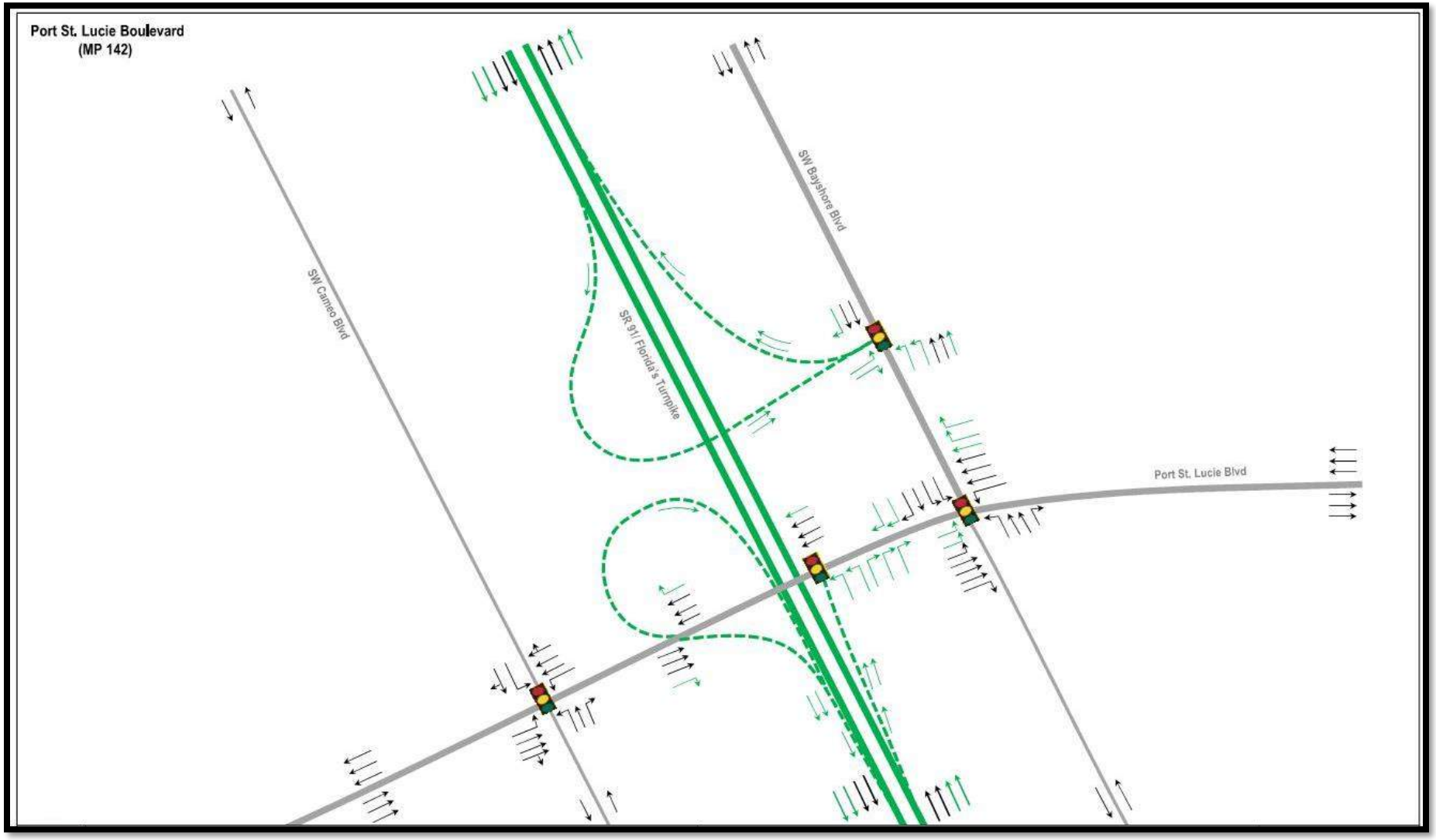


Figure 4-5: SW Port St. Lucie Boulevard Lane Configuration – Alternative 1

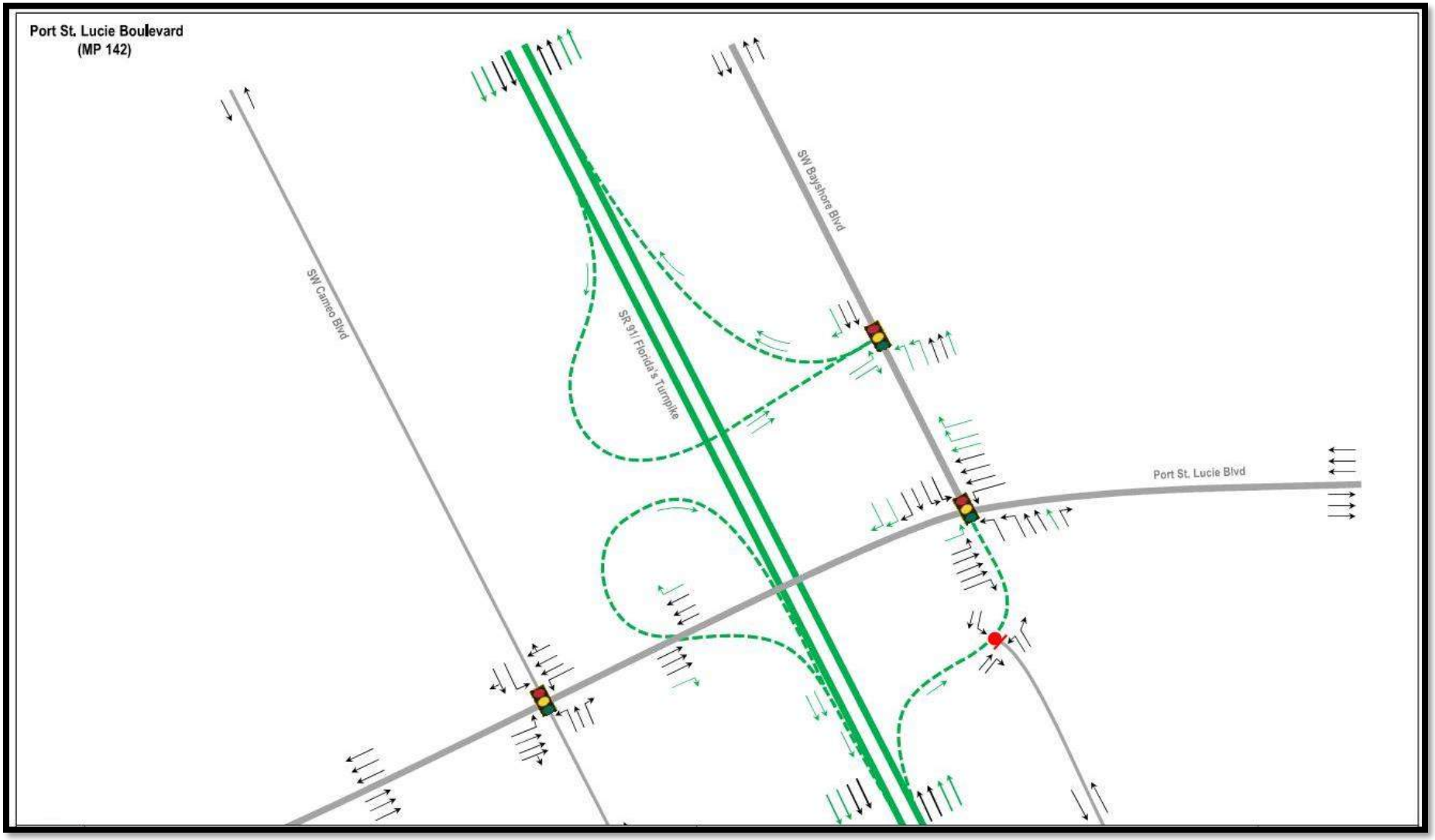


Figure 4-6: SW Port St. Lucie Boulevard Lane Configuration – Alternative 2

4.5.7 Crosstown Parkway

4.5.7.1 Alternative 3

Approximately 1,500 feet south of Crosstown Parkway, the northbound off-ramp diverts from the Turnpike to the inside and continues north for approximately 2,900 feet. The ramp then curves to the west, crossing at a bridge over the southbound lanes of the Turnpike until it ties into the existing SW Cameo Boulevard. The southbound on-ramp begins at the same tie in point at SW Cameo Boulevard and curves to the east, crossing at a bridge over the southbound lanes of the Turnpike. The ramp continues south, in between the northbound and southbound lanes of the Turnpike until it ties into the Turnpike from the inside, approximately 1,275 feet south of Crosstown Parkway.

4.5.7.2 Alternative 4

Approximately 2,000 feet south of Crosstown Parkway, the northbound off-ramp diverts from the Turnpike to the inside and continues north until it intersects Crosstown Parkway at a proposed signalized intersection. The northbound off-ramp gradually rises in elevation until it matches the elevation of the Crosstown Parkway Bridge over the Turnpike. The southbound on-ramp begins at the same proposed signalized intersection and gradually decreases in elevation until it matches the existing elevation of the Turnpike. The southbound on-ramp ties into the Turnpike from the inside, approximately 1,650 feet south of Crosstown Parkway.

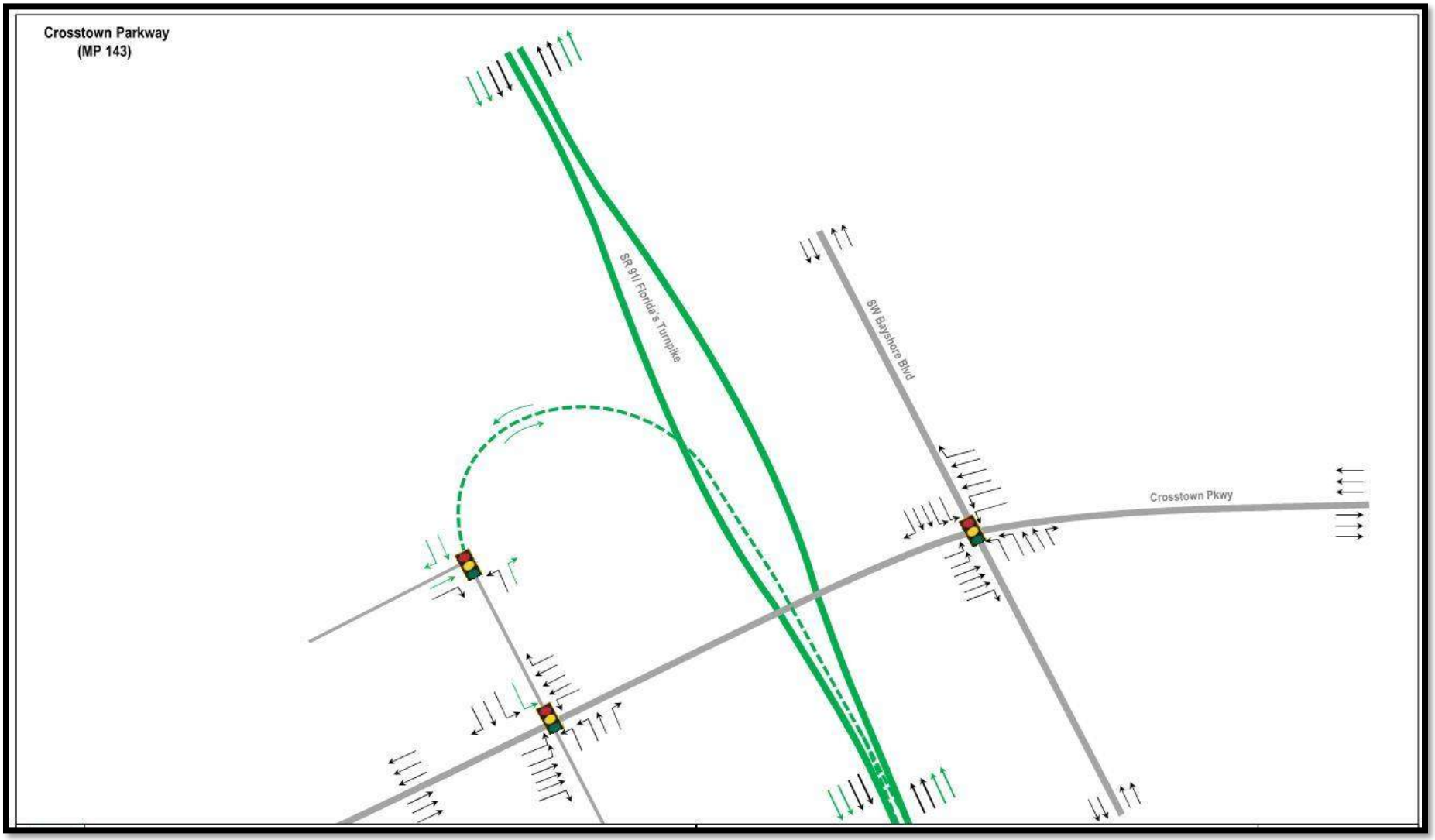


Figure 4-7: Crosstown Parkway Lane Configuration – Alternative 3

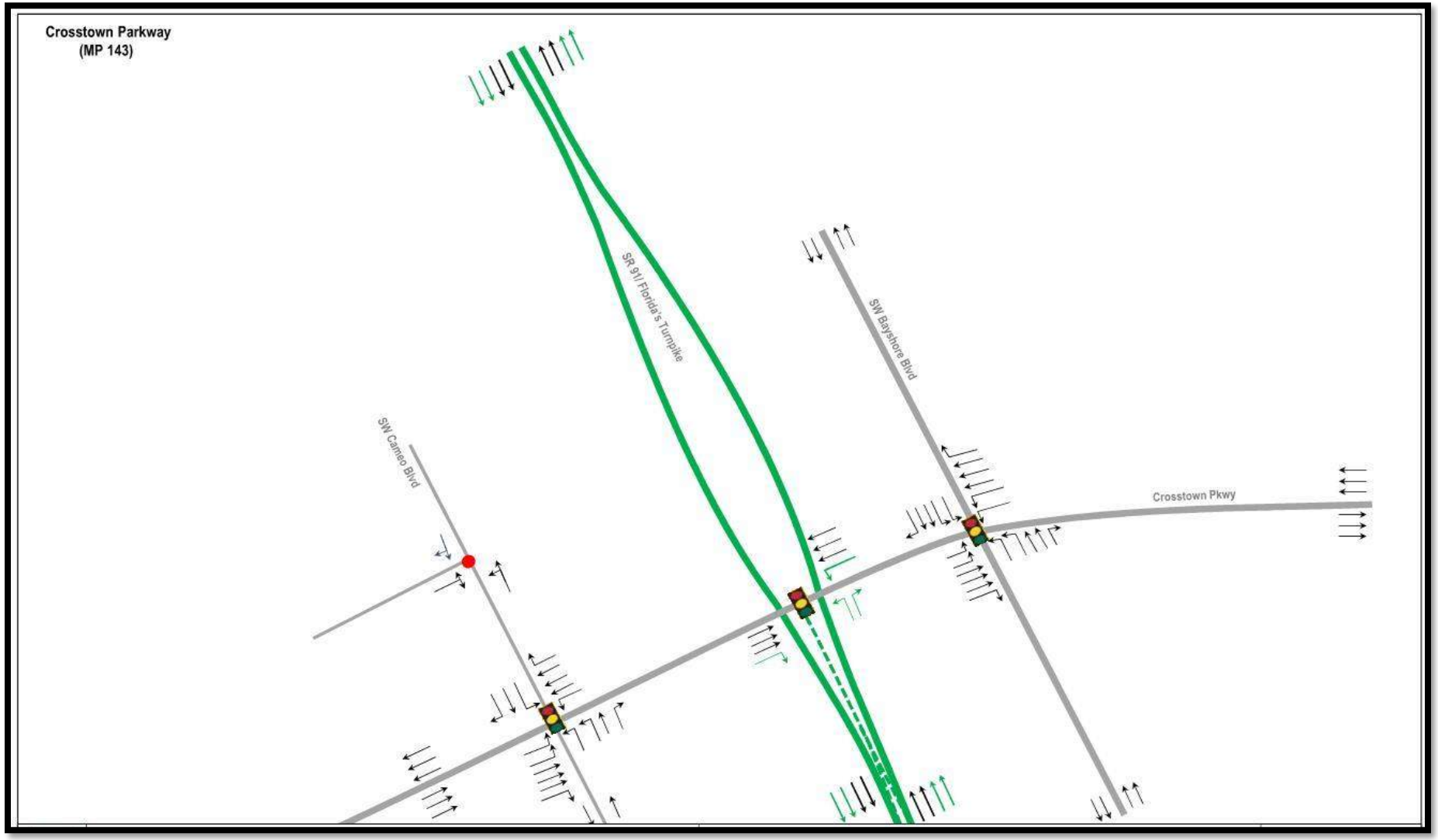


Figure 4-8: Crosstown Parkway Lane Configuration – Alternative 4

4.5.8 W Midway Road

4.5.8.1 Alternative 1

Approximately 1,900 feet south of W Midway Road, the northbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues north until it intersects W Midway Road at a proposed signalized intersection, approximately 1,900 feet east of the Turnpike. The northbound on-ramp begins at the same proposed signalized intersection and initially curves from north to west, then the ramp curves to the north and ties into the Turnpike approximately 1,300 feet north of W Midway Road. Approximately 3,600 feet north of W Midway Road, the southbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues south until it intersects W Midway Road at a proposed signalized intersection, approximately 285 feet west of the Turnpike. The southbound on-ramp begins at the same proposed signalized intersection and continues south until it ties into the Turnpike approximately 1,875 feet south of Midway Road. From S Jenkins Road to East Torino Parkway, W Midway Road will be widened from the existing two-lane undivided typical section to a four-lane divided typical section with seven-foot buffered bicycle lanes in each direction. The W Midway Road bridge over the Turnpike will be reconstructed to accommodate the widening of W Midway Road and the Turnpike.

4.5.8.2 Alternative 4

Approximately 2,150 feet south of W Midway Road, the northbound off-ramp diverts from the Turnpike and curves to the right. The ramp continues north until it intersects W Midway Road at Corporate Way with a proposed signalized intersection. The northbound on-ramp begins at the same proposed signalized intersection and curves from south to north, travelling parallel to the Turnpike, before tying into the Turnpike approximately 1,500 feet north of W Midway Road. Approximately 3,600 feet north of W Midway Road, the southbound off-ramp diverts from the Turnpike and curves to the right. The ramp continues south until it intersects W Midway Road at a proposed signalized intersection, approximately 285 feet west of the Turnpike. The southbound on-ramp begins at the same proposed signalized intersection and continues south until it ties into the Turnpike approximately 1,875 feet south of W Midway Road. From S Jenkins Road to East Torino Parkway, W Midway Road will be widened from the existing two-lane undivided typical section to a four-lane divided typical section with seven-foot buffered bicycle lanes in each direction. The W Midway Road Bridge over the Turnpike will be reconstructed to accommodate the widening of W Midway Road and the Turnpike.

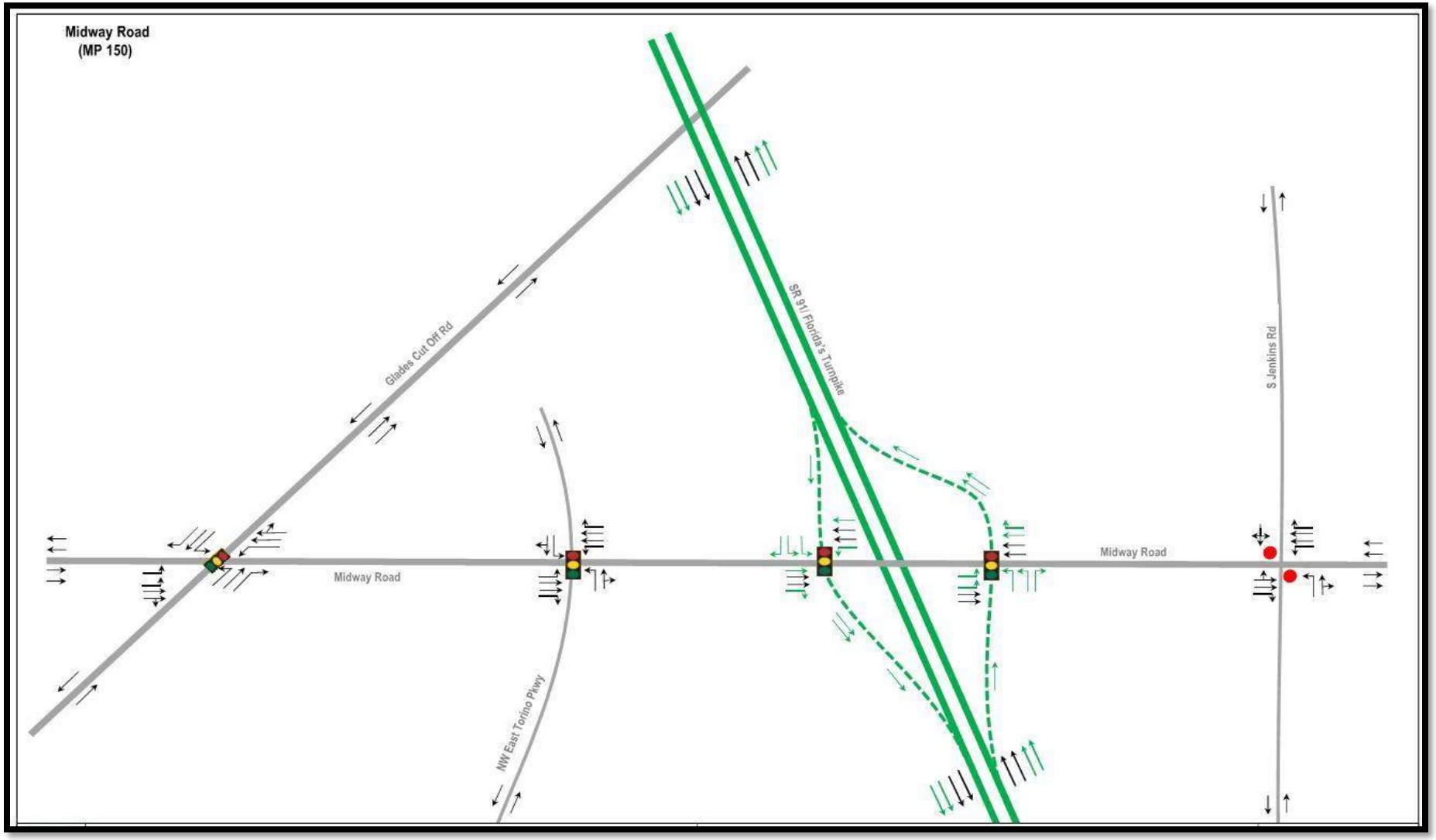


Figure 4-9: W Midway Road Lane Configuration – Alternative 1

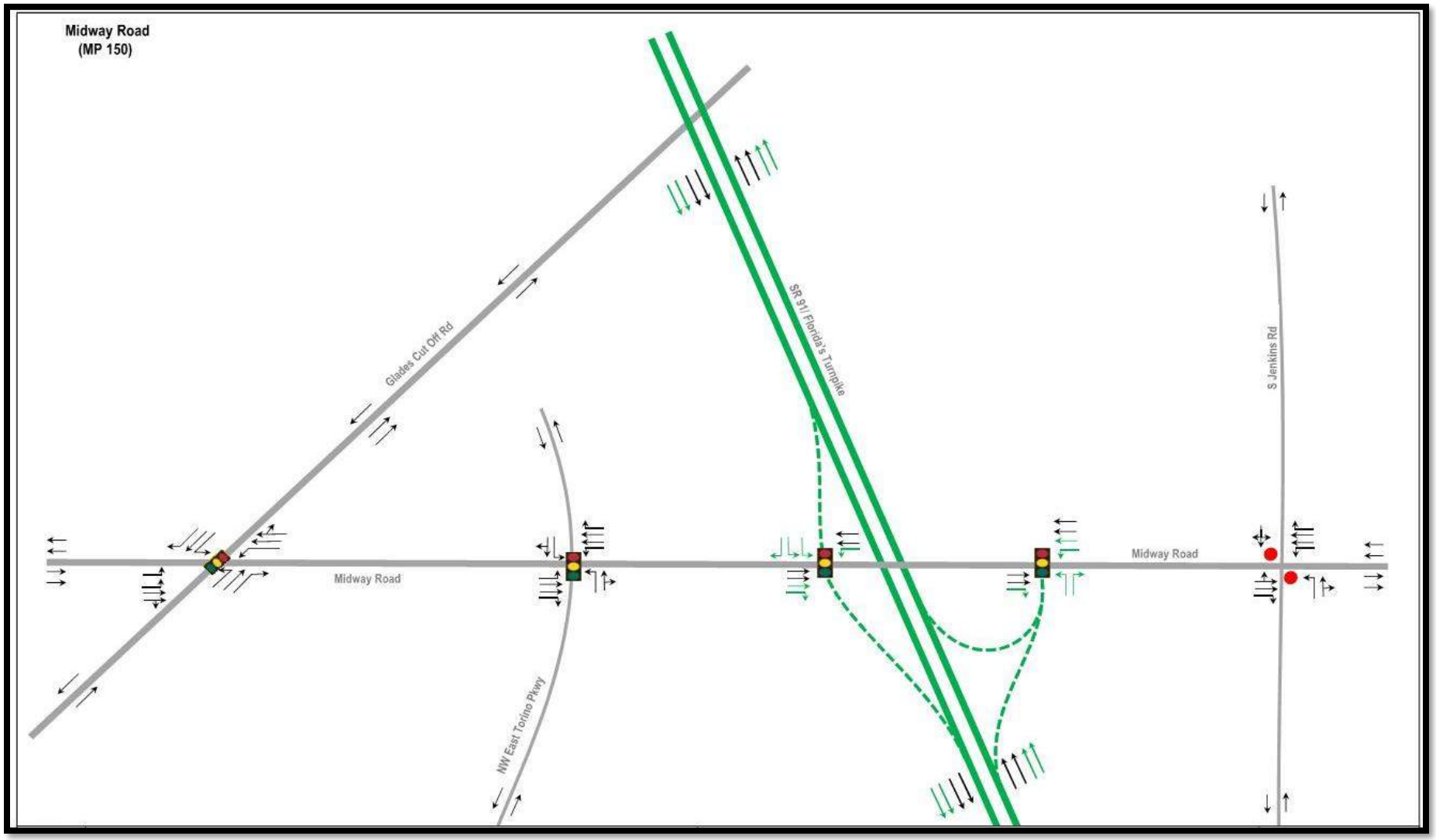


Figure 4-10: W Midway Road Lane Configuration – Alternative 4

4.5.9 Okeechobee Road (SR 70)

4.5.9.1 Alternative 1

The existing northbound off-ramp and on-ramp will not be modified with the proposed interchange alternative. The northbound approach leg of the S Kings Highway and Okeechobee Road intersection will be widened to accommodate three dedicated right-turn lanes, two through lanes, and a dedicated left-turn lane. Approximately 250 feet south of the existing ramp toll gantry, the southbound on-ramp begins. The ramp curves to the west, crossing at a bridge over the Turnpike mainline. After crossing over the Turnpike mainline, the ramp curves from west to north and then south and ties into the Turnpike mainline approximately 2,750 feet south of Okeechobee Road. Approximately 1,115 feet north of Okeechobee Road, the southbound off-ramp diverts from the mainline and curves to the right. The ramp continues over Okeechobee Road before curving further to the west. The ramp then curves west to east, crossing at a bridge over the Turnpike mainline, before curving to the north to tie into S Kings Highway, approximately 350 feet south of the existing ramp toll gantry. East of Rock Road, Okeechobee Road will be widened from the existing two-lane typical section to a three-lane typical section with three lanes in each direction and seven-foot buffered bicycle lanes. West of Rock Road, the south side of Okeechobee Road will be widened from the existing two-lane roadway to a three-lane roadway with a seven-foot buffered bicycle lane.

4.5.9.2 Alternative 4

The existing northbound off-ramp and on-ramp will not be modified with the proposed interchange alternative. The northbound approach leg of the S Kings Highway and Okeechobee Road intersection will be widened to accommodate three dedicated right-turn lanes, two through lanes, and a dedicated left-turn lane. Approximately 2,600 feet north of Okeechobee Road, the southbound off-ramp diverts from the Turnpike and curves to the right. The ramp continues south until it intersects Okeechobee Road at a proposed signalized intersection, approximately 75 feet west of Gordy Road. The southbound on-ramp begins at the same proposed signalized intersection. The ramp curves north to south, travelling over Okeechobee Road before tying into the Turnpike approximately 1,750 feet south of Okeechobee Road. East of Rock Road, Okeechobee Road will be widened from the existing two-lane typical section to a three-lane typical section with three lanes in each direction and seven-foot buffered bicycle lanes. West of Rock Road, the south side of Okeechobee Road will be widened from the existing two-lane roadway to a three-lane roadway with a seven-foot buffered bicycle lane.



Figure 4-11: Okeechobee Road (SR 70) Lane Configuration – Alternative 1

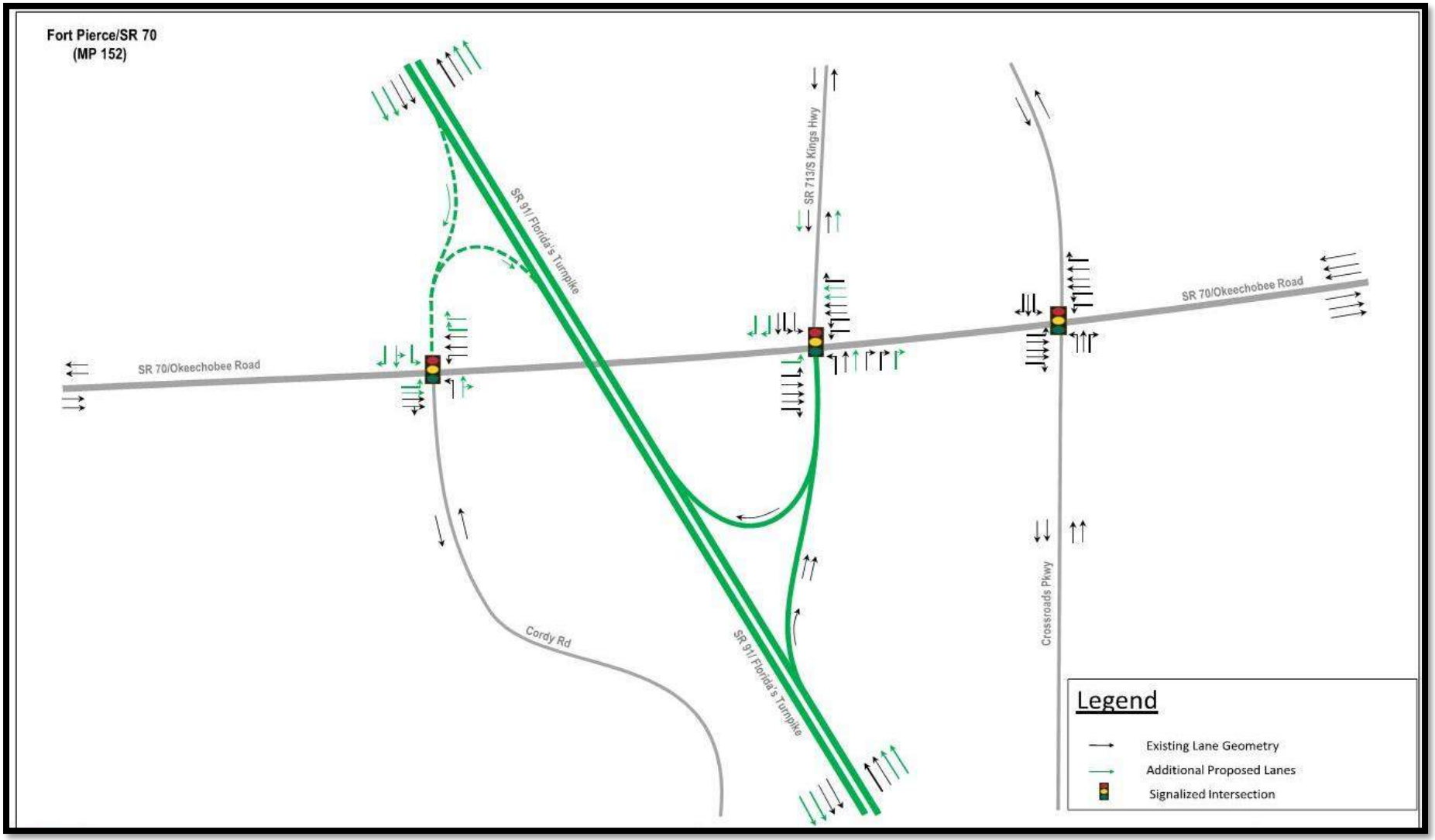


Figure 4-12: Okeechobee Road (SR 70) Lane Configuration – Alternative 4

4.6 Comparative Alternatives Evaluation

Alternative interchange configurations were analyzed based on specific criteria. There were 16 design parameters within three categories evaluated for each alternative. The categories included: engineering; environmental and community; and cost considerations. The design parameters included: traffic operations, local road impacts, overall interchange performances, floodplain and wetland impacts, potential residential and business relocations, right-of-way and Florida Gas Transmission impacts, right-of-way and construction costs, and benefit/cost (B/C) ratio. Each design parameter was weighted and assigned a score between one and 10, with one being the worst score and 10 being the best score. The scores were combined to reflect a total score, and a ranking of 1 or 2 was assigned based on the total score. A ranking of one (1) reflected the preferred alternative. The results of this analysis for each interchange location are provided below.

While additional environmental criteria were reviewed as part of this analysis, these criteria did not pose a fatal flaw potential and were assumed to be consistent across all alternatives. As a result, they were not included in the below matrices.

4.6.1 Interchange Alternatives

4.6.1.1 SW Martin Highway (SR 714)

		SW MARTIN HIGHWAY (SR 714) INTERCHANGE (MP 135)			
CATEGORY	**DESIGN PARAMETERS**	**ALT. 7B**		**ALT. 7S**	
CRITERIA / ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Direct access provided to SW Martin Hwy as currently exists		Interchange access split into two major points (SB-off and NB-on at SW Martin Hwy, and NB-off and SB-on from SW High Meadow Ave.)	
	1 to 10 (Wt.= 5)	**9.00**	90.0	**7.00**	70.0
	Traffic Operations Issues (Year 2045)	- Provides adequate capacity for expected traffic - SW High Meadow Ave Intersection will require upgrade (by others)		- Provides adequate capacity for expected traffic	
	1 to 10 (Wt.= 8)	**7.50**	75.0	**8.00**	80.0
	Driver Expectancy / Weaving Issues / Ramp Backups	Weaving has been minimized		Access to/from the interchange has been split into two major points; some movements may become circuitous	
	1 to 10 (Wt.= 4)	**9.00**	90.0	**7.00**	70.0
	MOT and Constructability Complexities	One major bridge crossing over the Turnpike mainline and FGT		Two major bridge crossings over the Turnpike mainline and FGT. Additional construction on a large section of High Meadow Ave.	
	1 to 10 (Wt.= 4)	**8.00**	80.0	**4.00**	40.0
	Utilities Impacts/Magnitude	- OE distribution S. side of SR 714 impacted - Communication tower site possibly impacted - Possibly misses OE Transmission pole at NB ramp, but then pole is in FTE ROW - UAO facilities along SW Martin Downs Blvd and SW Martin Hwy impacted, likely significant impacts		- OE distribution S. side of SR 714 impacted - Communication tower site possibly impacted - Likely OE Transmission pole at SB ramp impacted - UAO facilities along SW Martin Downs Blvd and SW Martin Hwy impacted, likely significant impacts	
	1 to 10 (Wt.= 5)	**7.00**	70.0	**5.00**	50.0
	Local Road Impacts or Traffic Patterns	Local road impacts are minimized		Traffic diversion and major addition/widening to SW High Meadow Ave will be required	
	1 to 10 (Wt.= 4)	**8.00**	80.0	**6.00**	60.0
	Overall Interchange Performance in relation to adjacent intersections & interchanges	Major access point at SW Martin Hwy / SW Martin Downs Blvd Intersection is adequate for expected traffic. Improvements to the SW High Meadow Ave Intersection are required (by others)		The two major access points for the interchange will operate at acceptable LOS. Split of traffic may help congestion, but some circuitous maneuvers may be required	
	1 to 10 (Wt.= 5)	**7.50**	75.0	**7.50**	75.0
ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	Approx. 41.3 acres within the "AE" designated floodplains		Approx. 41.3 acres within the "AE" designated floodplains	
	1 to 10 (Wt.= 6)	**3.00**	30.0	**3.00**	30.0
	Wetland Impacts (ac)	Approx. 18.8 acres of impacts to wetlands and man-made surface waters 0.1 acre of wetland scrub 10.7 acres of man-made channels/ditches 8.0 acres of man-made ponds		Approx. 21.0 acres of impacts to wetlands and man-made surface waters 0.2 acre of hydric pine 0.6 acre of wetland scrub 12.2 acres of man-made channels/ditches 8.0 acres of man-made ponds	
	1 to 10 (Wt.= 6)	**6.00**	60.0	**5.50**	55.0
	Number of Potential Residential & Business Relocations	+/- 2 (Business)		+/- 2 (Business)	
	1 to 10 (Wt.= 5)	**8.00**	80.0	**8.00**	80.0
	Number of Potential Contamination Sites	(1) Adjacent Como Oil Co. of FL/Martin County Petroleum (plume within ROW) (2) Adjacent Palm City Lube/Highway Enterprise Inc. (two documented petroleum discharges; SRCO 2012; operational gas station) (3) Adjacent Mobil gas station (documented petroleum discharge; SRCO 2012; operational gas station) (4) Adjacent 7-Eleven gas station (documented petroleum discharge; SRCO 2010; operational gas station)		(1) Adjacent Como Oil Co. of FL/Martin County Petroleum (plume within ROW) (2) Adjacent Palm City Lube/Highway Enterprise Inc. (two documented petroleum discharges; SRCO 2012; operational gas station) (3) Adjacent Mobil gas station (documented petroleum discharge; SRCO 2012; operational gas station) (4) Adjacent 7-Eleven gas station (documented petroleum discharge; SRCO 2010; operational gas station) (5) On-site former agricultural (row crops/groves)	
	1 to 10 (Wt.= 6)	**2.00**	20.0	**2.00**	20.0
	Impacts to Parks & Conservation Areas (ac)	No impacts identified		No impacts identified	
	1 to 10 (Wt.= 7)	**10.00**	100.0	**10.00**	100.0
COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$61,850,361		$70,446,467	
	1 to 10 (Wt.= 15)	**7.00**	70.0	**8.30**	83.0
	Right-of-way Impacts (ac) / Number of Parcels Impacted	17.266 ac. / 27 Parcels At cost = $12,650,329		22.267 ac. / 44 Parcels At cost = $18,179,196	
	1 to 10 (Wt.= 10)	**6.00**	60.0	**3.00**	30.0
	Severity and Magnitude of Impacts to FGT	Two at-grade ramps and one overpass crossing, similar to existing with some relocation at overpass		Increased FGT involvement/crossing (a second overpass bridge crossing is added)	
	1 to 10 (Wt.= 10)	**7.00**	70.0	**4.00**	40.0
SCORE		**68.85**		**59.70**	
RANK		**1**		**2**	

4.6.1.2 SE Becker Road

		SE BECKER ROAD (MP 138)			
CRITERIA	CATEGORY	DESIGN PARAMETERS	ALT. 1		ALT. 3	
	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	No impacts are anticipated to the access		The distance between the new ramp terminal on the west side to the next intersection (SW Bradshaw Cir) is reduced by 550 ft.	
		1 to 10 (Wt.= 5)	**7.50**	75.0	**6.00**	60.0
		Traffic Operations Issues (Year 2045)	Traffic operations are acceptable. Slight improvements in the SE Becker Rd/SB Ramp terminal operation		Traffic operations are acceptable	
		1 to 10 (Wt.= 8)	**7.50**	75.0	**7.00**	70.0
		Driver Expectancy / Weaving Issues / Ramp Backups	No issues are anticipated		No issues are anticipated	
		1 to 10 (Wt.= 4)	**7.50**	75.0	**7.50**	75.0
		MOT and Constructability Complexities	Similar typical MOT or constructability issues are anticipated		Similar typical MOT or constructability issues are anticipated	
		1 to 10 (Wt.= 4)	**7.50**	75.0	**7.50**	75.0
		Utilities Impacts/Magnitude	- FGT impacts are similar - OE distribution N. side of SE Becker Rd impacted - UAO facilities along SE Becker Rd will likely be impacted		- FGT impacts are similar - OE distribution N. side of SE Becker Rd impacted - UAO facilities along SE Becker Rd will likely be impacted	
		1 to 10 (Wt.= 5)	**7.50**	75.0	**7.50**	75.0
		Local Road Impacts or Traffic Patterns	No local road or traffic pattern impacts are anticipated		The SE Becker Rd / SW Bradshaw Cir. intersection may experience some impacts due to the close proximity of the new SE Becker Rd / SB off-ramp terminal	
		1 to 10 (Wt.= 4)	**7.00**	70.0	**6.00**	60.0
		Overall Interchange Performance in relation to adjacent intersections & interchanges	Acceptable traffic operation with no anticipated impacts on adjacent intersections or interchanges		Acceptable traffic operation with some potential impacts to the SE Becker Rd / SW Bradshaw Cir. intersection	
		1 to 10 (Wt.= 5)	**7.00**	70.0	**6.00**	60.0
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	Approx. 1.0 acre within the "AH" flood zone		Approx. 0.7 acre within the "AH" flood zone	
		1 to 10 (Wt.= 6)	**7.00**	70.0	**7.00**	70.0
		Wetland Impacts (ac)	Approx. 1.1 acres of impacts to man-made drainage channels		Approx. 1.2 acres of impacts to man-made drainage channels	
		1 to 10 (Wt.= 6)	**8.00**	80.0	**8.00**	80.0
		Number of Potential Residential & Business Relocations	None is anticipated		None is anticipated	
		1 to 10 (Wt.= 5)	**10.00**	100.0	**10.00**	100.0
		Number of Potential Contamination Sites	None is anticipated		None is anticipated	
		1 to 10 (Wt.= 6)	**10.00**	100.0	**10.00**	100.0
		Impacts to Parks & Conservation Areas (ac)	No impacts identified		No impacts identified	
		1 to 10 (Wt.= 7)	**10.00**	100.0	**10.00**	100.0
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$31,710,000		$39,620,000	
		1 to 10 (Wt.= 15)	**9.00**	90.0	**7.00**	70.0
		Right-of-way Impacts (ac) / Number of Parcels Impacted	1.25 (ac) / 11 Parcels At cost = $1,220,841		11.08 (ac) / 14 Parcels At cost = $5,243,321	
		1 to 10 (Wt.= 10)	**6.00**	60.0	**3.00**	30.0
		Severity and Magnitude of Impacts to FGT	New overpass crossing to replace existing bridge; minor FGT relocation (similar impacts in both options)		New overpass crossing to replace existing bridge; minor FGT relocation (similar impacts in both options)	
		1 to 10 (Wt.= 10)	**7.50**	75.0	**7.50**	75.0
SCORE			**79.80**		**71.75**	
RANK			**1**		**2**	

4.6.1.3 SW Port St. Lucie Boulevard

			SW PORT ST. LUCIE BLVD. (MP 142)			
	CATEGORY	DESIGN PARAMETERS	ALT. 1		ALT. 2	
CRITERIA	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Turnpike NB off traffic wishing to access SW Bayshore Blvd must make a right-turn and an immediate left-turn		Turnpike NB off traffic wishing to access SW Bayshore Blvd can proceed direct at the SW Port St. Lucie Blvd / SW Bayshore Blvd intersection	
		1 to 10 (Wt.= 5)	**7.00**	70.0	**8.00**	80.0
		Traffic Operations Issues (Year 2045)	One new signalized intersection (for NB off Ramp) is added in close proximity to an existing signalized intersection (SW Port St. Lucie Blvd / SW Bayshore Blvd)		No added intersections	
		1 to 10 (Wt.= 8)	**6.50**	65.0	**8.50**	85.0
		Driver Expectancy / Weaving Issues / Ramp Backups	The NB off ramp has more potentials to back up onto the mainline due to its length being substantially less than the ramp length in Alt. 2		The NB off ramp in this alternative is substantially longer than same ramp in Alt. 1; thus, it has less potentials of backing up onto the mainline	
		1 to 10 (Wt.= 4)	**7.00**	70.0	**8.50**	85.0
		MOT and Constructability Complexities	The NB off ramp terminal will be connected to the mainline bridge and will have the typical complications associated with a 90-degree road to a bridge connection		Typical MOT and construction	
		1 to 10 (Wt.= 4)	**6.00**	60.0	**8.50**	85.0
		Utilities Impacts/Magnitude	Potential utility impacts anticipated at: - OE Transmission W side of SW Bayshore Blvd - UAO facilities along SW PSL Blvd and SW Bayshore Blvd - FPL substation is in the in-field, requires extra consideration		Potential utility impacts anticipated at: - OE Transmission W side of SW Bayshore Blvd - UAO facilities along SW PSL Blvd and SW Bayshore Blvd - FPL substation is in the in-field, requires extra consideration	
		1 to 10 (Wt.= 5)	**8.00**	80.0	**8.00**	80.0
		Local Road Impacts or Traffic Patterns	Will separate the NB off-ramp traffic from the local traffic on SW Bayshore Blvd		Will not separate the NB off-ramp traffic from the local traffic on SW Bayshore Blvd	
		1 to 10 (Wt.= 4)	**8.00**	80.0	**6.50**	65.0
		Overall Interchange Performance in relation to adjacent intersections & interchanges (Low, Medium or High)	This alternative will add a new signalized intersection which will have operational impacts on the adjacent intersection at SW Port St. Lucie Blvd / SW Bayshore Blvd.		No impacts are anticipated	
		1 to 10 (Wt.= 5)	**7.00**	70.0	**8.50**	85.0
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	No impacts anticipated		No impacts anticipated	
		1 to 10 (Wt.= 6)	**10.00**	100.0	**10.00**	100.0
		Wetland Impacts (ac)	Total wetland impacts 4.16 acres - man-made channels (3.84 acres) and man-made ponds (0.32 acre)		Total wetland impacts 4.20 acres - man-made channels (3.88 acres) and man-made ponds (0.32 acre)	
		1 to 10 (Wt.= 6)	**4.00**	40.0	**4.00**	40.0
		Number of Potential Residential & Business Relocations	+/-2 (Residential)		+/-2 (Residential)	
		1 to 10 (Wt.= 5)	**7.00**	70.0	**7.00**	70.0
		Number of Potential Contamination Sites	(1) Adjacent Electrical Substation (history of discharges) (2) Adjacent Suddath Relocation Services (un-remediated spill under roadway) (3) Adjacent Palm City Mobil (active fuel station with ongoing remediation) (4) Adjacent Chevron Station (active fuel station) (5) Adjacent Port St. Lucie Shell Station (active fuel station)		(1) Adjacent Electrical Substation (history of discharges) (2) Adjacent Suddath Relocation Services (un-remediated spill under roadway) (3) Adjacent Palm City Mobil (active fuel station with ongoing remediation) (4) Adjacent Chevron Station (active fuel station) (5) Adjacent Port St. Lucie Shell Station (active fuel station)	
		1 to 10 (Wt.= 6)	**4.00**	40.0	**4.00**	40.0
		Impacts to Parks & Conservation Areas (ac)	No impacts identified		No impacts identified	
		1 to 10 (Wt.= 7)	**10.00**	100.0	**10.00**	100.0
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$45,930,000		$45,970,000	
		1 to 10 (Wt.= 15)	**7.00**	70.0	**7.00**	70.0
		Right-of-way Impacts (ac) / Number of Parcels Impacted	12.8 ac. / 6 Parcels At cost = $16,522,974		12.9 ac. / 8 Parcels At cost = $16,746,170	
		1 to 10 (Wt.= 10)	**8.00**	80.0	**7.00**	70.0
		Severity and Magnitude of Impacts to FGT	Severe impacts on FGT facilities and will require relocation of 3 lines for +/-1/2 mile with no ROW availability inside FTE ROW		Impacts are minimized to an at-grade ramp crossing and minor relocation at overpass	
		1 to 10 (Wt.= 10)	**3.50**	35.0	**7.00**	70.0
SCORE			**67.90**		**74.25**	
RANK			**2**		**1**	

4.6.1.4 Crosstown Parkway

		CROSSTOWN PARKWAY (MP 145)			
	CATEGORY	DESIGN PARAMETERS	ALT. 3		ALT. 4	
CRITERIA	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Access to Crosstown Pkwy is provided through SW Cameo Blvd, which may not be a direct access, but no signal addition on Crosstown Pkwy		Access is direct to Crosstown Pkwy; however, a new signal is added on a bridge and in between two closely spaced signals which will have impacts on the Crosstown Pkwy traffic	
		1 to 10 (Wt.= 5)	**7.00**	70.0	**6.00**	60.0
		Traffic Operations Issues (Year 2045)	Ramp traffic has very long ramps that may be used as storage under extreme traffic conditions, and will minimize any impacts to the mainline		Potentials for ramp traffic to queue back to the mainline (shorter ramp lengths) and one new signal on cross road	
		1 to 10 (Wt.= 8)	**7.50**	75.0	**4.50**	45.0
		Driver Expectancy / Weaving Issues / Ramp Backups	Longer ramps are provided to avoid ramp backups on mainline		Ramp lengths are shorter and backup issues may be expected on mainline	
		1 to 10 (Wt.= 4)	**7.00**	70.0	**4.00**	40.0
		MOT and Constructability Complexities	A new structure spanning over the SB mainline is added and will have its MOT implications		Constructability issues expected when tying the new ramp to the existing bridge with a 90-degree connection, and a new signal on exist. Bridge	
		1 to 10 (Wt.= 4)	**7.00**	70.0	**5.00**	50.0
		Utilities Impacts/Magnitude	No major impacts are anticipated		No major impacts are anticipated	
		1 to 10 (Wt.= 5)	**9.00**	90.0	**9.00**	90.0
		Local Road Impacts or Traffic Patterns	New ramps will access Crosstown Pkwy via a side road (SW Cameo Blvd)		Will access Crosstown Pkwy directly with a new signal which will have direct traffic implications on the Crosstown Pkwy operation	
		1 to 10 (Wt.= 4)	**6.50**	65.0	**4.50**	45.0
		Overall Interchange Performance in relation to adjacent intersections & interchanges	Will maintain existing signals and traffic operation on Crosstown Parkway; no further impacts to the adjacent interchanges are expected		Will impact traffic operation on Crosstown Pkwy and degrade the LOS of the SW Bayshore Blvd/Crosstown Pkwy intersection to an LOS of "F". However, no further impacts to the adjacent interchanges are expected	
		1 to 10 (Wt.= 5)	**7.00**	70.0	**3.50**	35.0
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	No areas within the "A" designated flood zone		No areas within the "A" designated flood zone	
		1 to 10 (Wt.= 6)	**10.00**	100.0	**10.00**	100.0
		Wetland Impacts (ac)	Approx. 0.1 acre of impacts to man-made drainage channels		Approx. 0.1 acre of impacts to man-made drainage channels	
		1 to 10 (Wt.= 6)	**9.00**	90.0	**9.00**	90.0
		Number of Potential Residential & Business Relocations	None is anticipated		+/- 5 (Residential) +/- 1 (Business)	
		1 to 10 (Wt.= 5)	**10.00**	100.0	**4.00**	40.0
		Number of Potential Contamination Sites	(1) Adjacent Port St. Lucie / Fort Pierce Service Plaza (nearby groundwater plume-active remediation)		(1) Adjacent Port St. Lucie Service / Fort Pierce Plaza (nearby groundwater plume)	
		1 to 10 (Wt.= 6)	**5.00**	50.0	**6.00**	60.0
		Impacts to Parks & Conservation Areas (ac)	Ramp in NW quadrant impacts an area identified for future recreational facilities/skate park, but access to future park will be provided		Proposed LA ROW in NW quadrant requires land acquisition alongside of parcels identified as future recreational facilities/skate park	
		1 to 10 (Wt.= 7)	**6.00**	60.0	**6.00**	60.0
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$21,360,000		$19,920,000	
		1 to 10 (Wt.= 15)	**7.00**	70.0	**8.00**	80.0
		Right-of-way Impacts (ac) / Number of Parcels Impacted	2.40 (ac) / 1 Parcel At cost = $1,222,789		7.23 (ac) / 30 Parcels At cost = $7,051,741	
		1 to 10 (Wt.= 10)	**6.00**	60.0	**2.50**	25.0
		Severity and Magnitude of Impacts to FGT	Impacts are minimized; no bridge or wall work on FGT side		Impacts are minimized; no bridge or wall work on FGT side	
		1 to 10 (Wt.= 10)	**8.00**	80.0	**8.00**	80.0
SCORE			**73.80**		**61.95**	
RANK			**1**		**2**	

4.6.1.5 W Midway Road

			W MIDWAY ROAD (MP 150)			
	CATEGORY	DESIGN PARAMETERS	ALT. 1		ALT. 4	
CRITERIA	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Generally, no access implications, except for the relatively short distance between the two ramp intersections which could impact timely access		Generally, no access implications	
		1 to 10 (Wt.= 5)	4.00	40.0	6.00	60.0
		Traffic Operations Issues (Year 2045)	The short distance between the two ramp intersections has a potential for operational issues		A longer distance is provided between signals	
		1 to 10 (Wt.= 8)	6.00	60.0	7.50	75.0
		Driver Expectancy / Weaving Issues / Ramp Backups	Ramp back-ups may result in peak hours due to the close proximity of the two ramp terminal intersections		No traffic issues are anticipated	
		1 to 10 (Wt.= 4)	6.00	60.0	7.50	75.0
		MOT and Constructability Complexities	No MOT or constructability issues are anticipated, however, construction of NB on-ramp will eliminate existing wet ponds		No MOT or constructability issues are anticipated	
		1 to 10 (Wt.= 4)	7.00	70.0	7.50	75.0
		Utilities Impacts/Magnitude	Some, but not major impacts, are anticipated		Some, but not major impacts, are anticipated	
		1 to 10 (Wt.= 5)	8.50	85.0	8.50	85.0
		Local Road Impacts or Traffic Patterns	Potential traffic impacts to W Midway Rd may result from the close proximity of the two ramp terminal junctions		No local road or traffic pattern impacts are anticipated	
		1 to 10 (Wt.= 4)	7.00	70.0	8.00	80.0
		Overall Interchange Performance in relation to adjacent intersections & interchanges	Effects on the adjacent intersections and interchanges are expected to be similar		Effects on the adjacent intersections and interchanges are expected to be similar	
		1 to 10 (Wt.= 5)	7.50	75.0	7.50	75.0
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	No areas within the "A" designated flood zone		No areas within the "A" designated flood zone	
		1 to 10 (Wt.= 6)	10.00	100.0	10.00	100.0
		Wetland Impacts (ac)	Approx. 6.9 acres of impacts to man-made drainage channels (6.5 acres) and man-made ponds (0.4 acre)		Approx. 1.7 acres of impacts to man-made drainage channels	
		1 to 10 (Wt.= 6)	5.00	50.0	7.00	70.0
		Number of Potential Residential & Business Relocations	None is anticipated		None is anticipated	
		1 to 10 (Wt.= 5)	10.00	100.0	10.00	100.0
		Number of Potential Contamination Sites	(1) Adjacent CEMEX W. Ft. Pierce Ready-Mix & Block (2) Onsite Railroad Crossing (3) Adjacent St. Lucie County Glades Road Landfill/St. Lucie Co Bailing and Recycling Facility		(1) Adjacent CEMEX W. Ft. Pierce Ready-Mix & Block (2) Onsite Railroad Crossing (3) Adjacent St. Lucie County Glades Road Landfill/St. Lucie Co Bailing and Recycling Facility	
		1 to 10 (Wt.= 6)	6.00	60.0	6.00	60.0
		Impacts to Parks & Conservation Areas (ac)	Ramp in SW quadrant requires small amount of ROW from parcels identified as future park.		Ramp in SW quadrant requires small amount of ROW from parcels identified as future park.	
		1 to 10 (Wt.= 7)	7.00	70.0	7.00	70.0
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$25,890,000		$28,070,000	
		1 to 10 (Wt.= 15)	7.50	75.0	6.00	60.0
		Right-of-way Impacts (ac) / Number of Parcels Impacted	11.6 ac. / 16 Parcels At cost = $5,147,557		15.1 ac. / 18 Parcels At cost = $6,517,211	
		1 to 10 (Wt.= 10)	7.00	70.0	6.50	65.0
		Severity and Magnitude of Impacts to FGT	Two new at-grade crossings for the ramps (over FGT) and one new overpass to replace existing bridge; minor impacts but similar in both options		Two new at-grade crossings for the ramps (over FGT) and one new overpass to replace existing bridge; minor impacts but similar in both options	
		1 to 10 (Wt.= 10)	7.50	75.0	7.50	75.0
SCORE			71.05		72.90	
RANK			1		2	

4.6.1.6 Okeechobee Road (SR 70)

			OKEECHOBEE ROAD (SR 70) (MP 152)			
	CATEGORY	DESIGN PARAMETERS	ALT. 1		ALT. 4	
CRITERIA	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Access is concentrated at one junction placing it under extreme congestions, and degrading the ease of access ability		Access is separated into two junctions to ease congestions and enhance access abilities	
		1 to 10 (Wt.= 5)	**4.00**	40.0	**7.50**	75.0
		Traffic Operations Issues (Year 2045)	Severe weaving between SB off and NB off Ramps once joined; Traffic operation at S Kings Hwy is failing		The S Kings Hwy junction is at LOS E. All other junctions are operating at D or better	
		1 to 10 (Wt.= 8)	**2.00**	20.0	**7.00**	70.0
		Driver Expectancy / Weaving Issues / Ramp Backups	Ramp back-ups are expected at the south side of SR 70		Back-ups are minimized, as they have been separated into two junctions	
		1 to 10 (Wt.= 4)	**3.00**	30.0	**7.50**	75.0
		MOT and Constructability Complexities	There is a large structure spanning over the Turnpike, which will have MOT and constructability implications		Typical construction with no large structures spanning over the Turnpike	
		1 to 10 (Wt.= 4)	**4.00**	40.0	**8.00**	80.0
		Utilities Impacts/Magnitude	Less impacts along SR 70. Impacts the FGT lines under the new structure and will require FGT relocation		Longer distance impacted along SR 70. FGT impacts are minimized;	
		1 to 10 (Wt.= 5)	**6.00**	60.0	**7.50**	75.0
		Local Road Impacts or Traffic Patterns	The major congestion at the SR 70 / S Kings Hwy will impact the operation of SR 70		Impacts to SR 70 or traffic patterns are minimized	
		1 to 10 (Wt.= 4)	**4.00**	40.0	**7.50**	75.0
		Overall Interchange Performance in relation to adjacent intersections & interchanges	Effects on adjacent interchanges are similar; however, large impacts to the S Kings Hwy intersection		Effects on adjacent interchanges are similar. Impacts to the S Kings Hwy intersection are minimized	
		1 to 10 (Wt.= 5)	**6.00**	60.0	**7.50**	75.0
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	Approx. 0.1 acre within the "AE" designated flood zone		Less than 0.1 acre within the "AE" designated flood zone	
		1 to 10 (Wt.= 6)	**7.00**	70.0	**8.00**	80.0
		Wetland Impacts (ac)	Approx. 1.0 acre of impacts to man-made drainage channels (0.6 acre) and man-made ponds (0.4 acre)		Approx. 1.2 acres of impacts to man-made drainage channels (1.2 acres)	
		1 to 10 (Wt.= 6)	**7.00**	70.0	**7.00**	70.0
		Number of Potential Residential & Business Relocations	None is anticipated		+/- 1 (Residential)	
		1 to 10 (Wt.= 5)	**10.00**	100.0	**7.00**	70.0
		Number of Potential Contamination Sites	(1) Adjacent Agricultural Row Crops (2) Adjacent Pilot Travel Center (active remediation)		(1) Adjacent Agricultural Row Crops (2) Adjacent Pilot Travel Center (active remediation)	
		1 to 10 (Wt.= 6)	**3.00**	30.0	**3.00**	30.0
		Impacts to Parks & Conservation Areas (ac)	No impacts identified		No impacts identified	
		1 to 10 (Wt.= 7)	**10.00**	100.0	**10.00**	100.0
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$28,250,000		$28,240,000	
		1 to 10 (Wt.= 15)	**7.00**	70.0	**7.00**	70.0
		Right-of-way Impacts (ac) / Number of Parcels Impacted	0.36 (ac) / 2 Parcels At cost = $277,698		15.11 (ac) / 8 Parcels At cost = $6,658,207	
		1 to 10 (Wt.= 10)	**7.50**	75.0	**3.50**	35.0
		Severity and Magnitude of Impacts to FGT	Two existing at-grade ramps will remain over FGT; one new overpass (to replace existing bridge) will cause minor FGT relocation		FGT Conflicts minimized; two existing at-grade ramps will remain over FGT but no new overpass structure	
		1 to 10 (Wt.= 10)	**5.00**	50.0	**8.00**	80.0
SCORE			**59.20**		**69.35**	
RANK			**2**		**1**	

4.7 Selection of the Preferred Alternative

Below is a brief summary of the results of the comparative alternatives evaluation, for each of the proposed interchange alternatives. For a full detailed analysis and evaluation, refer to the *Recommendation of Preferred Alternative Memorandum,* February 2021 in **Appendix E** prepared under separate cover.

4.7.1 SW Martin Highway

Alternative 7B has scores equal to or greater than Alternative 7S in almost every category. Alternative 7B provides direct access to the SW Martin Highway, while Alternative 7S splits interchange access between SW Martin Highway (SR 714) and SW High Meadow Avenue. Alternative 7B also minimizes weaving, minimizes local road impacts, and reduces potential impacts to FGT. Construction costs and right-of-way costs and impacts for Alternative 7B are markedly less expensive than for Alternative 7S. **Hence, Alternative 7B is recommended as the preferred interchange alternative for SW Martin Highway (SR 714).**

4.7.2 SE Becker Road

Scores and impacts for Alternative 1 and Alternative 3 are similar in most categories. For Alternative 3, the distance between the new southbound off-ramp terminal on the west side of SW Bradshaw Circle intersection is reduced by 550 feet, which may cause some impacts to the SW Bradshaw Circle intersection. While both alternatives provide acceptable operating conditions, construction and right-of-way costs and impacts are markedly less expensive for Alternative 1. Alternative 1 also provides better operating conditions at the intersection of SE Becker Road and SW Bradshaw Circle. **Hence, Alternative 1 is recommended as the preferred interchange alternative for SE Becker Road.**

4.7.3 SW Port St. Lucie Boulevard

Both Alternatives 1 and 2 accommodate future growth and alleviate the existing operational failure at the existing interchange where traffic congestion has been observed on the westbound left-turn lanes during the AM peak period and on the northbound approach during the PM peak period. Both alternatives offer similar operating conditions. Scores and impacts for Alternative 1 and Alternative 2 are similar for all environmental and community considerations. Alternative 1 adds one new signalized intersection for the northbound on-ramp which is close proximity to the existing signalized intersection at SW Port St. Lucie Boulevard and SW Bayshore Boulevard. The northbound off-ramp has greater potential to back up onto the mainline due to its shorter length compared to Alternative 2. Alternative 1 has a more complicated road to bridge connection where the northbound off-ramp connects to the SW Port St. Lucie Boulevard bridge. Alternative 1 also has more severe impacts to FGT, which translates into higher gas main relocation costs. **Hence, Alternative 2 is recommended as the preferred interchange alternative for SW Port St. Lucie Boulevard.**

4.7.4 Crosstown Parkway

Alternative 4 provides direct access to the Crosstown Parkway while Alternative 3 has a more circuitous access via SW Cameo Boulevard, an arterial roadway located to the west of the Turnpike. However, Alternative 4 contains significant differences on engineering and operation parameters including: traffic operations, potential relocations, local road, park, and right-of-way impacts. The introduction of a new

signal on the existing bridge between two existing and closely spaced signals has direct impacts on the Crosstown Parkway traffic, a major local arterial. Also, due to the shorter ramp lengths being proposed, there is the potential that traffic may queue back, creating issues for the mainline traffic. In addition, right-of-way impacts affect a high number of parcels, including parcels identified for a future skate park and six potential relocations. **Hence, Alternative 3 is recommended as the preferred interchange alternative for Crosstown Parkway.**

4.7.5 W Midway Road

Alternatives 1 and 4 are similar in engineering and impact parameters, including the minor impacts to Florida Gas Transmission (FGT), three potential contamination sites, and that the proposed on-ramp in the southwest quadrant will require the taking of land identified as a future park. However, Alternative 1 key differences are the traffic operations at the interchange junction, and local road and wetland impacts. Potential traffic operational issues and impacts to W Midway Road may result from the proximity of the two signals at the ramp terminal intersections, including a timely access and potential ramp back-ups during peak hours. In addition, the proposed northbound on-ramp will impact the existing wet ponds in the northeast quadrant requiring their relocation. Alternative 4 has higher construction costs and right-of-way impacts. However, the St. Lucie Transportation Planning Organization (TPO) believes that Alternative 1 will have less of a negative impact on the local roadway network, especially on the planned intersection at W Midway Road and the future Jenkins Road extension. The St. Lucie County Board of County Commissioners passed Resolution 20-267 on December 1, 2020 that requests that the preferred alternative for the W Midway Road interchange be Alternative 1. In a letter dated December 17, 2020, the St. Lucie Transportation Planning Organization expressed their strong support for the County's Resolution 20-267 and the recommendation of Alternative 1 as the preferred alternative for W Midway Road. **Hence, Alternative 1 is recommended as the preferred interchange alternative for W Midway Road.**

4.7.6 Okeechobee Road (SR 70)

Alternative 4 is superior to Alternative 1 in terms of engineering considerations. Alternative 4 separates access into two junctions to ease congestion and enhance access, while Alternative 1 concentrates access into one junction, exacerbating congestion. This congestion will impact the operation of Okeechobee Road (SR 70). Alternative 1 requires one large structure spanning over the Turnpike, while Alternative 4 has no large structures spanning over the Turnpike. Alternative 4 does require one residential relocation, while Alternative 1 does not require any relocations. While both alternatives are similar in construction costs, Alternative 4 is substantially higher in right-of-way cost and parcel impacts. However, Alternative 4 avoids the construction of a new large structure spanning over the Turnpike. **Hence, Alternative 4 is recommended as the preferred interchange alternative for Okeechobee Road (SR 70).**

5.0 PROJECT COORDINATION & PUBLIC INVOLVEMENT

5.1 Agency Coordination

5.1.1 Efficient Transportation Decision Making

The Florida Department of Transportation (FDOT), Florida's Turnpike Enterprise (FTE) conducted an early environmental screening of the proposed Turnpike Mainline Widening from Jupiter to Fort Pierce and Interchange improvements through the Efficient Transportation Decision Making (ETDM) process. This screening resulted in feedback from several environmental agencies regarding the degree of effect that the project could have on specific resources.

The project's ETDM Programming Screen Summary Report was published on May 19, 2017 and identified potential project related impacts to multiple social, cultural, and natural and physical environmental resources. As a result of the comments received as part of this report, potential impacts identified were assessed, and where appropriate, mitigation actions identified. The results of these assessments were published in project support documents, including:

- Sociocultural Effects Evaluation (SCE): right-of-way acquisition and potential relocations
- Cultural Resource Assessment Survey (CRAS): potential impacts to historic and archeological resources,
- Natural Resources Evaluation (NRE): potential impacts to wetlands, wildlife, and habitat,
- Pond Siting Report (PSR): potential impacts to water quality and quantity,
- Location Hydraulics Report (LHR): potential impacts to floodplains, and
- Contamination Screening Evaluation Report (CSER): potential impacts to contaminated sites.

This information was used in the selection of alternative project alignments that avoided and minimized potential impacts to the greatest extent possible.

5.1.2 Advance Notification Package

There are many local, regional, state, and federal agencies, as well as private stakeholders, which have an interest in this project due to jurisdictional review or expressed interest. Interested agencies have been identified and were contacted directly by Florida's Turnpike Enterprise (FTE) through the Advanced Notification (AN) process at the outset of the project in accordance with the PD&E Manual, Part 1, Chapter 3, Preliminary Environmental Discussion (PED) and Advance Notification and Executive Order 95-359. As other concerned public agencies and stakeholders were identified, they too were notified directly by FTE.

5.1.3 Public Involvement Plan

A comprehensive *Public Involvement Plan (PIP), March 2018*, was developed for this project. This plan is in compliance with the Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Manual, FDOT's Public Involvement Handbook and Section 339.155, Florida Statutes. It is consistent with the Americans with Disabilities Act of 1990, and in compliance with Title VI

and its various related statutes. The plan outlines the public involvement approach and activities required to be undertaken as part of the project, including lists of contact persons (officials, agencies, and media) and the means used to involve them in the process. The collection of public input occurs throughout the entire project duration.

5.1.4 Government Agencies Coordination

Coordination meetings were held with various local and Federal agencies throughout the PD&E Study. The purpose of these meetings was to coordinate the proposed improvements and to address specific concerns. The dates and the purposes of these coordination meetings are summarized in **Table 5-1.**

Table 5-1: Government Agencies Coordination Meetings

Agency	Date	Purpose
St. Lucie County	October 10, 2018	Project Status Update Meeting and Interchange Discussions
	June 22, 2021	Project Update Meeting
City of Port St. Lucie	October 10, 2018	Project Status Update Meeting and Interchange Discussions
	September 16, 2020	Adventure Park Coordination Meeting
	April 22, 2021	Crosstown Parkway Coordination Meeting
	June 22, 2021	Project Update Meeting
FDOT District 4	March 9, 2018	I-95 Multimodal Master Plan Technical Review Committee Meeting #2
Florida Gas Transmission	June 15, 2017	Project Coordination Meeting
	June 30, 2020	Quarterly Coordination Meeting
South Florida Water Management District & Army Corps of Engineers	November 16, 2017	Pre-Application Meeting
Loxahatchee River Management Coordinating Council	September 25, 2017	Project Update Presentation
National Park Service	February 15, 2018	Initial Coordination Meeting
	September 25, 2020	Section 7A Coordination Meeting
US Coast Guard	October 19, 2020	Technical Assistance Meeting
US Fish and Wildlife Service and National Marine Fisheries Service	October 26, 2020	Technical Assistance Meeting
Florida Fish and Wildlife Conservation Commission	October 16, 2020	Technical Assistance Meeting
North St. Lucie River Water Control District	July 2, 2020	Coordination Meeting
Loxahatchee River Environmental Control District	July 2, 2020	Coordination Meeting
Martin County	June 22, 2021	Project Update Meeting

5.1.5 Community Coordination

Two additional meetings were held with the Martin Metropolitan Organization (MPO) Board, on February 3 and 5, 2020, to provide an overview of the project, discuss the interchange concepts, and invite attendees to public information meetings held on February 27, 2020 and March 5, 2020.

5.2 Public Involvement

5.2.1 Newsletter

The first newsletter was published and distributed in July 2017 and provided information regarding the start of the project, including a discussion of the study process and schedule. It also stressed the need for public input and provided on points of contact within the Department regarding citizen comments and concerns. The first newsletter was mailed to property owners/residents located in a larger defined geographic area. Additionally, the first newsletter was mailed/emailed to:

- Federal agencies
- State agencies
- Regional agencies
- Local government staff
- Elected officials
- Native American Tribes
- Public interest organizations
- Other interested individuals

The second newsletter was distributed at the Public Information Meetings that were held on February 27 and March 5, 2020. The newsletter defined the principal goals of the study and outlined how to participate and provide comments on the alternatives presented at the meetings.

5.2.2 Public Information Meeting(s)

The Florida Department of Transportation (FDOT), Florida's Turnpike Enterprise (FTE), held two Public Information Meetings for this PD&E study. The first meeting was held on Thursday, February 27, 2020, at the Indian River State College Wolf Center, 2400 SE Salerno Road, Stuart, Florida, 33497. This meeting had 77 attendees signed in, including multiple residents from the Copperleaf development in Martin County. There were 23 staff representatives present to assist attendees. The second meeting was held on March 5, 2020, at the Port St. Lucie Civic Center, 9221 SE Civic Center Place, Port St. Lucie, Florida 34952. This meeting had 78 attendees signed in, including the elected and appointed representatives from the City of Port St. Lucie and St. Lucie County. There were 28 staff representatives present to assist attendees. Both meetings were held from 5:30 p.m. to 7:30 p.m. The meetings were informal open houses with staff available to discuss the study process and proposed improvements, answer questions and receive comments. The same information was presented at both meetings, there were no formal presentations.

Attendees had an opportunity to view display boards with information about the project. Interactive Smart Boards also were used to allow community members to focus on a specific area of the project, ask questions and provide feedback. Members of the project team, including engineers and experts on traffic and noise,

were available to discuss the project and answer questions. Participants were encouraged to fill out and submit comment forms, watch the informational videos, review the display boards, and discuss their thoughts and concerns regarding the project with project team members. Comment forms could also be completed and mailed to FTE Project Manager Brian Ribaric, P.E., at the address listed on the comment forms. All materials and videos were uploaded onto the study website at www.TreasureCoastTurnpike.com and were available on the meeting dates.

A total of 33 comment forms were received via the comment boxes at the February 27th meeting, and a total of 31 comment forms were received at the March 5th meeting. One additional comment form was received after the meeting. Email comments received as a result of the two Public Information Meetings totaled 34. A petition signed by 90 residents from the Copperleaf community regarding noise and safety concerns was submitted to the project team as well.

5.2.3 Public Hearing

The Florida Department of Transportation (FDOT), Florida's Turnpike Enterprise (FTE), held one virtual hybrid Public Hearing for this PD&E study on July 22, 2021. In-person meeting locations included the Schreiber Conference Center, CORE Communities Auditorium at Indian River State College, 500 NW California Boulevard, Port St. Lucie, FL 34986, and the Clare & Gladys Wolf High-Technology Center, Susan H. Johnson Auditorium at Indian River State College, 2300 SE Salerno Road, Stuart, Fl 34997. These two sites were provided to accommodate stakeholders with limited internet connections and to allow attendees the opportunity to view the project exhibits and virtual meeting in-person. The Public Hearing was also simultaneously presented virtually to online stakeholders that had registered using the project website, www.TreasureCoastTurnpike.com.

The virtual hybrid Public Hearing schedule included a virtual open house and in-person exhibit room from 5:30 to 6:00 pm, a formal presentation from 6:00 to 6:38 pm, and a public comment period and closing statements from 6:38 to 7:37 pm. A total of 98 attendees signed-in for the in-person meeting and 101 online stakeholders attended the virtual meeting. Attendees included elected and appointed representatives from Palm Beach, Martin, and St. Lucie Counties. There were 21 staff representatives present to assist in-person attendees, to discuss the study process and proposed improvements, answer questions and receive comments.

Both in-person and online attendees had an opportunity to view display boards with information about the project. Members of the project team, including engineers and experts on traffic and noise, were available to discuss the project and answer questions. Participants were encouraged to fill out and submit comment forms, watch the informational videos, review the display boards, and discuss their thoughts and concerns regarding the project with project team members. Comment forms could also be completed and mailed to FTE Project Manager Brian Ribaric, P.E., at the address listed on the comment forms. All materials and videos were uploaded onto the study website at www.TreasureCoastTurnpike.com and were available on the meeting date.

A total of seven in-person and 20 online attendees provided comments during the public comment period, and seven additional in-person attendees provided written comments. Email comments received in response

to the Public Hearing totaled 138. Most of the stakeholder comments received dealt with traffic noise concerns associated with the widening of the Turnpike mainline roadway.

5.2.4 Comments and Coordination

A *Comments and Coordination Report* (May 2022) was prepared to fully document the public stakeholder involvement associated with this project. Comments and coordination that took place during public participation meetings, and that are undertaken throughout the study period, were compiled and maintained in the project file. This includes input provided through the public involvement techniques utilized in the project development process including, but not limited to, the Advance Notification, the Elected Officials/Agency Kick-off notification letter/newsletter, the Alternatives Public Information Meetings, Public Hearings, coordination with local officials and agencies, small group meetings, etc., as per Part 1, Chapter 11 of the FDOT's PD&E Manual, effective July 1, 2020. All notification methods (letters, newsletters, flyers, display ads, Florida Administrative Register ads, and press releases), mailing lists, meeting materials (handouts, copy of the presentations, speaker cards, etc.), responses and comments, and the Public Hearing transcripts, erratas and certifications are included in the project file.

6.0 DESIGN FEATURES OF THE PREFERRED ALTERNATIVE

6.1 Engineering Details of the Preferred Alternative

This section summarizes the results of the preliminary design analysis that includes a discussion of the preferred alternative. Typical sections, geometry, costs, drainage, and socioeconomic and environmental impacts associated with the preferred alternative are documented in greater detail in the following sections. **Appendix A** provides a complete set of concept plans displaying the preferred alternative. Refer to the Typical Section Package, in **Appendix F**, for detailed typical sections.

6.1.1 Typical Sections

6.1.2 Mainline

The preferred alternative for Florida's Turnpike (SR 91) includes widening the existing four-lane divided typical section to an eight-lane divided typical section. The widening will include adding two general toll lanes in each direction. 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 of the existing Florida's Turnpike (SR 91) roadway. The proposed eight-lane typical section is consistent throughout the entirety of the project limits. The median width varies between 26 feet and 585 feet wide. For the majority of the project limits, the median width is 26 feet; the large variance is due to the presence of the Port St. Lucie - Fort Pierce Service Plaza. The northbound and southbound lanes separate, with the northbound lanes east of, and southbound lanes west of the service plaza. North of the service plaza, the northbound and southbound travel lanes converge with a 26-foot median until the end of the project, north of Okeechobee Road (SR 70). The proposed typical section includes four, 12-foot travel lanes in each direction, 12-foot paved outside shoulders, 12-foot paved inside shoulders, and a 2-foot concrete median barrier. The east side of the roadway will remain in its existing location with all of the roadway widening occurring to the west. The required typical section width for Florida's Turnpike (SR 91) is 146 feet. The proposed mainline improvements fall within the existing right-of-way and do not require right-of-way acquisition or relocations. The proposed mainline typical section is provided below in **Figures 6-1** and **6-2.**

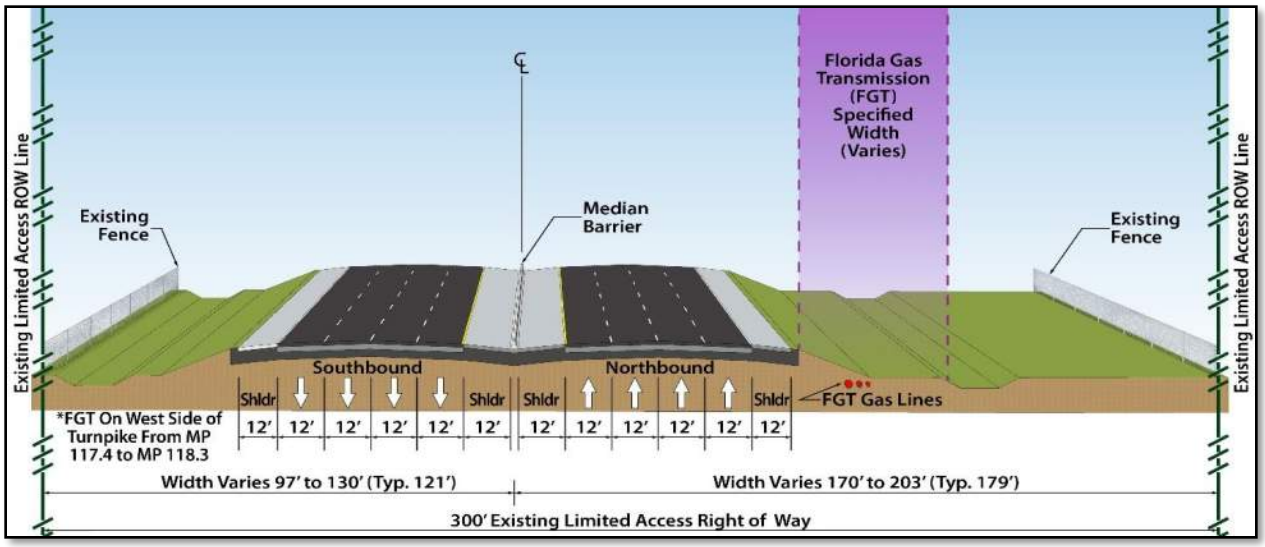


Figure 6-1: Proposed Mainline Typical Section

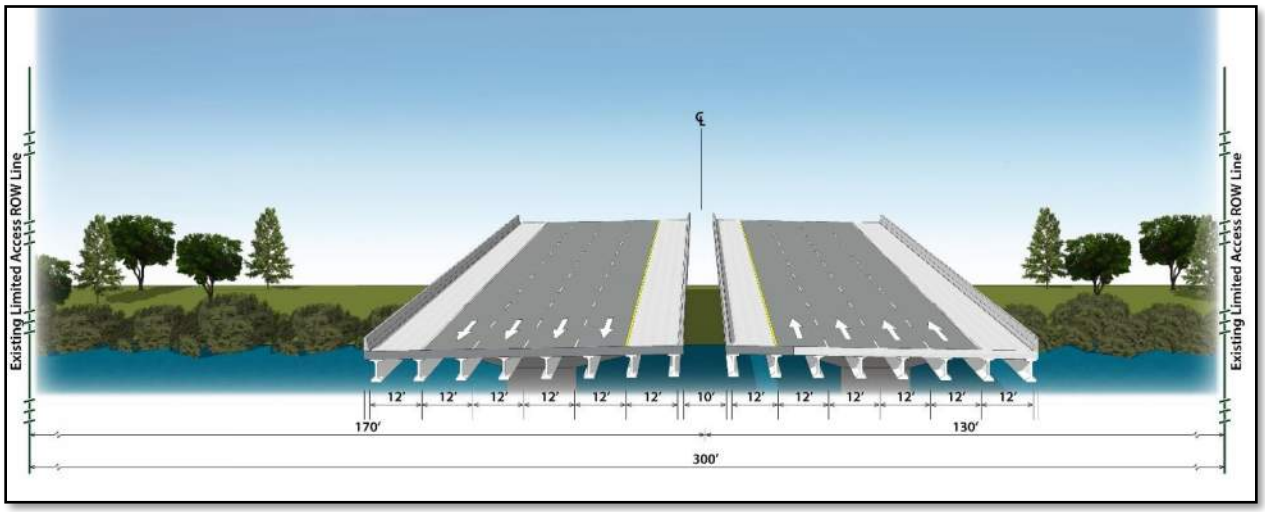


Figure 6-2: Proposed Thomas B. Manuel Bridge Typical Section

6.1.3 Bridges and Structures

The proposed roadway improvements will necessitate the widening or replacement of the majority of mainline and overpass bridges within the project study limits. The I-95 overpasses at MP 131.6 (Bridge Nos. 890122 and 890121) and MP 151.9 (Bridge Nos. 940126 and 940127) will be excluded due to federal oversight requirements which will be analyzed independently of this PD&E Study. The W Midway Road overpass at MP 169.1 (Bridge No. 940050) will also be excluded as it is currently being reconstructed by District 4 (FPID 231440-4-52-01) and incorporates the widened Turnpike section as proposed in this PD&E Study. Where feasible, bridges were recommended to be widened to minimize impacts and costs. However, the majority of structures were recommended to be replaced. For more information on this project's proposed bridge improvements, refer to the *Bridge Analysis Technical Memorandum, January 2023.*

6.1.3.1 Mainline Bridges

The preferred alternative proposes to widen the northbound bridge over the St. Lucie Canal and replace all other mainline bridges. **Table 6-1** provides a summary and brief description of the preferred mainline bridge alternatives that include recommended bridge replacements and details for the widening of the remaining bridges.

Table 6-1: Mainline Bridges

Bridge Over	Bridge No.	Replace / Widen	Proposed Length (feet)	Proposed Width (feet)	Existing Depth (feet)	Preferred Alternative
Loxahatchee Creek	930241	Replace	200'-0"	148'-8"	3'-10"	3 span (45 ft-110 ft-45 ft) FIB 45
Cypress Creek	890079	Replace	192'-0"	148'-8"	3'-10"	2 span (96 ft-96 ft) FIB 36
Phipp Canal	890082	Replace	100'-0"	148'-8"	Varies 1'-0" to 2'-5"	3 span (33.33 ft each) 18 in CIP slab
St. Lucie Canal (Thomas B. Manuel Bridge)	891000	Widen	2989'-4"	74'-10 1/2"	7'-6"	21 spans, FIB 72
	890066	Replace	2989'-4"	74'-8"	Varies	21 spans, FIB 72
Bessey Creek	890085	Replace	177'-0"	148'-8"	1'-4"	2 span (88.5 ft each) FIB 36
Canal C-23	890083	Replace	340'-0"	160'-8"	2'-11"	3 span (113.33 ft each) FIB 45
Canal C-24	940049/ 940082	Replace	305'-0"	160'-8"	2'-11" 2'-11"	3 span (101.67 ft each) FIB 45
Glades Rd. (CR 709) and FEC Railroad	940076/ 940951	Replace	172'-0"	189'-8"	3'-7" 3'-7"	2 span (86 ft – 86 ft) FIB 36
Ten Mile Creek	940072	Replace	187'-0"	148'-8"	3'-4"	3 span (55 ft – 77 ft - 55 ft) FIB 36
Okeechobee Rd. (SR 70)	940134/ 940135	Replace	193'-3"	204'-8"	6'-8"	Single span (193'-3") FIB 96

**Information in the table above was extracted from the Bridge Analysis Technical Memorandum, January 2023.*

6.1.3.2 Overpass Bridges

The majority of the overpass bridges require replacement in order to accommodate the proposed mainline widening. In addition to accommodating the proposed mainline typical section, the overpass structures must also provide clearance to the existing FGT gas pipelines, which are located on the east side of the Florida's Turnpike (SR 91) mainline. Crosstown Parkway (Bridge No. 944018) is the only location that does not require replacement to accommodate the proposed mainline widening. **Table 6-2** provides a summary and brief description of the preferred overpass bridge alternatives.

Table 6-2: Overpass Bridges

Overpass	Bridge No.	Exist. Bridge Depth (ft.)	Preferred Alternative	Prop. Bridge Width (ft.)	Bridge Cost	FGT Impact Cost	Roadway Cost	Total Cost
SE Bridge Rd.	890119	5.2	2 span (107 ft – 185 ft) FIB 45 and FIB 96	100'-8"	$4,187,864	-	$351,400	$4,539,264
SW Kanner Hwy.	890126	5.2	2 span (107 ft – 187 ft) FIB 45 and FIB 96	113'-1"	$4,721,003	-	$350,900	$5,071,903
SW Martin Hwy. Ramp	890068 (B13R-A)	3.1	3 span (124 ft – 98 ft – 105 ft) FIB 54	43'-0"	$1,645,137	$358,807	-	$2,003,944
	890068 (B13R-B)	3.1	3 span (120 ft – 97 ft – 109 ft) FIB 54	29'-8"	$1,131,673	$358,807	-	$1,490,480
SW Martin Hwy.	890159	5.9	3 span (171 ft – 162 ft – 116 ft) FIB 78	123'-1"	$7,847,547	-	$89,800	$7,937,347
SE Becker Rd.	941001	5.5	2 span (117 ft – 220 ft) FIB 45 and 100 in Steel Girder	109'-1"	$5,932,933	-	$322,300	$6,255,233
SW Port St. Lucie Blvd.	940142	5.2	3 span (120 ft – 99 ft – 110 ft) FIB 54	133'-1"	$5,122,777	$639,205	-	$5,761,982
Ramp to SW Port St. Lucie Blvd.	940121	4.3	3 span (111 ft – 103 ft – 109 ft) FIB 45	29'-8"	$1,133,730	$383,523		$1,517,253
St. Lucie West Blvd.	949901/ 949902	5.2	3 span (112 ft – 99 ft – 98 ft) FIB 45	124'-1"	$4,485,985	-	-	$4,485,985

**Information in the table above was extracted from the Bridge Analysis Technical Memorandum, January 2023.*

6.1.3.3 Interchange Bridges

There are bridges, specific to the preferred interchange alternatives, which have not been discussed in either of the previous two sections. These includes new ramp bridges at the SW Martin Highway (SR 714) and Crosstown Parkway interchanges. The proposed ramp bridges at SW Martin Highway (SR 714) will serve as the southbound off ramp to SW Martin Downs Boulevard and the southbound on ramp to Florida's Turnpike (SR 91). The proposed southbound off ramp bridge will carry two lanes over the northbound off ramp. The proposed ramp bridge at Crosstown Parkway will serve as both the northbound off ramp and the southbound on ramp. The proposed ramp bridge will carry one lane in each direction over southbound Florida's Turnpike (SR 91).

6.1.4 Right-of-way and Relocations

The existing right-of-way width along Florida's Turnpike (SR 91) is 300 feet. Widening the existing four-lane roadway to an eight-lane roadway will not require right-of-way acquisition. Due to the presence of three buried FGT gas lines on the east side of the roadway, all of the proposed widening will occur on the west side of the roadway.

All six of the preferred interchange alternatives, four existing and two new, require right-of-way acquisition. A total of 72 parcels will be impacted and 64.24 acres of right-of-way are required to construct the preferred

interchange alternatives. **Table 6-3** below provides a breakdown of the number of impacted parcels and total right-of-way required for each respective interchange.

Table 6-3: Proposed Right-of-way Impacts

Interchange	Type	Number of Impacted Parcels	Area of required Right-of-way (Acres)
SW Martin Highway (SR 714)	Existing	22	16.44
SE Becker Road	Existing	12	2.04
SW Port St. Lucie Boulevard	Existing	11	14.88
Crosstown Parkway	New	3	3.26
W Midway Road	Existing	16	12.61
Okeechobee Road (SR 70)	New	8	15.00
	Total	72	64.24

The total cost associated with right-of-way acquisition is $50,220,000. **Table 6-4** below provides a breakdown of the right-of-way costs associated with the preferred alternative.

Table 6-4: Preliminary Right-of-way Cost Estimate

Road	Right-of-way Cost
Mainline	
Florida's Turnpike (SR 91)	$5,200,000
Interchanges	
SW Martin Highway (SR 714) – Alt. 7B (EI)	$12,700,000
SE Becker Road – Alt. 1 (EI)	$1,200,000
SW Port St. Lucie Boulevard – Alt. 2 (EI)	$16,700,000
Crosstown Parkway – Alt. 3 (NI)	$1,200,000
W Midway Road – Alt. 1 (NI)	$6,500,000
Okeechobee Road (SR 70) – Alt. 4 (EI)	$6,700,000
Total Right-of-way Cost	$50,200,000

EI = Existing Interchange, NI = New Interchange

Residential Relocations

Three residential relocations are anticipated to be required to accommodate the preferred alternative, as shown in **Table 6-5**. Two of the residential relocations are located at the interchange between Florida's Turnpike (SR 91) and SW Port St. Lucie Boulevard. The third residential relocation is located at the interchange between Florida's Turnpike (SR 91) and Okeechobee Road (SR 70).

Table 6-5: Potential Residential Relocations

Parcel ID	Address	Type	Occupancy	Year Built
342058526370005	2141 SW Bayshore Boulevard	Single Family Residence	Occupied	1994
342058526360008	2131 SW Bayshore Boulevard	Single Family Residence	Occupied	2005
232350100590004	7260 Okeechobee Road	Single Family Residence	Occupied	1950

**Information in the table above was extracted from St. Lucie County Property Appraiser*

Business Relocations

There are two potential business relocations anticipated to accommodate the preferred alternative. **Table 6-6** lists pertinent information about the business that is expected to be relocated.

Table 6-6: Potential Business Relocations

Parcel ID	Address	Type	Occupancy	Year Built
143840001000001700	3833 SW Bruner Terrace	Warehouse/Distribution	Occupied	1985
4408-511-000-000-0	299 SW Port St. Lucie Boulevard	Gas Station	Occupied	1990

**Information in the table above was extracted from Martin County & St. Lucie County Property Appraisers*

6.1.5 Horizontal and Vertical Geometry

The majority of the preferred alternative follows the existing horizontal alignment of Florida's Turnpike (SR 91). Minor alignment modifications are proposed to accommodate the construction of new bridges on all of the crossroads within the project study limits. The preferred alignment will be further analyzed during final design to ensure it meets the most current FDOT FDM and TDH Design Criteria. The horizontal curve data is summarized in **Table 6- 7.**

Table 6-7: Proposed Horizontal Alignment

County	PC (Station)	PT (Station)	Design Speed	Degree of Curvature	Super-elevation	Radius	Minimum Radius (NC)	Curve Length	FDOT Minimum Required Curve Length
Northbound									
Martin	234+07.93	259+07.25	70	28.72	RC	11,431	14,714	2,493	1,050
Martin	425+38.03	452+78.74	70	38.07	0.026	8,623	14,714	2,750	1,050
Martin	452+78.74	465+03.63	70	38.06	0.026	8,625	14,714	1,191	1,050
Martin	465+03.63	481+97.07	70	36.17	0.026	9,075	14,714	3,103	1,050
Martin	481+97.07	495+26.98	70	28.72	RC	11,429	14,714	3,481	1,050
Martin	518+65.13	563+02.07	70	28.72	RC	11,431	14,714	3,734	1,050
Martin	687+63.35	725+07.25	70	22.48	RC	14,603	14,714	2,397	1,050
Martin	744+18.42	768+17.18	70	22.50	NC	14,591	14,714	2,396	1,050
Martin	809+61.26	816+14.84	70	21.89	NC	14,999	14,714	653	1,050
Martin	819+95.71	827+05.18	70	17.29	NC	18,985	14,714	710	1,050

Martin	1101+73.31	1117+76.62	70	28.57	RC	11,489	14,714	1,607	1,050
St. Lucie	1232+90.31	1252+96.42	70	28.57	RC	11,489	14,714	2,011	1,050
St. Lucie	1351+91.99	1378+70.57	70	28.72	RC	11,431	14,714	2,672	1,050
St. Lucie	1501+59.68	1519+43.02	70	42.97	0.028	7,639	14,714	1,780	1,050
St. Lucie	1566+87.96	1584+70.05	70	42.91	0.028	7,651	14,714	1,787	1,050
St. Lucie	1718+01.20	1749+82.42	70	43.13	0.028	7,611	14,714	3,232	1,050
St. Lucie	1878+70.48	1886+81.69	70	16.41	NC	19,999	14,714	811	1,050
St. Lucie	1886+81.69	1903+96.68	70	14.33	NC	22,915	14,714	1,715	1,050
St. Lucie	1903+96.68	1914+24.46	70	8.66	NC	37,910	14,714	1,129	1,050
St. Lucie	1925+45.79	1937+56.94	70	22.32	NC	14,709	14,714	1,212	1,050
St. Lucie	1955+77.38	1979+64.41	70	42.95	0.028	7,644	14,714	2,388	1,050
Southbound									
St. Lucie	1979+64.41	1955+77.38	70	42.95	0.028	7,644	14,714	2,388	1,050
St. Lucie	1937+56.94	1925+45.79	70	22.32	NC	14,709	14,714	1,212	1,050
St. Lucie	1914+24.46	1903+96.68	70	8.66	NC	37,910	14,714	1,129	1,050
St. Lucie	1903+96.68	1886+81.69	70	14.33	NC	22,915	14,714	1,715	1,050
St. Lucie	1886+81.69	1878+70.48	70	16.41	NC	19,999	14,714	811	1,050
St. Lucie	1749+82.42	1718+01.20	70	43.13	0.028	7,611	14,714	3,232	1,050
St. Lucie	1560+87.01	1525+53.45	70	42.77	0.028	7,675	14,714	3,582	1,050
St. Lucie	1516+19.29	1505+62.81	70	19.51	NC	16,826	14,714	1,076	1,050
St. Lucie	1505+62.81	1488+69.29	70	22.24	NC	14,762	14,714	1,703	1,050
St. Lucie	1488+69.29	1483+53.94	70	32.83	0.023	10,000	14,714	513	1,050
St. Lucie	1378+70.57	1351+91.99	70	28.72	RC	11,431	14,714	2,672	1,050
St. Lucie	1252+96.42	1232+90.31	70	28.57	RC	11,489	14,714	2,011	1,050
Martin	1117+76.62	1101+73.31	70	28.57	RC	11,489	14,714	1,607	1,050
Martin	827+05.18	818+46.92	70	17.26	NC	19,015	14,714	858	1,050
Martin	818+46.92	811+69.88	70	21.96	NC	14,952	14,714	675	1,050
Martin	725+07.25	687+63.35	70	22.48	RC	14,603	14,714	2,397	1,050
Martin	563+02.07	518+65.13	70	28.72	RC	11,431	14,714	3,734	1,050
Martin	494+83.28	488+19.53	70	31.20	0.022	10,522	14,714	484	1,050
Martin	488+19.53	464+65.28	70	38.01	0.026	8,636	14,714	2,576	1,050
Martin	465+03.63	452+78.74	70	38.06	0.026	8,625	14,714	1,191	1,050
Martin	452+78.74	425+38.03	70	38.07	0.026	8,623	14,714	2,750	1,050
Martin	259+07.25	234+07.93	70	28.72	RC	11,431	14,714	2,493	1,050

NC=Normal Crown, RC=Reverse Crown

The existing topography within the project study limits varies between flat segments and minor inclines and declines. The preferred alternative will match existing vertical alignment of Florida's Turnpike (SR 91) where applicable. There are a total of 11 bridges along Florida's Turnpike (SR 91) within the project study limits. The preferred alternative proposes to replace 10 of the mainline bridges, with the exception being the northbound Thomas B. Manuel Bridge, which is proposed to be widened. The proposed profiles for the 10 bridges to be replaced can be found in the *Bridge Analysis Technical Memorandum, January 2023.* The

preferred alternative profile will be further analyzed during final design to ensure it meets the most current FDOT FDM and TDH Design Criteria.

6.1.6 Bicycle and Pedestrian Accommodations

There are no existing bicycle facilities along the mainline as this is a high-speed roadway where bicycles are not allowed. 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 interchange 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 10-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 12-foot-wide sidewalks in lieu of on-street 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.

6.1.7 Multi-Modal Accommodations

No transit services are provided along Florida's Turnpike (SR 91) mainline, within the project study limits. The Treasure Coast Connector Bus System includes three routes that either cross or terminate adjacent to Florida's Turnpike (SR 91) mainline. Routes 5 and 6 cross over the mainline at SW Port St. Lucie Boulevard and St. Lucie West Boulevard, respectively. Both of these crossroad bridges are to be reconstructed in order to accommodate the proposed mainline widening. However, no impacts to the existing transit routes are anticipated due to the reconstruction of the bridges. Route 3 runs along Okeechobee Road (SR 70) and terminates at the Greyhound bus station adjacent to Wheeler Terrace. The proposed interchange improvements at Okeechobee Road (SR 70) are not anticipated to impact the existing transit Route 3.

Of the three existing park and ride lots within the project study limits, only the SW Martin Highway and Turnpike Milepost 133 Park and Ride lot will require modification. Currently, there are two driveway entrances to the park and ride lot from SW Martin Downs Boulevard. The northern entrance, nearest SW Martin Highway, will be relocated to provide access for eastbound traffic along SW Martin Highway. The layout of the parking lot will also be adjusted to eliminate a grassed median and connect the two existing

parking lots. The modifications are expected to improve overall access and maneuverability for transit users.

No impacts to the existing FEC railroad, adjacent to Glades Cut-Off Road, are anticipated due to the proposed mainline widening. Minimum vertical clearance requirements over the FEC railroad will be maintained.

6.1.8 Access Management

The preferred alternative proposes two additional interchange locations within the project study limits. The new interchange locations include Crosstown Parkway (partial interchange) and W Midway Road (full interchange). The proposed partial interchange at Crosstown Parkway will provide a northbound off-ramp and a southbound on-ramp, with both ramps tying into SW Cameo Boulevard at a roundabout. The proposed full interchange at W Midway Road will provide both northbound off- and northbound on-ramps as well as southbound off- and southbound on-ramps. The majority of land use between SW Port St. Lucie Boulevard and Okeechobee Road (SR 70) is residential. The two additional access points are anticipated to relieve congestion at the SW Port St. Lucie Boulevard and Okeechobee Road (SR 70) interchanges and provide more direct routes to Florida's Turnpike (SR 91) for local residents.

Of the four existing interchanges, three are proposing modifications to existing access. A brief description of the respective changes is provided below:

SW Martin Highway

Currently, the southbound off-ramp provides access westbound along SW Martin Highway at the intersection of SW Martin Highway and SW Martin Downs Boulevard. The proposed interchange improvements include an additional connection from the southbound off-ramp to SW Leighton Farm Avenue, which will provide access westbound along SW Martin Highway. Drivers who continue along the southbound off-ramp to the intersection of SW Martin Highway and SW High Meadow Avenue will only have the ability to continue north or turn east.

SW Port St. Lucie Boulevard

Currently, all four ramp movements begin or terminate at the intersection of SW Port St. Lucie Boulevard and SE Bayshore Boulevard. From this point, drivers have the ability to continue north along SW Bayshore Boulevard or turn east or west along SW Port St. Lucie Boulevard. The proposed northbound off-ramp will be relocated to begin on the south side of SW Port St. Lucie Boulevard, eliminating the "S" curve configuration of the existing ramp. The northbound on-ramp will be relocated to begin at a new proposed signalized intersection on SW Bayshore Boulevard, approximately 350 feet south of SW Chandler Terrace. The southbound off-ramp will terminate at this new proposed signalized intersection, instead of at the SW Port St. Lucie Boulevard and SW Bayshore Boulevard intersection. Two new southbound on-ramps are proposed along SW Port St. Lucie Boulevard, on the west side of Florida's Turnpike (SR 91). Drivers will be able to access these ramps in both the eastbound and westbound directions.

Okeechobee Road (SR 70)

The existing northbound off- and northbound on-ramps will remain in their current configuration with no change to access. The southbound off-ramp will be relocated to the north side of Okeechobee Road (SR 70) and terminate at a proposed signalized intersection at Gordy Road. The southbound on-ramp will be relocated from the Okeechobee Road (SR 70) and S Kings Highway intersection, to begin at the proposed Okeechobee Road (SR 70) and Gordy Road signalized intersection as well.

6.1.9 Intersection and Interchange Concepts

The preferred alternative proposes operational improvements at four existing interchange locations: SW Martin Highway, SE Becker Road, SW Port St. Lucie Boulevard, and Okeechobee Road (SR 70). In addition, two new interchange locations are proposed. The two new interchange locations are at Crosstown Parkway (MP 145) and W Midway Road (MP 150). **Table 6-8** shows the preferred interchange alternatives for each respective interchange. **Figures 6-3** to **Figure 6-8** provide detailed graphics of the respective preferred interchange alternative concepts. These graphics were extracted from the Interchange Alternatives Concept Plan Set.

Table 6-8: 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

6.1.9.1 SW Martin Highway (SR 714)

Approximately 3,500 feet south of SW Martin Highway, the northbound off-ramp diverts from Florida's Turnpike (SR 91) and curves to the right. The ramp splits into two, one lane ramps that intersect SW Martin Highway at SW Martin Downs Boulevard. The outside ramp provides drivers with the ability to make a right turn onto SW Martin Highway while the inside ramp provides drivers with the ability to continue through onto SW Martin Downs Boulevard as well as turn left onto SW Martin Highway. The two-lane northbound on-ramp begins at the SW Martin Highway and SW Martin Downs Boulevard intersection and loops from the south to the north, to tie into Florida's Turnpike (SR 91) approximately 1,900 feet north of SW Martin Highway. Approximately 750 feet north of SW Martin Highway, the southbound off-ramp diverts from Florida's Turnpike (SR 91) and curves to the right. The ramp travels underneath the SW Martin Highway overpass before splitting into a one lane and two-lane ramp. A single lane ramp continues to the west until ending at SW Leighton Farm Avenue at a proposed roundabout. SW Leighton Farm Avenue will be realigned to intersect SW Martin Highway at SW Deggeller Court. Drivers can turn left or right onto SW Martin Highway or continue through on SW Deggeller Court. At the southbound off-ramp split, a two-lane ramp curves from the west to the east, crossing at a bridge over Florida's Turnpike (SR 91),

until it loops to the north to intersect SW Martin Highway at SW Martin Downs Boulevard. Drivers can continue through onto SW Martin Downs Boulevard or turn right onto SW Martin Highway. The southbound on-ramp begins approximately 800 feet east of Florida's Turnpike (SR 91), at SW Martin Downs Boulevard, and curves to the west, crossing at a bridge over Florida's Turnpike (SR 91), before looping around to tie into Florida's Turnpike (SR 91) approximately 3,500 feet south of SW Martin Highway. Between SW High Meadow Avenue and SW Armellini Avenue, SW Martin Highway will be widened from the existing four lane typical section to a six-lane typical section with three lanes in each direction. West of SW Armellini Avenue until SW Deggeller Court, SW Martin Highway will be widened from the existing two-lane typical section to a six-lane typical section with three lanes in each direction. The SW Martin Highway bridge over Florida's Turnpike (SR 91) will be reconstructed to accommodate the proposed widening of Florida's Turnpike (SR 91).



Figure 6-3: SW Martin Highway (SR 714) – Preferred Interchange Alternative

6.1.9.2 SE Becker Road

The alignment of the northbound off-ramp will remain as existing. Approximately 700 feet north of SE Becker Road, the northbound off-ramp will be widened to accommodate a dedicated right turn lane. The alignment of the northbound on-ramp will remain as existing. The initial 415 feet of the northbound on-ramp will be widened to accommodate an additional lane before tapering down to one lane. Approximately 3,000 feet north of SE Becker Road, the southbound off-ramp diverts from Florida's Turnpike (SR 91) and curves to the right until it intersects SE Becker Road at an existing signalized intersection, approximately 325 feet west of Florida's Turnpike (SR 91). The southbound on-ramp begins at the same location and provides a two-lane ramp for approximately 900 feet before tapering down to one lane. The southbound on-ramp ties into Florida's Turnpike (SR 91) approximately 1,265 feet south of SE Becker Road. The alignment of SE Becker Road, between the St. Lucie County Fire Station Number 13 and SW Bradshaw Circle, will shift approximately 38 feet to the north to accommodate the construction of a new bridge over Florida's Turnpike (SR 91). The SE Becker Road bridge over Florida's Turnpike (SR 91) will be reconstructed to accommodate the proposed widening of Florida's Turnpike (SR 91).

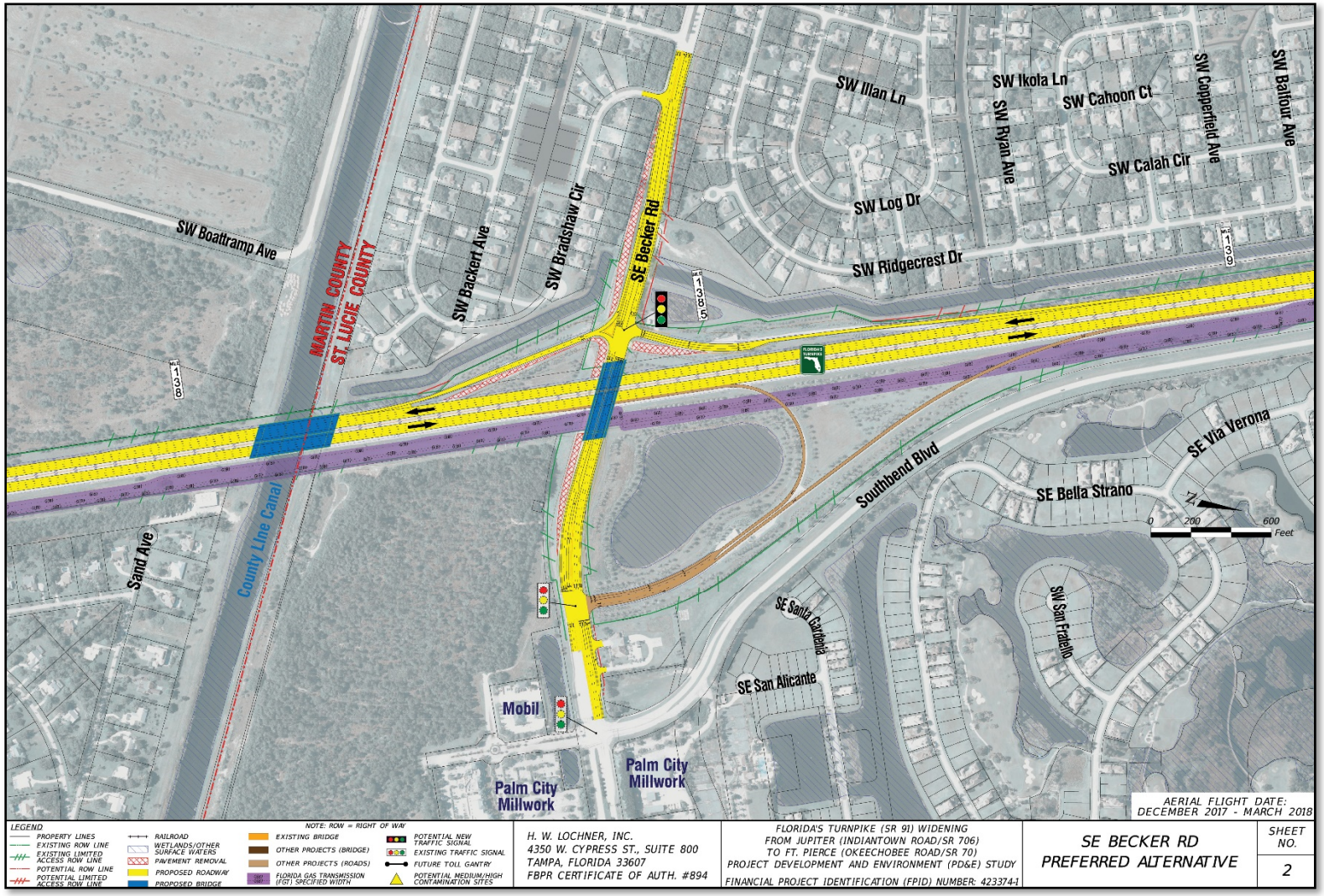


Figure 6-4: SE Becker Road – Preferred Interchange Alternative

6.1.9.3 SW Port St. Lucie Boulevard

Approximately 2,750 feet south of SW Port St. Lucie Boulevard, the northbound off-ramp diverts from the Turnpike and travels parallel to the mainline for approximately 1,500 feet before curving to the right and tying into the existing SW Bayshore Boulevard, on the south side of SW Port St. Lucie Boulevard. The northbound on-ramp begins at a proposed signalized intersection on SW Bayshore Boulevard, approximately 1,250 feet north of SW Port St. Lucie Boulevard. The ramp begins travelling west and curves to the north, tying into the Turnpike approximately 1,950 feet north of SW Port St. Lucie Boulevard. The southbound off-ramp diverts from the Turnpike approximately 2,200 feet north of SW Port St. Lucie Boulevard and curves to the right. The ramp then curves from the south to the east, crossing at a bridge over the Turnpike before intersecting SW Bayshore Boulevard at a proposed signalized intersection approximately 1,250 feet north of SW Port St. Lucie Boulevard. For drivers travelling east, the southbound on-ramp begins approximately 900 feet west of the Turnpike and curves to the right. The ramp continues south until it ties into the Turnpike approximately 2,800 feet south of SW Port St. Lucie Boulevard. For drivers travelling west, the southbound on-ramp begins approximately 650 feet east of the Turnpike. Following the SW Port St. Lucie bridge over the Turnpike, the ramp loops around and continues south until it intersects the Turnpike approximately 2,800 feet south of SW Port St. Lucie Boulevard. Between SW Bayshore Boulevard and SW Cameo Boulevard, the typical section for SW Port St. Lucie Boulevard will accommodate 12-foot-wide sidewalks in each direction, in lieu of on-street bicycle facilities. The alignment of SW Port St. Lucie Boulevard will shift approximately 20 feet to the north to accommodate the construction of a new bridge over the Turnpike. The SW Port St. Boulevard bridge over the Turnpike will be reconstructed to accommodate the proposed widening of the Turnpike.

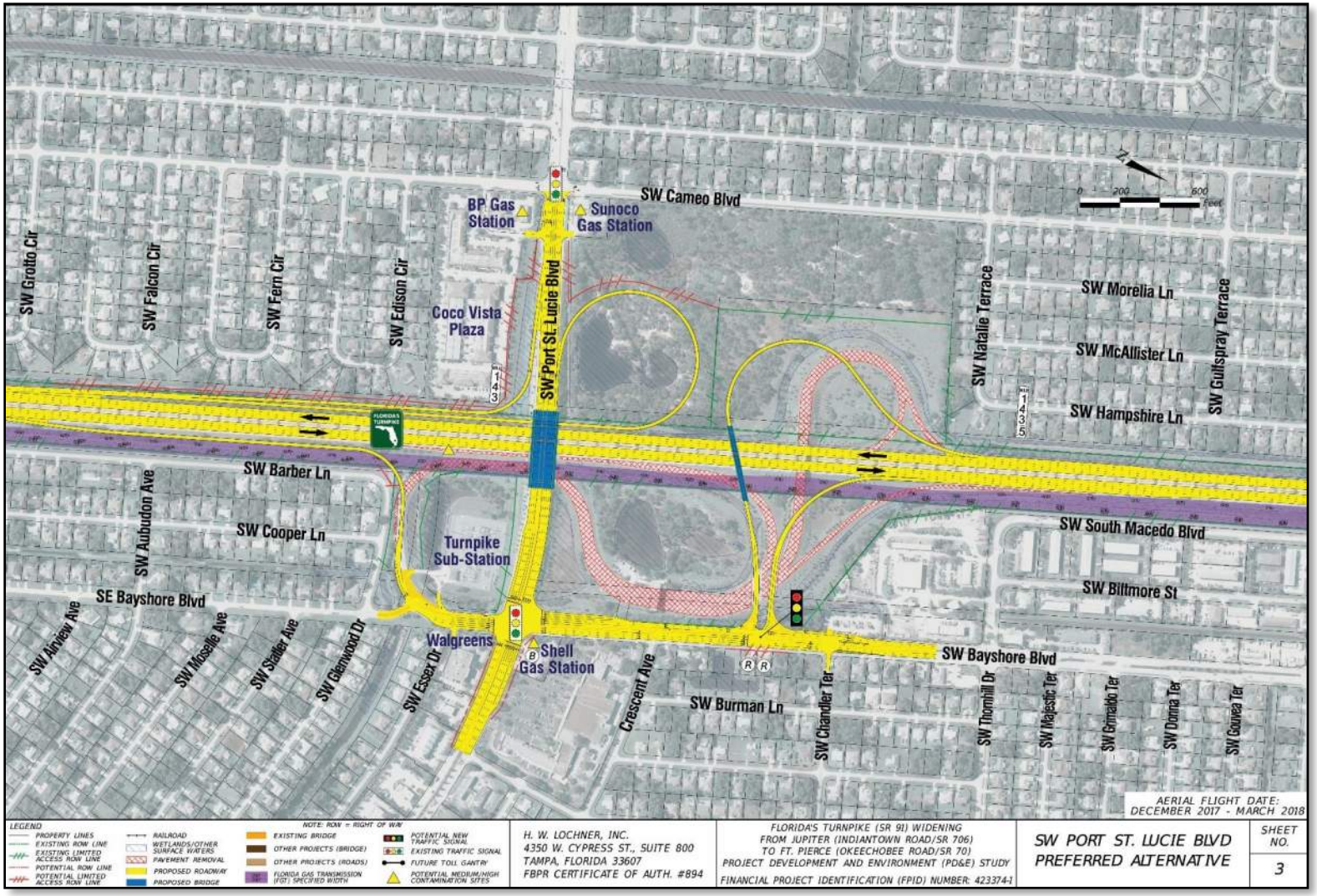


Figure 6-5: SW Port St. Lucie Boulevard – Preferred Interchange Alternative

6.1.9.4 Crosstown Parkway

Approximately 1,500 feet south of Crosstown Parkway, the northbound off-ramp diverts from Florida's Turnpike (SR 91) to the inside and continues north for approximately 2,900 feet. The ramp then curves to the west, crossing at a bridge over the southbound lanes of Florida's Turnpike (SR 91) until it ties into the existing SW Cameo Boulevard at a proposed roundabout. The southbound on-ramp begins at the same tie in point at SW Cameo Boulevard and curves to the east, crossing at a bridge over the southbound lanes of Florida's Turnpike (SR 91). The ramp continues south, in between the northbound and southbound lanes of Florida's Turnpike (SR 91) until it ties into Florida's Turnpike (SR 91) from the inside, approximately 1,275 feet south of Crosstown Parkway.

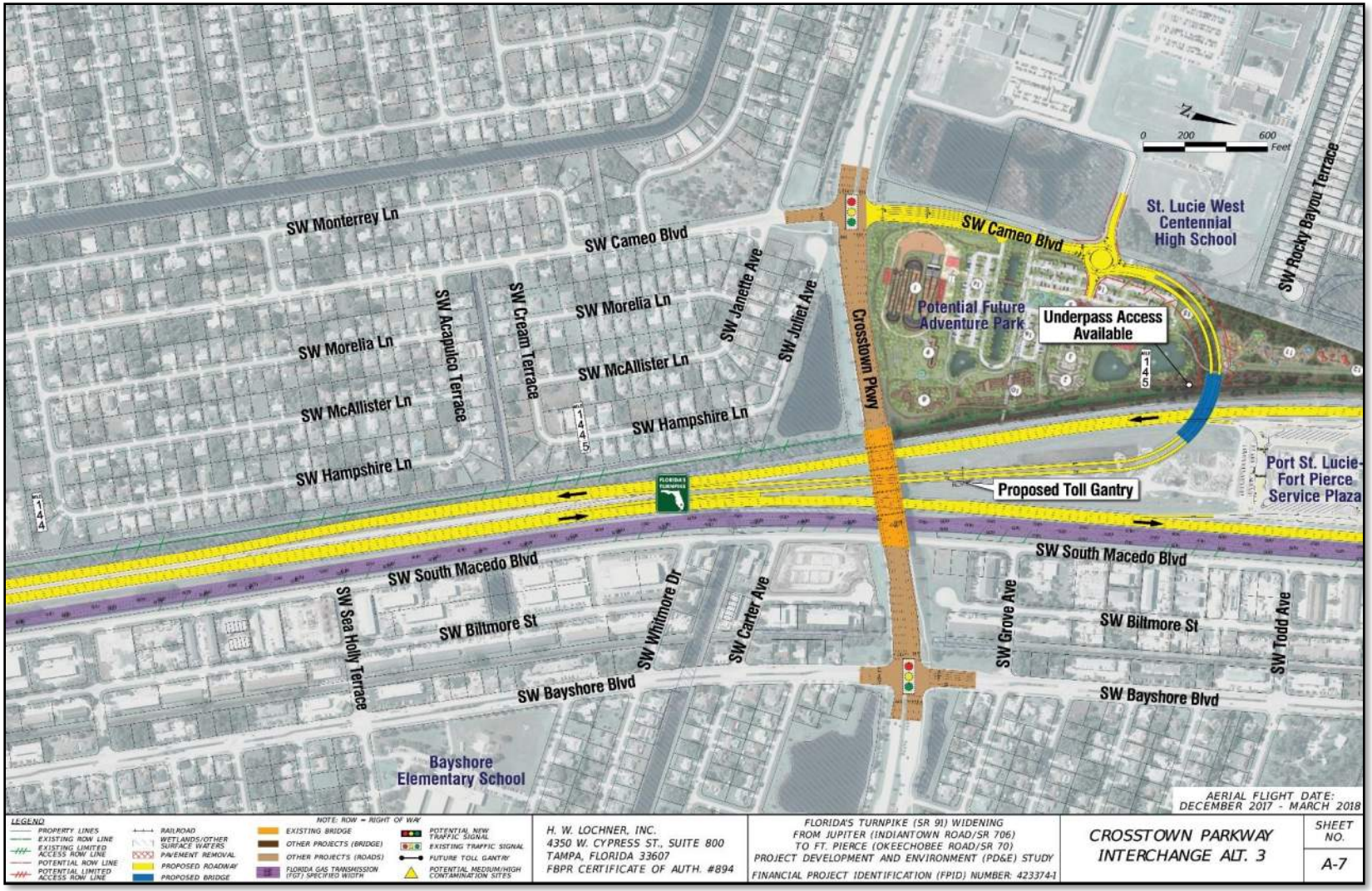


Figure 6-6: Crosstown Parkway – Preferred Interchange Alternative

6.1.9.5 W Midway Road

Approximately 1,900 feet south of W Midway Road, the northbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues north until it intersects W Midway Road at a proposed signalized intersection, approximately 500 feet east of the Turnpike. The northbound on-ramp begins at the same proposed signalized intersection and initially curves from north to west. The ramp then curves to the north and ties into the Turnpike approximately 1,900 feet north of W Midway Road. Approximately 3,600 feet north of W Midway Road, the southbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues south until it intersects W Midway Road at a proposed signalized intersection, approximately 285 feet west of the Turnpike. The southbound on-ramp begins at the same proposed signalized intersection and continues south until it ties into the Turnpike approximately 1,875 feet south of W Midway Road. From S Jenkins Road to East Torino Parkway, W Midway Road will be widened from the existing two-lane undivided typical section to a six- lane divided typical section with seven-foot buffered bicycle lanes in each direction. The W Midway Road bridge over the Turnpike will be reconstructed to accommodate the widening of W Midway Road and the Turnpike.

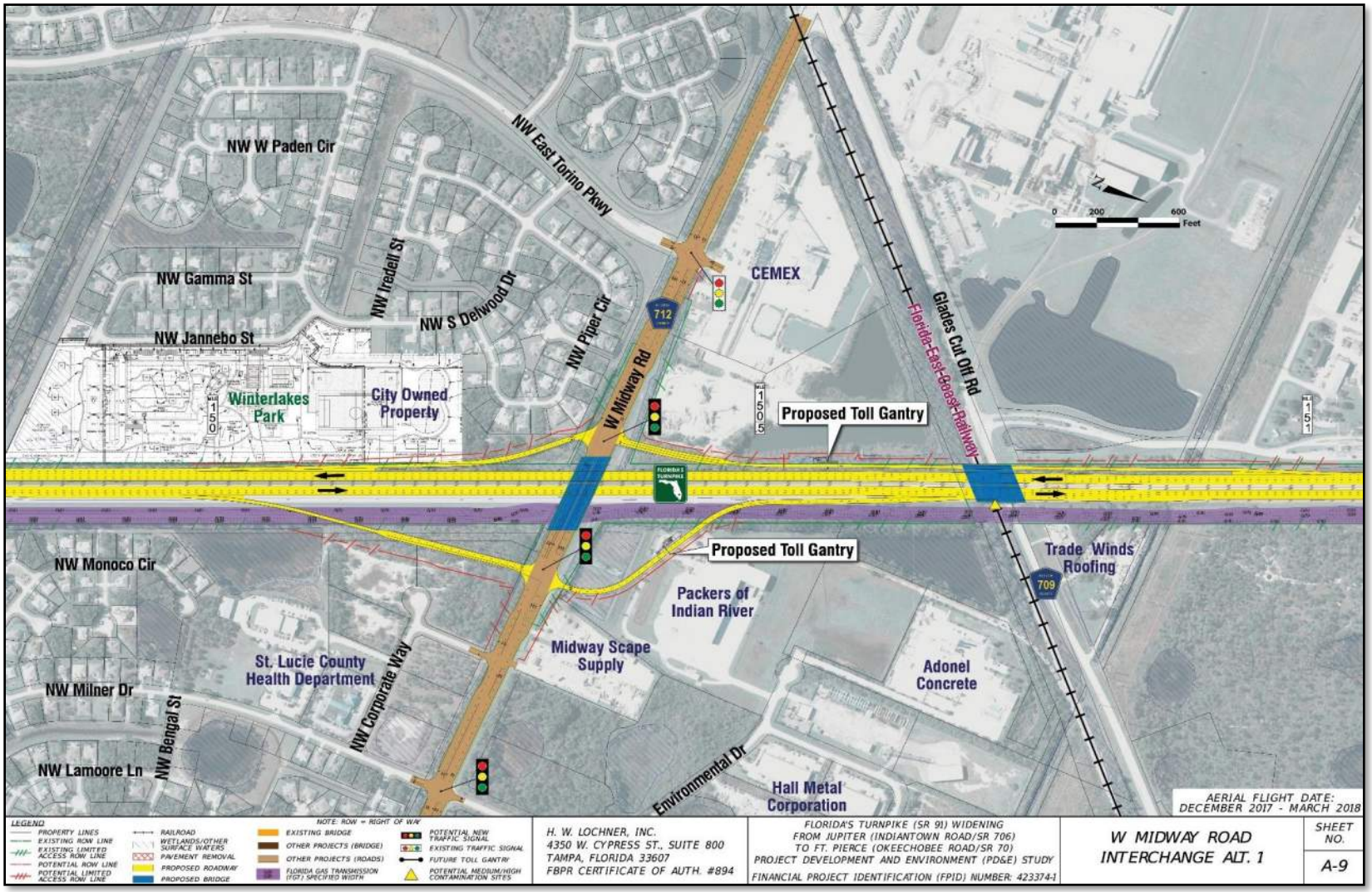


Figure 6-7: W Midway Road – Preferred Interchange Alternative

6.1.9.6 Okeechobee Road (SR 70)

The existing northbound off-ramp and on-ramp will not be modified with the proposed interchange alternative. The northbound approach leg of the S Kings Highway and Okeechobee Road intersection will be widened to accommodate three dedicated right turn lanes, two through lanes, and a dedicated left turn lane. Approximately 2,600 feet north of Okeechobee Road, the southbound off-ramp diverts from Florida's Turnpike (SR 91) and curves to the right. The ramp continues south until it intersects Okeechobee Road at a proposed signalized intersection, approximately 75 feet west of Gordy Road. The southbound on-ramp begins at the same proposed signalized intersection. The ramp curves north to south, travelling over Okeechobee Road before tying into Florida's Turnpike (SR 91) approximately 1,750 feet south of Okeechobee Road. East of Gordy Road, Okeechobee Road will be widened from the existing two-lane typical section to a three-lane typical section with three lanes in each direction and seven-foot buffered bicycle lanes. West of Gordy Road, the south side of Okeechobee Road will be widened from the existing two-lane roadway to a three-lane roadway with a seven-foot buffered bicycle lane.

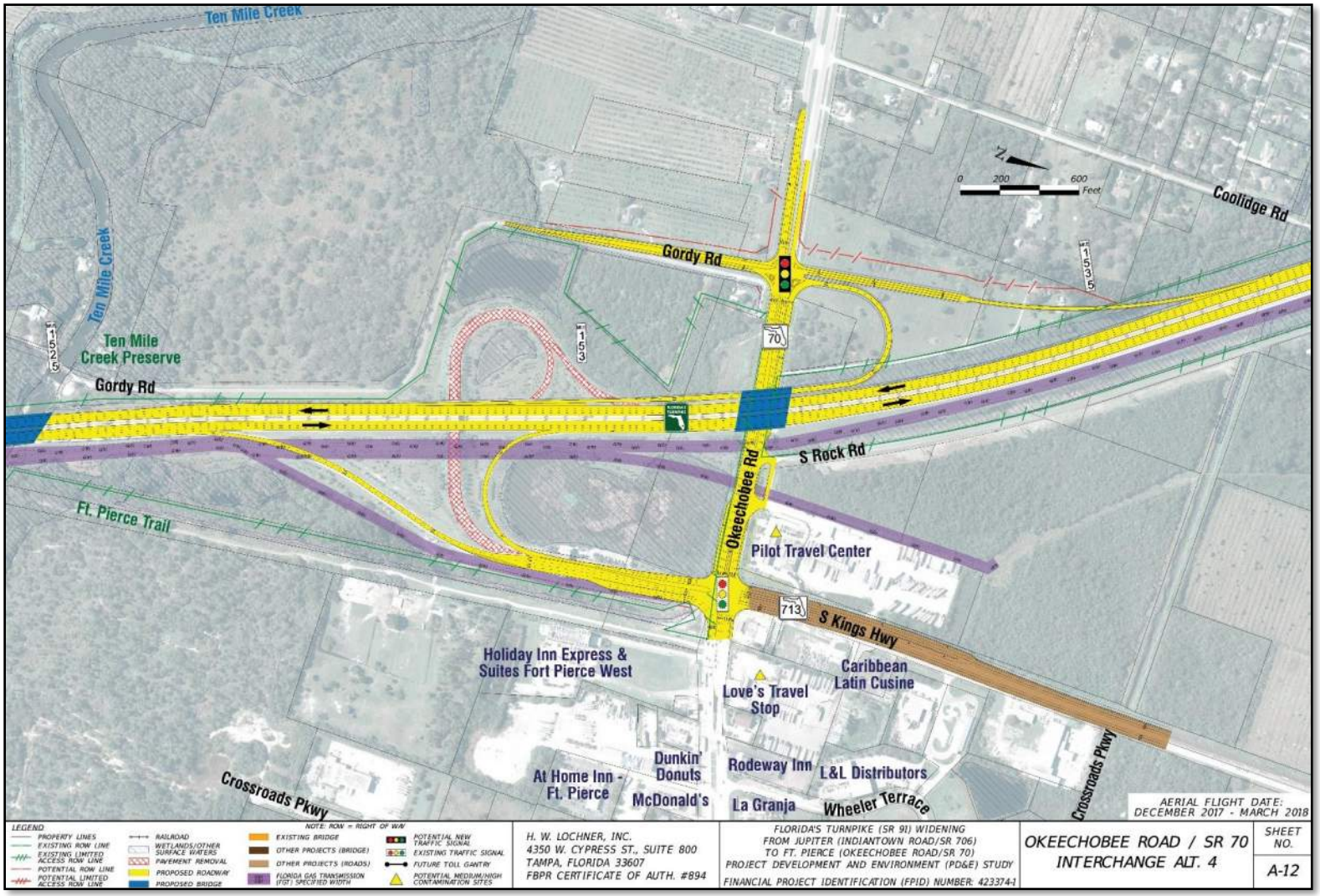


Figure 6-8: Okeechobee Road (SR 70) – Preferred Interchange Alternative

6.1.10 Intelligent Transportation System and TSMO Strategies

The goal of the proposed Intelligent Transportation System (ITS) is to have a system that meets the Turnpike's current and future needs within the project study limits. The existing ITS including the Fiber Optic Communications Network, Power Subsystem, CCTV Camera Subsystem, MVDS Subsystem, VDS-AVI Subsystem, DMS Subsystem, and Highway Advisory Radio (HAR) Subsystem, will be replaced where necessary. A new Fiber Optic Communications Network and additional DMS for new interchanges will be installed within the project study limits. Please refer to the *ITS Technical Memorandum, June 2021,* for a detailed description of the proposed ITS Infrastructure.

The TSM&O program is an integrated method of optimizing roadway performance of existing infrastructure. This is done through implementing systems and services to enable freeway and arterial traffic to efficiently operate together to recover capacity lost due to congestion and/or disruptions. TSM&O improvements can include, but are not limited to, acceleration lane extensions, freeway management systems (FMS), access management, queue warning, wrong way driving (WWD) countermeasures, automatic vehicle location (AVL), all electronic tolling (AET), and vehicle to infrastructure (V2I) communication. Strategies are most appropriate when trying to maximize capacity with existing geometry and are categorized in one of the following focus areas.

- Active Demand Management (ADM)
- Active Traffic Management (ATM)
- Congestion and Safety
- Freight Management
- Incident Management
- Infrastructure Management and Operations
- Policy Consideration

With future population growth and regional mobility needs, TSM&O improvements alone would not be anticipated to address design year traffic on Florida's Turnpike (SR 91). TSM&O strategies alternatives can meet some of the focus areas such as Congestion and Safety and Infrastructure Management and Operations. AET and WWD countermeasure alternatives are two examples of strategy alternatives that can meet the Department's Vital Few initiatives to Improve Safety and Enhance Mobility

6.1.11 Utilities

The estimated impacts to utility facilities resulting from the preferred alternative are itemized by location in **Table 6-9**, along with estimated relocation costs. The estimated impacts are based on the data provided by the Utility Agency Owners (UAOs) as previously summarized. Actual utility impacts will be verified during the design phase, when a detailed survey is performed, and subsurface utility information is available.

Conservative utility facility relocation estimates were requested as part of the utility coordination process with each UAO. The total combined estimated cost for relocations is $46,300,000. Note, estimates have not been received from all UAOs at the time of this report; all estimates are based on historical data.

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 6-9: Build Impacts & Relocation 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	OFO	1157+25 to 1174+75	East R/W	#216	Not anticipated	$0
AT&T Florida	BFO	1174+75 to 1179+80	East R/W	#216	Not anticipated	$0
AT&T Florida	BT	1535+75	Crossing TPK	100 PR Copper	Not anticipated	$0
AT&T Florida	BT	1535+75 to 1549+00	West side of Service Plaza	100 PR Copper	Not anticipated	$0
AT&T Florida	OT	1933+70	West R/W	Cable	Not anticipated	$0
AT&T Florida	BFO	1945+50	East R/W	50 PR Copper	Not anticipated	$0
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	1275+00	Crossing TPK	30" HDPE	Not anticipated	$0
City of Port St. Lucie	Reclaimed WM	1275+20	Crossing TPK	30" HDPE	Not anticipated	$0
City of Port St. Lucie	Fiber	1277+40	Crossing TPK	1-2"	Not anticipated	$0
City of Port St. Lucie	FM	1289+30	Crossing TPK	8"	Not anticipated	$0
City of Port St. Lucie	WM	1289+50	Crossing TPK	24"	Not anticipated	$0
City of Port St. Lucie	WM	1470+10	Crossing TPK	16"	Not anticipated	$0
City of Port St. Lucie	FM	1477+00	Crossing TPK	12"	Not anticipated	$0
City of Port St. Lucie	FM	1537+70	Crossing TPK	6" Private (TPK)	Not anticipated	$0
City of Port St. Lucie	WM	1545+60 (SW South Macedo)	East R/W	6" to Meter assembly	Not anticipated	$0
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
Crown Castle	OFO	512+00	Crossing TPK	Aerial FOC	Not anticipated	$0
Crown Castle	OFO	1718+20	Crossing TPK	Aerial FOC	Not anticipated	$0
Florida City Gas	GM	1595+90	Crossing TPK	8" Steel	Not anticipated	$0
Florida City Gas	GM	1595+90 to 1698+20	West R/W	8" Steel	Not anticipated	$0
Florida Gas Transmission	GM	3625+00 to 3696+50	East R/W	18", 24" & 30"	Widening	$18,000,000
Florida Gas Transmission	GM	97+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
FPUA Water & Sewer	FM	1876+00	Crossing TPK	6" HDPE	Not anticipated	$0
FPL Distribution	UE	3635+40	Crossing TPK	2-6" 23kv	Not anticipated	$0
FPL Distribution	OE	174+75	Crossing TPK	1-1/OT 23kv	Not anticipated	$0
FPL Distribution	OE	731+80 R to 761+50 R	East R/W	568T 23kv	Not anticipated	$0
FPL Distribution	OE	838+00 R to 861+90 R	East R/W	1-1/OT 7.6kv	Not anticipated	$0
FPL Distribution	OE	886+00 L to 998+80 L	West R/W	1-1/OT 13kv	Not anticipated	$0
FPL Distribution	OE	1014+00	Crossing TPK	3-3/OT 13kv	Not anticipated	$0
FPL Distribution	OE	1000+00 R to 1179+50 R	East R/W	3-3/OT 23kv	Not anticipated	$0
FPL Distribution	UE	1288+30	Crossing TPK	3-6" PVC Only	Not anticipated	$0
FPL Distribution	OE	1334+80	Crossing TPK	3-3/OT 23kv	Not anticipated	$0
FPL Distribution	OE	1329+50 R to 1422+50 R	East R/W	3-3/OT 23kv	Not anticipated	$0
FPL Distribution	UE	1537+20	Crossing TPK	3-1000A XPE	Not anticipated	$0
FPL Distribution	OE	1545+00	Crossing TPK	3-568T 23kv	Not anticipated	$0
FPL Distribution	OE	1551+00	Crossing TPK	3-568T 23kv	Not anticipated	$0
FPL Distribution	OE	1530+50 L to 1562+50 L	West R/W	3-1/OT 23kv	Not anticipated	$0
FPL Distribution	UE	1811+00	Crossing TPK	3-1000A XPE	Bridge construction	$200,000
FPL Distribution	OE	1813+00 R to 1820+00 R	East R/W	3-568T 23kv	Not anticipated	$0
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	UE	1841+00	Crossing TPK	3-1000A XPE	Not anticipated	$0
FPL Distribution	OE	1988+00	Crossing TPK	3-568T 23kv	Not anticipated	$0

FPL Distribution	OE	1991+00	Crossing TPK	3-568T 23kv	Not anticipated	$0
FPL Distribution	OE	1885+50 R to 1997+25 R	East R/W	3-568T 23kv	Not anticipated	$0
FPL Distribution	OE	1889+50 L to 1996L	West R/W	3-568T 23kv	Ramp construction	$100,000
FPL Transmission	OE	512+00	Crossing TPK	230kv	Not anticipated	$0
FPL Transmission	OE	667+80	Crossing TPK	230kv	Not anticipated	$0
FPL Transmission	OE	935+00 R to 962+50 R	East R/W	230kv	Not anticipated	$0
FPL Transmission	OE	962+50	Crossing TPK	230kv	Not anticipated	$0
FPL Transmission	OE	963+00 L to 998+20 L	West R/W	230kv	Widening and ramp improvents	$3,000,000
FPL Transmission	OE	998+20	Crossing TPK	230kv	Not anticipated	$0
FPL Transmission	OE	997+30 R to 1423+00 R	East R/W	230kv	Bridge and interchange improvements	$1,800,000
FPL Transmission	OE	1432+00 R to 1441+20 R	East R/W	230kv	Not anticipated	$ 0
FPL Transmission	OE	1452+00 R to 1715+00 R	East R/W	230kv	Bridge construction	$500,000
FPL Transmission	OE	1715+00 to 1718+50	Crossing TPK	(4) 230kv	Not anticipated	$0
FPL Transmission	OE	1833+90	Crossing TPK	230kv	Bridge construction	$500,000
FPL Transmission	OE	1841+75 to 1843+00	Crossing TPK	(3) 138kv	Not anticipated	$ 0
Town of Jupiter	WM	3634+00	Crossing TPK	24" HPE, 18" HDPE	Not anticipated	$0
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	WM	724+00	Crossing TPK	24" HDPE	Not anticipated	$0
Martin County	FM	724+00	Crossing TPK	20" HDPE	Not anticipated	$0
Martin County	FM	724+00	Crossing TPK	16" HDPE	Not anticipated	$0
Martin County	RWM	724+00	Crossing TPK	18" HDPE	Not anticipated	$0
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
SE Bridge Road (SR 708)						
AT&T Florida	BT	499+00	SE Bridge Rd south side	1-4" PVC	Not anticipated	$0
AT&T Florida	BT	499+00	SE Bridge Rd south side	1-100 PR	Not anticipated	$0
AT&T Florida	BT	499+00	SE Bridge Rd south side	48 FOC	Not anticipated	$0
AT&T Florida	BT	498+90	SE Bridge Rd south side	1-4"	Not anticipated	$0
AT&T Florida	BFO	499+00	SE Bridge Rd south side	#48	Not anticipated	$0
AT&T Florida	BT	499+10	SE Bridge Rd south side	100 PR Copper	Not anticipated	$0
FPL Distribution	OE	498+75	South side crossing TPK	3-3/OT 23kv	Not anticipated	$0
Kanner Highway (SR 76)						
FPL Distribution	OE	739+25	South side crossing TPK	13kv	Bridge Construction	$100,000
AT&T Florida	BT	739+80	South side crossing TPK	9-4"	Not anticipated	$0
Comcast	Aerial	739+00	South side crossing TPK	Fiber	Not anticipated	$0
Comcast	Fiber	740+00	East side of TPK to east	1-4"	Not anticipated	$0
Crown Castle	BFO	739+50	South side crossing TPK	4-1.5” HDPE	Not anticipated	$0
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
AT&T Florida	BT	983+50	North side crossing TPK	8-4"	Not anticipated	$0
Comcast	Aerial	981+40	South side crossing TPK	N/A	Widening	Reimbursement not anticipated
Crown Castle	BFO	983+50	North side crossing TPK	2-1.5” HDPE	Not anticipated	$0

SE Becker Road						
FPL Distribution	UE	1182+20	South side crossing TPK	3-3/OT 23kv		
AT&T Florida	BFO	1179+80 R	East R/W	#216	Not anticipated	$0
AT&T Florida	BFO	1182+10	North side crossing TPK	(2) # 216, (1) # 48 & 100 PR Copper	Widening	$200,000
Florida City Gas	GM	1180+50	South side crossing TPK	6"	Not anticipated	$0
City of Port St. Lucie	Fiber	1180+20	South side east of TPK	1-2"	Not anticipated	$0
City of Port St. Lucie	Fiber	1180+20	North side crossing TPK	1-2"	Widening	Reimbursement not anticipated
City of Port St. Lucie	FM	1180+20	South side crossing TPK	20"	Not anticipated	$0
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
AT&T Florida	BFO	1426+20	South side crossing TPK	16- 4"	Not anticipated	$0
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
Crown Castle	BFO	1428+00	North side crossing TPK	4-1.5” HDPE	Widening	Reimbursement not anticipated
Crown Castle	BFO	1426+00 to 1442+00 (Bayshore Blvd)	East R/W (Bayshore Blvd)	4-1.5” HDPE	Not anticipated	$0
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
Crosstown Parkway						
City of Port St. Lucie	WM	1519+70	North side crossing TPK	18"	Not anticipated	$0
City of Port St. Lucie	Fiber	1518+90	North side crossing TPK	1-2"	Not anticipated	$0
Crown Castle	BFO	1518+00	South side crossing TPK	2-1.5” HPDE	Not anticipated	$0
St Lucie West Boulevard						
FPL Distribution	UE	1601+60	Crossing TPK	(2) 1000A XPE 23kv	Bridge construction	$100,000
AT&T Florida	BT	1600+99	Crossing TPK	6-4"	Not anticipated	$0
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
Crown Castle	BFO	1601+00	North side crossing TPK	2-1.5" HDPE	Not anticipated	$0
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
AT&T Florida	BT	1813+10 to 1820+00	East R/W	50 PR Copper	Not anticipated	$0
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	BT	1830+90	South side crossing TPK	200 PR Copper	Not anticipated	$0
AT&T Florida	BFO	1831+10	South side crossing TPK	#144	Not anticipated	$0
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.*
Aerial = aerial overhead fiber optics cable
BFO = buried fiber optics cable
BT = buried transmission line (electric)
Concrete Main = concrete water main

Fiber = fiber optics cable
FM = force main (water)
GM = gas main
OE = overhead electric cable
OFO = overhead fiber optics cable
OT = overhead transmission line (electric)
RWM = reuse water main (reuse water)
UE = underground electric
WM = water main

6.1.12 Drainage and Stormwater Management Facilities

Proposed stormwater management facilities are recommended to accommodate the proposed widening and interchange improvements. Three pond site alternatives were identified for each basin between MP 133 and MP 142. Pond sizing calculations were performed for the remainder of the basins within the project limits. Given the high seasonal groundwater table (SHGWT) throughout the project corridor, wet detention ponds are recommended. The Loxahatchee River, as well as Cypress Creek and an adjacent wetland are classified as Outstanding Florida Waters (OFW) and direct discharge to these water bodies requires an additional 50% treatment. The offsite discharges for this project are expected to occur within FDOT ROW and the additional 50% treatment criteria does not apply, since the discharges will be indirect discharges to the OFW's.

Thirty pond sites were evaluated for the project study 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, and hydraulic connectivity to the pond site. The total cost for each pond alternative was estimated using available property sales information and cost per acre land use. The preferred pond alternatives were selected based on sites that best addressed these parameters. **Table 6-10** provides a summary of the preferred pond alternatives for the pond siting portion of the project study limits.

Table 6-10: Preferred Pond Alternatives

Basin	Preferred Alternative	Pond Size	Parcel(s)	Estimated Cost
Basin 38	SMF 38-1	16.2	45-38-41-000-000-00040-1 46-38-41-000-000-00010-5	$3,946,679
Basin 39	SMF 39-3A SMF 39-3B	2.9 3.4	24-38-40-000-039-00000-0 24-38-40-000-039-00010-2	$1,727,165
Basin 40	SMF 40-1A	2.4	24-38-40-000-024-00000-0	$1,225,655
	SMF 40-1B	1.0	23-38-40-000-015-00000-0	
Basin 41	SMF 41-4	8.5	14-38-40-000-009-00000-8	$2,749,348
Basin 42	SMF 42-3	1.4 1.6	10-38-40-000-000-00020-1 10-38-40-000-000-00020-1	$1,165,353
Basin 43	SMF 43-1	1.4	10-38-40-000-000-00020-1	$518,502
Basin 44	SMF 44-1	1.2	10-38-40-000-000-00020-1	$434,119
Basin 45	SMF 45-2	3.2	10-38-40-000-000-00020-1	$1,163,929
Basin 46	SMF 46-1	2.0	03-38-40-000-000-00060-7	$577,635
Basin 47	SMF 47-2	10.6	03-38-40-000-000-00012-6	$2,628,454

**Information in the table above was extracted from the Pond Siting Report, June 2021*
**Note: SMF=Stormwater Management Facility*

From SE Becker Road to C-24 Canal, Florida's Turnpike (SR 91) is bordered by Florida Gas Transmission (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 lines to a treatment swale.

It is recommended that this approach be coordinated with FGT early on in the design phase to ensure it is a feasible option. Through the Environmental Look-Around (ELA) process, non-conventional permitting approaches were discussed with SFWMD. One opportunity is to fund a pepper farm located on SFWMD-owned land. This alternative could also provide a potential for floodplain compensation by reconnecting Cypress Creek. Another opportunity is to provide funding for a flow-through marsh on Florida Forever land to capture agricultural discharge and provide attenuation. During the design phase, these opportunities should be revisited with SFWMD to determine whether they are viable options to minimize the right-of-way needed for off-site ponds. The design phase ELA will also include coordination with adjacent golf courses for additional means of reducing the necessary right-of-way needed for off-site ponds and/or floodplain compensation.

6.1.13 Floodplain Analysis

Federal Emergency Management Agency (FEMA) floodplains are prevalent throughout the corridor. There are three regulatory floodways within the project study limits: Loxahatchee River, Roebuck Creek, and Tenmile Creek. Floodplain compensation sites will be necessary to offset the floodplain impacts from the proposed improvements and will be further analyzed in the design phase.

The anticipated floodplain impacts due to the proposed widening were estimated to determine potential impacts to the 100-year floodplains and necessary compensation volumes. The anticipated impacts are provided in **Table 6-11** and **Table 6-12**, for the Turnpike mainline and interchanges, respectively. The

impact volume from the proposed widening and interchange improvements 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.

Table 6-11: Mainline Floodplain Encroachment Estimates

Floodplain Description	Approximate Location (MP)	Approximate Encroachment Area* (acres)
Loxahatchee River	117.50 to 117.52	0.26
Cypress Creek	119.06 to 119.10	0.10
Mapps Creek and Danforth Creek	103.03 to 134.60	36.72
Bessey Creek	134.63 to 135.76	9.04
St. Lucie Canal / Roebuck Creek / Okeechobee Waterway (C-23 Canal)	135.76 to 137.08	5.28
Blakeslee Creek	138.73 to 141.28	10.20
C-24 Canal	142.22 to 142.27	0.40
Ten Mile Creek	151.97 to 152.82	6.80

**Information in the table above was extracted from the Location Hydraulics Report, June 2021.*
*Note: Approximate encroachment area does not include floodplain encroachments at interchange locations

Table 6-12: Interchange Floodplain Encroachment Estimates

Interchange	Floodplain Description	Approximate Encroachment Area (acres)
SW Martin Highway (SR 714)	Danforth Creek	4.65
SE Becker Road	Winters Creek	0.12
SW Port St. Lucie Boulevard	None	N/A
Crosstown Parkway	None	N/A
W Midway Road	None	N/A
Okeechobee Road (SR 70)	None	N/A

**Information in the table above was extracted from the Location Hydraulic Report, June 2021.*

The transverse floodplain impacts associated with the proposed culvert and box culvert extensions and bridge widening 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 are anticipated at Ten Mile Creek.

The existing profile grades were used to estimate the floodplain impacts. The existing Turnpike mainline does not meet current criteria for minimum gutter grade and some locations exhibit a 100-year floodplain

elevation above the existing roadway footprint. The estimated floodplain encroachments may increase significantly if the proposed improvements require substantial modifications to the profile to meet all FTE requirements. Alternatively, additional conveyance could be added to provide a hydraulically equivalent post-development condition. For example, a large culvert could be proposed under the Turnpike mainline with an upstream weir set at the existing roadway profile grade. When the proposed profile is raised, the culvert would mimic the overtopping of the existing roadway without overtopping the proposed roadway or impacting the existing floodplain elevation.

6.1.14 Transportation Management Plan

The preferred alternative includes widening Florida's Turnpike (SR 91) from the existing four-lane divided expressway facility to an eight-lane divided expressway facility. There are multiple overpass structures that will be impacted by the widening of Florida's Turnpike (SR 91). Transportation Management Plan guidelines are developed in order to ensure safe and efficient transportation operations continue during construction. Below is a detailed Transportation Management Plan for Florida's Turnpike (SR 91) mainline and each of the respective overpass structures that will be impacted by the proposed project.

<u>Florida's Turnpike (SR 91) Mainline</u>

- Any overpass bridge over Florida's Turnpike (SR 91) mainline must be reconstructed prior to the mainline widening construction. The details below describe how traffic will be maintained on the mainline and the crossroads while reconstructing each of the overpass structures.
- Once the overpass structures are reconstructed, construct a portion of the new southbound lanes (construct the three outside lanes and the outside shoulder) and place a temporary barrier wall along the eastern side of the new pavement to allow for the space noted below.
- Shift the two southbound lanes over the new southbound pavement providing a 12-foot-wide outside shoulder two 12-foot-wide travel lanes, and a four-foot wide inside shoulder.
- Complete the construction of the ultimate southbound lanes, inside shoulder and the ultimate median barrier wall including the inside shoulder of the ultimate northbound lanes.
- Relocate the two northbound lanes over the new southbound pavement so that the four lanes (two in each direction) will be placed over the ultimate southbound pavement. Each of the two lanes will provide a two-foot wide inside shoulder, an 11-foot-wide travel lane, a 12-foot-wide travel lane, and a 10-foot-wide paved outside shoulder.
- Widen and/or reconstruct the four northbound travel lanes.
- Switch traffic to be in its ultimate configuration.

<u>SE Bridge Road and SW Kanner Highway Overpasses</u>

- Shift the four travel lanes on the crossroad to be concentrated on the northern portion of the existing overpass bridge.
- Remove as much of the existing overpass bridge, along its south side, as possible
- Cut off a portion of the existing sloped revetment on the west side and place a temporary wall to retain the existing earthwork.
- Shift the southbound two lanes further west so they will be placed in between the proposed median pier and the wall at the western abutment.

- Construct the southern portion of the proposed median pier and abutments.
- Construct the beams and deck over the new center pier and abutments along the south side of the overpass.
- Shift the two eastbound lanes of the crossroad over the new portion of the proposed bridge and leave the two westbound lanes over the existing bridge along its north side.
- Remove more width from the existing bridge along its southern side.
- Construct the additional bridge width along the north side of the proposed bridge.
- Shift the two westbound lanes over the new portion completed in the middle.
- Remove the remainder of the existing bridge and complete the proposed bridge.

Thomas B. Manuel Bridge

- Remove a portion of the existing southbound bridge, from its east side, enough to widen the northbound bridge to the inside. The southbound bridge is wide enough to shift the two southbound lanes to the west and remove a portion along the east side.
- Widen the existing northbound bridge to the inside as required.
- The clear width of the final northbound bridge will be 72 feet wide. Place the four lanes, two southbound and two northbound, on the northbound bridge.
- The bridge typical section would include a 10-foot outside shoulder, 12-foot southbound lane, 11-foot southbound lane, two-foot inside shoulder, two-foot barrier, two-foot inside shoulder, 11-foot northbound lane, 12-foot northbound lane, 10-foot outside shoulder, which equals 72 feet total width.
- Remove and replace the southbound bridge.

SW Martin Highway Ramp Overpass (South of SW Martin Highway Overpass)

- Cutoff the sloped revetment on the west side and place a temporary wall so that one ramp lane will pass under the west side span.
- Place temporary pavement for the southbound on loop-ramp so its lane will pass under the existing western span of the overpass. Continue the southbound on-ramp lane, separated from the mainline, until Sta. 963+00 and then taper it toward the southbound mainline lanes.
- Shift the mainline southbound lanes closer to the median barrier, with two foot inside shoulder.
- Construct the proposed ramp overpass and its pier, the center pier will be on the west side of the existing mainline lanes.
- Remove the existing ramp overpass bridge.

SW Martin Highway Overpass

- Shift the mainline southbound lanes east. Provide a two-foot-wide inside shoulder only.
- Construct the proposed median pier. It will not impact the southbound traffic.
- Shift the four lanes on crossroad to be concentrated on the northern portion of the existing bridge.
- Remove as much of the existing overpass bridge, along its south side, as possible.
- Shift the southbound two lanes further west so they will be placed in between the proposed median

pier and the wall at the western abutment.
- Construct the southern portion of the proposed median pier and abutments.
- Construct the beams and deck over the new center pier and abutments along the south side of the overpass.
- Shift the two eastbound lanes of the crossroad over the new portion of the proposed bridge and leave the two westbound lanes over the existing bridge, along its north side.
- Remove more width from the existing bridge along its southern side.
- Construct the additional bridge width along the north side of the proposed bridge.
- Shift the two westbound lanes over the new portion completed in the middle.
- Remove the remainder of the existing bridge and complete the proposed bridge.

SE Becker Road Overpass

- Shift the southbound two lanes further west so they will be placed in between the proposed median pier and the wall at the western abutment.
- Shift the lanes on the crossroad overpass, to the extent possible, to the south side and remove the portion of the existing overpass bridge along its north side.
- Construct the northern portion of the proposed median pier and abutments.
- Construct the beams and deck over the new center pier and abutments along the north side of the overpass.
- Shift the two westbound lanes of the crossroad over the new portion of the proposed bridge and leave the two eastbound lanes over the existing bridge, along its south side.
- Remove more width from the existing bridge along its northern side.
- Construct the additional bridge width along the south side of the proposed bridge.
- Shift the two eastbound lanes over the new portion completed in the middle.
- Remove the remainder of the existing bridge and complete the proposed bridge.

SW Port St. Lucie Boulevard

- Shift the southbound two lanes further west so they will be placed in between the proposed median pier and the wall at the western abutment.
- Shift the lanes on the crossroad overpass, to the extent possible, to the south side and remove the portion of the existing overpass bridge along its north side.
- Construct the northern portion of the proposed median pier and abutments.
- Construct the beams and deck over the new center pier and abutments along the north side of the overpass.
- Shift the two westbound lanes of the crossroad over the new portion of the proposed bridge and leave the two eastbound lanes over the existing bridge, along its south side.
- Remove more width from the existing bridge along its northern side.
- Construct the additional bridge width along the south side of the proposed bridge.
- Shift the two eastbound lanes over the new portion completed in the middle.
- Remove the remainder of the existing bridge and complete the proposed bridge.

Loop Ramp for SW Port St. Lucie Boulevard

- Construct the new southbound on loop-ramp in the northwest quadrant of the SW Port St. Lucie Blvd interchange as part of the SW Port St. Lucie Boulevard construction. Thus, the existing southbound on ramp will no longer be needed.
- Shift the mainline southbound lanes further west and closer to the existing pier on the west side. Keep the southbound lanes shifted west so that they will pass on the west side of the proposed overpass pier.
- Construct the proposed ramp overpass and its pier. The center pier will be on the east side of the southbound mainline lanes.
- Remove the existing ramp overpass bridge.

Crosstown Parkway

- Construct the new southbound pavement where it will be shifted westward to create more room in the median.
- Construct the new ramps in the median without impacting the Crosstown Parkway overpass bridge.
- The new ramp bridge over the southbound lanes will be constructed via traffic pacing.

St. Lucie West Boulevard

- The proposed median pier is at the same alignment of the existing pier.
- Shift the three westbound lanes toward the inside parapet and keep a two-foot-wide inside shoulder, 31 feet for three travel lanes, a two-foot-wide outside shoulder, and a temporary barrier. Remove the extra bridge width along the north side.
- Construct a portion of the proposed bridge along the north side of the existing bridge, keeping a five-foot-wide gap in between for construction. The new bridge portion being constructed will allow for three westbound lanes and a pedestrian crossing separated by a barrier wall. The new bridge portion will be approximately 51 feet wide.
- Shift the three westbound lanes and the pedestrian walkway to be over the new bridge on the north side and remove the rest of the existing westbound bridge.
- Construct more of the proposed bridge in the median, along the north side of the existing eastbound bridge, leaving a five-foot-wide gap between the existing eastbound bridge and the new construction.
- Shift the three eastbound lanes over the new bridge portion constructed in the median. The new bridge portion will include a two-foot-wide inside shoulder, 31 feet for three travel lanes, a two-foot-wide outside shoulder, and a temporary barrier.
- Remove the existing eastbound bridge and complete the construction of the proposed bridge.

W Midway Road Overpass

- This overpass will be constructed by others before the construction for this project begins.
- The proposed center pier is outside of the existing mainline pavement, on the west side, and thus, the pier and abutments will not conflict with the mainline traffic.

I-95 Overpass at MP 152

- Remove a portion of the existing sloped revetment on each side and construct retaining walls as shown in the plans.
- Widen the Turnpike northbound and southbound lanes to the outside.
- The I-95 Bridge will remain as is.

Florida's Turnpike (SR 91) over Okeechobee Road (SR 70)

- Construct the proposed southbound off ramp located north of Okeechobee Road (SR 70), on the west side, and open it to traffic.
- Shift Florida's Turnpike, northbound and southbound lanes, to the extent possible, to the east.
- Remove the remaining unused portion of the existing bridge over Okeechobee Road (SR 70), on the west side.
- Construct the new portion of the proposed bridge on the west side, enough for two southbound mainline lanes and for the southbound on-ramp.
- Construct the southbound on-ramp and provide a temporary connection between the new southbound on-ramp and the existing southbound on-ramp, near Sta. 1949+00.
- Open the new southbound on-ramp to traffic, close the existing ramp overpass, and remove the bridge.
- Shift the two southbound lanes over onto the newly completed portion of the bridge over Okeechobee Road (SR 70) bridge, on the west side.
- Remove the middle portion of the existing bridge over Okeechobee Road (SR 70) and construct the proposed bridge portion in its place.
- Shift the two northbound Turnpike mainline lanes onto the middle portion of the proposed bridge.
- Remove the remaining portion of the existing bridge over Okeechobee Road (SR 70), on the east side, and construct the remaining portion of the proposed bridge in its place.

6.1.15 Special Features

The proposed mainline widening and interchange improvements are anticipated to lead to an increase in noise levels and could potentially impact adjacent properties. A *Noise Study Report*, March 2022 was prepared and identified various locations where noise barriers were determined to be potentially feasible and reasonable to mitigate anticipated increases in traffic noise levels. **Table 6-13** provides a summary of locations where noise walls may be potentially feasible and reasonable. These locations will be reassessed during the project design phase to ensure they are still feasible and reasonable, including a determination that they are constructible and do not incur additional construction costs that render them no longer cost reasonable.

Table 6-13: Potentially Feasible and Reasonable Noise Barrier Locations

Noise Barrier	Travel Direction	Height (ft)	Barrier Type	Begin Station	End Station
1	Southbound	22	Right-of-Way	742+00.00	774+40.00
2	Northbound	14	Shoulder	841+80.00	931+80.00
3	Northbound	22	Right-of-Way	994+20.00	1025+20.00
4	Northbound	14	Shoulder	1023+00.00	1035+00.00
5	Northbound	14	Shoulder	1109+80.00	1138+80.00
6	Southbound	22	Right-of-Way	1184+20.00	1249+40.00
7	Southbound	8	Shoulder	1248+10.00	1252+90.00
8	Southbound	22	Right-of-Way	1251+60.00	1275+60.00
9	Southbound	8	Shoulder	1274+40.00	1278+90.00
10	Southbound	22	Right-of-Way	1277+60.00	1287+90.00
11	Northbound	14	Shoulder	1285+00.00	1335+00.00
12	Southbound	8	Shoulder	1286+10.00	1291+70.00
13	Southbound	22	Right-of-Way	1290+60.00	1382+20.00
14	Northbound	14	Shoulder	1370+00.00	1382+20.00
15	Southbound	8	Shoulder	1378+90.00	1387+90.00
16	Northbound	8	Shoulder	1382+20.00	1385+20.00
17	Northbound	14	Shoulder	1385+20.00	1413+40.00
18	Southbound	22	Right-of-Way	1386+30.00	1422+30.00
19	Northbound	22	Right-of-Way	1412+40.00	1419+80.00
20	Southbound	22	Right-of-Way	1447+00.00	1516+50.00
21	Southbound	22	Right-of-Way	1542+00.00	1595+20.00
22	Northbound	14	Shoulder	1603+70.00	1713+50.00
23	Southbound	22	Right-of-Way	1617+70.00	1704+90.00
24	Northbound	14	Shoulder	1719+20.00	1796+00.00
25	Southbound	22	Right-of-Way	1726+60.00	1789+70.00

**Information in the table above was extracted from the Noise Study Report, March 2022.*

6.1.16 Design Variations and Design Exceptions

In constrained situations, it may be necessary to deviate from the standard criteria used in the design process. Seven design variations and one design exception have been identified for the preferred alternative. The proposed design variations include border width, lateral offset, horizontal curve length, inside and outside shoulder width, cross slope, and bicycle facilities. The proposed design exception is for ramp design speed. **Table 6-14** provides a summary of the proposed design variations and exceptions. These variations will be processed by Florida's Turnpike Enterprise (FTE).

Table 6-14: Proposed Design Exceptions and Variations

Criteria	Location	Proposed Scenario	Standard	Reference	Formal Variation or Project Design Variation Memorandum
Border Width - V	SR 91 Mainline MP 144.5 to MP 146	NB Typ. 92 ft, Min. 90 ft SB Typ. 92 ft, Min. 88 ft	94 ft	FDM Section 211.6	Project Design Variation Memorandum
Lateral Offset - V	Bridge abutments for Crosstown Parkway Bridge MP 144.8 and I-95 Bridge MP 152	≤ 33 ft	Outside Clear Zone (36 ft)	FDM Table 215.2.2	Project Design Variation Memorandum
Horizontal Curve Length (Ramps) - V	1) SW Martin Highway SB Off Ramp 2) SW Port St. Lucie NB Off Ramp 3) W Midway Road NB On Ramp	1) 344 ft 2) 378 ft 3) 307 - 323 ft	400 ft	FDM Table 211.7.1	Project Design Variation Memorandum
Ramp Design Speed - E	NB On-Ramp W Midway Road Interchange	30 mph	35 mph	AASHTO Table 10-1	N/A
Median (or Left) Shoulder Width - V	Under overpass structures at MP 125.5, 130.0, 134.3, 134.6, 138.5, 143.0, 143.3, 144.8, 146.4	10 ft full paved width	12 ft full width, 10 ft paved	FDM Table 211.4.1	Formal Design Variation
Outside Shoulder Width - V	SW Martin Highway Interchange - Ramp A	10 ft full paved width	12 ft full width, 10 ft paved	FDM Table 211.4.1	Formal Design Variation
Shoulder Cross Slope - V	Crosstown Parkway Ramp, MP 144.8 and Toll Gantry	0.02	0.05	FDM Section 211.4.2	Formal Design Variation
Bicycle Facilities - V	SW Port St. Lucie Boulevard	No on-street bicycle facility	Bicycle facility on all SHS roadways	FDM Section 223.1	Project Design Variation Memorandum

**V = Design Variation, E = Design Exception*

6.1.17 Cost Estimates

The construction cost for the preferred alternative was developed using the FDOT Long Range Estimate (LRE) application. The estimated total project cost including, construction costs, right-of-way costs, and professional services is $1,773,958,000. Refer to **Appendix B** for the full LRE cost estimate. **Table 6-15** provides a summary of the estimated project costs.

Table 6-15: Estimated Total Project Costs

Road	Construction	Right-of-way	Professional Services	Grand Total
Mainline				
Florida's Turnpike (SR 91)	$1,161,995,000	$5,200,000	$220,779,000	$1,387,974,000
Interchanges				
SW Martin Highway (SR 714) – Alt. 7B (EI)	$87,083,000	$12,700,000	$16,546,000	$116,329,000
SE Becker Road – Alt. 1 (EI)	$35,767,000	$1,200,000	$6,796,000	$43,763,000
SW Port St. Lucie Boulevard – Alt. 2 (EI)	$59,782,000	$16,700,000	$11,359,000	$87,841,000
Crosstown Parkway – Alt. 3 (NI)	$35,059,000	$1,200,000	$6,661,000	$42,920,000
W Midway Road – Alt. 1 (NI)	$31,104,000	$6,500,000	$5,910,000	$43,514,000
Okeechobee Road (SR 70) – Alt. 4 (EI)	$37,745,000	$6,700,000	$7,172,000	$51,617,000
Total Project Cost	$1,448,535,000	$50,200,000	$275,223,000	$1,773,958,000

EI = Existing Interchange, NI = New Interchange, Note: Estimated costs are rounded to the nearest thousandth.

6.1.18 Cost Risk and Value Engineering

A Cost Risk and Value Engineering (CRAVE) study was conducted from June 17 through June 26, 2020. The PD&E team presented an overview of the project and results of the February 27 and March 5, 2020 Public Information Meetings to the CRAVE team on June 22, 2020 and were available throughout the week for questions. The CRAVE team developed 30 Value Engineering Recommendations and presented their findings to Florida's Turnpike Enterprise (FTE) Management and the project team on June 26, 2020. On July 22, 2020, a multi-disciplinary team composed of the PD&E study team and Turnpike staff concurred on the final resolutions presented. On September 8, 2020, a presentation was made to senior FTE Management and staff to review the proposed recommendations.

Table 6-16 summarizes the results of each of the 30 VE recommendations presented by the CRAVE Team. VE resolutions are identified as "Yes" for accepted into the PD&E phase, "No" for not recommended for implementation, or "Design Phase" for advancement to the next phase for further investigation and/or refinement. For more information, please see the *Cost Risk Assessment & Value Engineering Study (CRA+VE – Final Report) (*October 2020).

Table 6-16: CRAVE Recommendations

VE Comment	VE Recommendation	Resolution Recommendation
CE-01	Minimize Impervious Surfaces at Interchange Ramp Locations	This recommendation should be further evaluated during the design phase – (Design Phase)
CE-02	Re-purpose Existing Toll Booth Locations to Mitigate Stormwater Treatment Requirements	This recommendation should be further evaluated during the design phase – (Design Phase)
CE-03	Consider Underground Stormwater Retention Systems	This recommendation should not be considered for implementation – (No)
CE-09	Locate Ponds Under Turnpike Alignment to Minimize Right-of-Way Acquisitions	This recommendation should be further evaluated during the design phase – (Design Phase)
CE-29	Use Infiltration Swales	This recommendation should be further evaluated during the design phase – (Design Phase)
CE-30	Provide Stormwater Treatment Swales	This recommendation should be further evaluated during the design phase – (Design Phase)
CE-32	Construct Linear Ponds Outside Travel Area Within Existing Right-of-Way	This recommendation should be further evaluated during the design phase – (Design Phase)
CE-36	Shift South End Logical Terminus North to Mile Post 118.5	This recommendation should not be considered for implementation – (No)
RG-08	Build Crossover Between I-95 and Turnpike at Mile Post 132 and Mile Post 152	This recommendation should not be considered for implementation – (No)
RG-15	Use High Friction Course Along Ramps and Tight Curves	This recommendation should be further evaluated during the design phase – (Design Phase)
RG-16	Build Concrete Pavements Along Ramps and Tight Curves	This recommendation should be further evaluated during the design phase – (Design Phase)
RG-20	Incorporate Incidence Pull Off Areas for Maintenance Personnel and Safety	This recommendation should be further evaluated during the design phase – (Design Phase)
RG-23	Increased Standard Pavement Thickness From 4” to 7” to Reduce Maintenance and Reconstruction	This recommendation should be further evaluated during the design phase – (Design Phase)
RG-24	Utilize a 25 Year Pavement Life Cycle Analysis	This recommendation should be further evaluated during the design phase – (Design Phase)
ST-01	Reduce Clear Zone from the Culvert Headwall to Edge of Shoulder	This recommendation should not be considered for implementation – (No)
ST-02	Use Deeper Girders at Loxahatchee Bridge to Reduce Girder Requirements	This recommendation should be further evaluated during the design phase – (Design Phase)
ST-03	Use Deeper Girders at Canal C-23 To Reduce Girder Requirements	This recommendation should be further evaluated during the design phase – (Design Phase)
ST-04	Use Deeper Girders at Canal C-24 To Reduce Girder Requirements	This recommendation should be further evaluated during the design phase – (Design Phase)

ST-08	Use MSE Walled Abutments to Eliminate End Spans at Bridge Over FEC RR And Glades Road	This recommendation should be considered for implementation – (Yes)
ST-09	Reduce Inside Shoulder to 10’ Along the Project Corridor	This recommendation should not be considered for implementation – (No)
ST-13	Utilize Barrier Wall to Reduce Clear Zone at Okeechobee Road Therefore Reducing Span Length and Depth of Superstructure	This recommendation should not be considered for implementation – (No)
ST-15	Re-align Westward FGT Line Farthest East to Reduce Clearance and Span Requirements at Bridge Road	This recommendation should not be considered for implementation – (No)
ST-16	Re-align Westward FGT Line Farthest East to Reduce Clearance and Span Requirements at Kanner Highway	This recommendation should not be considered for implementation – (No)
ST-17	Reduce Horizontal Clearance from 36’ to 12’ by Using Barrier Walls to Reduce Span Requirements at Bridge Road	This recommendation should not be considered for implementation – (No)
ST-18	Reduce Horizontal Clearance From 36’ to 12’ by Using Barrier Walls to Reduce Span Requirements at Kanner Highway	This recommendation should not be considered for implementation – (No)
ST-22	Place Intermediate Pier to Reduce Depth of Beams at Okeechobee Road	This recommendation should be evaluated further during the design phase – (Design Phase)
ST-24	Use Box Culvert to Span Canal and Eliminate Main Span Arrangement at Crosstown Parkway Ramp	This recommendation should be considered for implementation – (Yes)
ST-25	Reduce Horizontal Clearance Requirement at Crosstown Parkway Ramp to Reduce Main Span Length	This recommendation should be considered for implementation – (Yes)
ST-27	Repurpose Existing Substructure to Accommodate New Superstructure at Loxahatchee River Bridge	This recommendation should be further evaluated during the design phase – (Design Phase)
ST-31	Selectively Support Approach Slabs on Piles to Minimize Settlement and Improve Rideability	This recommendation should not be implemented – (No)

6.2 Summary of Environmental Impacts of the Preferred Alternative

6.2.1 Future Land Use

Future land use within a one-mile buffer of the project corridor was assessed to identify their anticipated future composition. The future land use within this buffer for each of the three project counties are described below.

Palm Beach County

According to the Future Land Use Map (FLUM), Palm Beach County is anticipated to be comprised primarily of conservation land and residential low density, within the project study limits.

Martin County

According to the Future Land Use Map (FLUM), Martin County is anticipated to be comprised of a wide variety of land uses within the project study limits. From the Palm Beach County line to SW Kanner Highway, the primary land use consists of agricultural land with a small amount of conservation land. From north of SW Kanner Highway to the Martin County line, there is a range of land uses adjacent to Florida's Turnpike (SR 91) including, industrial, conservation, recreational, agricultural, and residential land uses.

St. Lucie County

According to the Future Land Use Map (FLUM), St. Lucie County is anticipated to be comprised of a wide variety of land uses within the project study limits. From the Martin County line to W Midway Road, the land adjacent to Florida's Turnpike (SR 91) is anticipated to be comprised primarily of residential land use. Between W Midway Road and Okeechobee Road (SR 70), a mixture of industrial, mixed use, special district, and transportation/utilities land uses is anticipated.

6.2.2 Recreational Areas

Between Indiantown Road (SR 706) and north of Okeechobee Road (SR 70), there are numerous parks, preserves, and natural areas within the project study area. The project is within or 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, east of 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. 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 which has SW Cameo Boulevard to its west, Florida's Turnpike (SR 91) mainline to its east, and Crosstown Parkway to its south. The proposed fishhook ramp will bisect the adventure park parcel. 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 W Midway Road crossing. This park abuts the existing mainline right-of-way and construction of a new interchange with W Midway Road will result in impacts to this park. Construction of a new southbound on-ramp to Florida's Turnpike (SR 91) from W Midway Road will require additional right-of-way from this park; however, these impacts are within a proposed park buffer zone 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.

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.

6.2.3 Cultural Resources

No archaeological sites were identified within the archaeological area of potential effect (APE). Background research, a pedestrian survey, and extensive subsurface testing conducted during the project area 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) 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, as well as past testing conducted within the current APE, indicated 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, eight road segments, one railroad segment, six buildings, and one bridge within the current project area. The survey also resulted in the identification of nine newly identified buildings, 28 newly identified bridges, and a newly identified segment of Florida's Turnpike within the project area.

All but two of the historic linear resources (St. Lucie Canal and FEC Railway - Lake Harbor Branch) have either been previously determined ineligible for the National Register of Historic Places (National Register) or are considered ineligible for the National Register based on the results of the project survey.

Portions of the St. Lucie Canal and FEC Railway - Lake Harbor Branch 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 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 the Florida Turnpike that are located within the 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 field 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.

6.2.4 Wetlands

6.2.4.1 Wetland and Surface Water Impacts

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 man-made streams and waterways, reservoirs, mixed wetland hardwoods, exotic wetland hardwoods, cypress, hydric pine, wetland forested mixed, wetland scrub, and freshwater marshes. **Table 6-17** shows the total wetland and surface water impacts by Florida Land Use, Cover and Form Classification System (FLUCFCS) classification for the preferred alternative. 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 wetland functional units. Uniform Mitigation Assessment Methodology (UMAM) scores and functional loss are presented in **Table 6-18**. These scores are subject to agency review and may change during the permitting process.

Table 6-17: Preferred Alternative Wetland and Other Surface Water Impacts

Impact Type	FLUCFCS Classification[1]	FLUCFCS Description	USFWS Classification[2]	Preferred Alternative Impact Acreage
Surface Waters	510	Streams and Waterways	E1UBLx, PEM1C, PEM1Cx, PEM1Hx, PFO1Cx, PSS1Cx, PSS1Hx, PUB2Cx, PUB2Hx, R2UB2Hx	307.81
	511	Natural River, Stream, Waterway	E1UBL, PFO1/4C, R2UB2H	9.30
	530	Reservoirs	L1UBHx, PEM1Hx, PSS1Hx, PUB2Hx	50.03
			Total Natural Other Surface Water Impacts[3]	**9.30**
			Total Other Surface Water Impacts	**367.14**
Wetlands	617	Mixed Wetland Hardwoods	PFO1C, PFO1R	6.61
	619	Exotic Wetland Hardwoods	PFO3C	2.93
	621	Cypress	PFO2C, PFO2F	1.33
	625	Wet Pinelands Hydric Pine	PFO4C	1.93
	630	Wetland Forested Mixed	PFO1/4C	1.31
	631	Wetland Scrub	PSS1C, PSS1Cx	48.44
	641	Freshwater Marshes	PEM1B, PEM1C, PEM1Cx	0.12
			Total Wetland Impacts	**62.67**
			Total Wetland and Natural Other Surface Water Impacts	**71.97**
			Total Wetland and Other Surface Water Impacts	**429.81**

[1]Florida Land Use Cover and Forms Classification System (FLUCFCS)(FDOT 1999)

[2]Cowardin, et. al. 1979

[3]Natural Other Surface Waters include Natural Rivers, Streams, and Waterways (FLUCFCS 511)

**Information in the table above was extracted from the Natural Resources Evaluation, May 2021.*

Table 6-18: Estimated UMAM Functional Loss from Wetland and Natural Other Surface Water Impacts

FLUCFCS Classification[1]	FLUCFCS Description	USFWS Classification[2]	UMAM Delta	Total Impact Acres	Total Functional Loss
511	Natural River, Stream, Waterway	E1UBL, PFO1/4C, R2UB2H	0.67	9.30	6.23
617	Mixed Wetland Hardwoods	PFO1C, PFO1R	0.53	6.61	3.50
619	Exotic Wetland Hardwoods	PFO3C	0.40	2.93	1.17
621	Cypress	PFO2C, PFO2F	0.57	1.33	0.76
625	Wet Pinelands Hydric Pine	PFO4C	0.57	1.93	1.10
630	Wetland Forested Mixed	PFO1/4C	0.57	1.31	0.75
631	Wetland Scrub	PSS1C, PSS1Cx	0.53	48.44	25.67
641	Freshwater Marshes	PEM1B, PEM1C, PEM1Cx	0.57	0.12	0.07
			Total	**71.97**	**39.25**

[1]*Florida Land Use Cover and Forms Classification System (FLUCFCS)(FDOT 1999)*
[2]*Cowardin, et. al. 1979*
**Information in the table above was extracted from the Natural Resources Evaluation, May 2021.*

6.2.4.2 Mitigation

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 of Chapter 373, F.S., and 22 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.

In accordance with EO 11990, the FTE has undertaken all actions to minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities. Nonetheless, the FTE has determined that there is no practicable alternative to construction impacts occurring in wetlands. The proposed project will have no significant short-term or long-term adverse impacts to wetlands because any unavoidable impacts to wetlands will be mitigated to achieve no net loss of wetland function.

6.2.5 Protected Species and Habitat

The project corridor and adjacent areas were was evaluated for the presence of federal and/or state protected species and their habitat in accordance with Part 2, Chapter 16 of the PD&E Manual. **Tables 6-19** and **6-20** 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 to offset any potential impacts to each species.

Table 6-19: Federal Protected Species Effect Determinations

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

**Information in the table above was extracted from the Natural Resources Evaluation, May 2021.*

Table 6-20: State Protected Species Effect Determinations

Project Effect Determination	State Listed Species
"No effect anticipated"	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 abscissa)*
	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)*
	Scrub Bluestem (*Schizachyrium niveum)*
	Ray Fern (*Schizaea pennula)*
	Southern Ladies'-tresses (*Spiranthes torta)*
	Banded Wild-pine (*Tillandsia flexuosa)*
	Scentless Vanilla (*Vanilla mexicana)*
	Redmargin Zephyrlily (*Zephyranthes simpsonii)*
"No adverse effect anticipated"	Hand Fern (*Ophioglossum palmatum)*
	Toothed Maiden Fern (*Thelypteris serrata)*
	Gopher Tortoise (*Gopherus polyphemus)*
	Florida Pine Snake (*Pituophis melanoleucus mugitus)*
	Florida Sandhill Crane (*Antigone canadensis pratensis)*
	Florida Burrowing Owl (*Athene cunicularia floridana)*
	Little Blue Heron (*Egretta caerulea)*
	Tricolored Heron (*Egretta tricolor)*

	Southeastern American Kestrel (*Falco sparverius paulus)*
	Roseate Spoonbill (*Platalea ajaja)*
	Least Tern (*Sternula antillarum)*

**Information in the table above was extracted from the Natural Resources Evaluation, May 2021.*

6.2.6 Essential Fish Habitat

Construction of the proposed project 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. **Table 6-21** provides a summary of the estimated EFH impacts due to the preferred alternative. 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 forest wetlands. Potential impacts to EFH, as well as differentiation between direct and indirect impacts, will be further assessed at each waterway crossing as the project proceeds through the design process.

EFH impacts resulting from the construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 22 U.S.C 1344. Compensatory mitigation for this project will be completed through the use of mitigation banks and any other mitigation options to satisfy state and federal requirements. Available opportunities to replace EFH functions within systems with similar salinity regimes, connectivity, and habitat types will be investigated and evaluated for implementation during the project design phase.

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 transportation 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 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 habitat and the salinity regimes do not meet the requirements for the majority of 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 elevational position 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 the relatively minor impact to EFH within its local surroundings, resulting in no representative species or life stages of a species being significantly impacted. 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.

Table 6-21: Estimated Essential Fish Habitat Impacts

Waterway Crossing	Bridge No.	Estimated EFH Impact Acreage by FLUCFCS Habitat Type					Estimated EFH Impact Acreage	
		Surface Waters		Wetlands			Surface Waters	Wetlands
		510	511	617	621	630		
Loxahatchee River	930241		0.08		0.14		0.08	0.14
Unnamed Tributary to Cypress Creek	Culvert		1.24				1.24	0.00
Cypress Creek	890079					0.21	0.00	0.21
Roebuck Creek	890066 and 891000			1.74			0.00	1.74
St. Lucie Canal (C-44A Canal)			0.23				0.23	0.00
Unnamed Tributary to Mapps Creek	Culvert	0.70		0.06			0.70	0.06
Rim Ditch (C-23A Canal)	940049 and 940082	0.25					0.25	0.00
Tenmile Creek	940072		0.11	1.34			0.11	1.34
Estimated EFH Impacts							**2.61**	**3.49**
Total Estimated EFH Impacts							**6.10**	

**Information in the table above was extracted from the Natural Resources Evaluation, May 2021.*

6.2.7 Highway Traffic Noise

A traffic noise analysis documented in a PD&E Noise Study Report (NSR) (dated March 2022) 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 predicted at 3,134 receptor points, representing 5,091 residences, and 203 special use receptor points. 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 6-22** below indicates that noise barriers could potentially provide reasonable and feasible noise abatement for 1,366 of the 1,518 impacted residences, as well as provide a 5 dB(A) noise reduction benefit to 1,493 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 6-22**.

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 2,859 residences with predicted noise levels that approach or exceed the NAC. **Table 6-22** 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 reasonableness criterion with a preliminary cost of under $42,000 per benefited receptor. 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.

Table 6-22: 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 and 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	1138+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 & 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 Clug and Monoco Court residences (CNE NB13, NB14, & NB15)	101	1719+20	1796+00	14	7,700	SH	$3,234,000	101	331	$9,770
NOISE BARRIERS SOUTHBOUND SIDE OF TURNPIKE										
Wildwood Estates & Sunshine Parkway Manor (CNE SB05)	48	742+00	774+40	22	3,350	ROW	$2,211,000	47	64	$34,547

Port St Lucie - Sections 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	$13,153,200	154	432	$30,447
		1184+20	1249+40	22	6,540	ROW				
		1251+60	1275+60	22	2,400	ROW				
		1277+60	1287+40	22	980	ROW				
		1378+90	1387+90	8	900	SH				
		1286+10	1291+70	8	560	SH				
		1248+10	1252+90	8	480	SH				
		1274+40	1278+90	8	450	SH				
Port St Lucie – Section 5 (CNE SB 11)	48	1386+30	1422+30	22	3,600	ROW	$2,376,000	45	66	$36,000
Port St Lucie – Section 9 (CNE SB12 & CNE SB13)	97	1447+00	1516+50	22	7,280	ROW	$4,804,800	96	172	$27,935
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, & Paradise Villas (CNE SB15)	104	1617+70	1704+90	22	8,720	ROW	$5,755,200	88	178	$32,333
Vizcaya Falls & Winterlakes (CNE SB16 & CNE SB17)	183	1726+60	1789+70	22	6,260	ROW	$4,131,600	165	289	$14,296

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.

4 SH = At outside edge of shoulder

5 ROW = At Right-of-Way line

6.2.8 Contamination

Based on the Level I contamination screening evaluation, a total of 108 mainline potential contamination sites and 38 pond potential contamination sites were identified within the project limits. Potential contamination sites include gas stations, petroleum spills, electrical substations, railroads, agricultural lands, and landfills. **Tables 6-23** and **6-24** present a summary of the risk ratings assigned to these potential contamination sites/facilities:

Table 6-23: Summary of Risk Ratings - Mainline

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

Table 6-24: Summary of Risk Ratings – Ponds

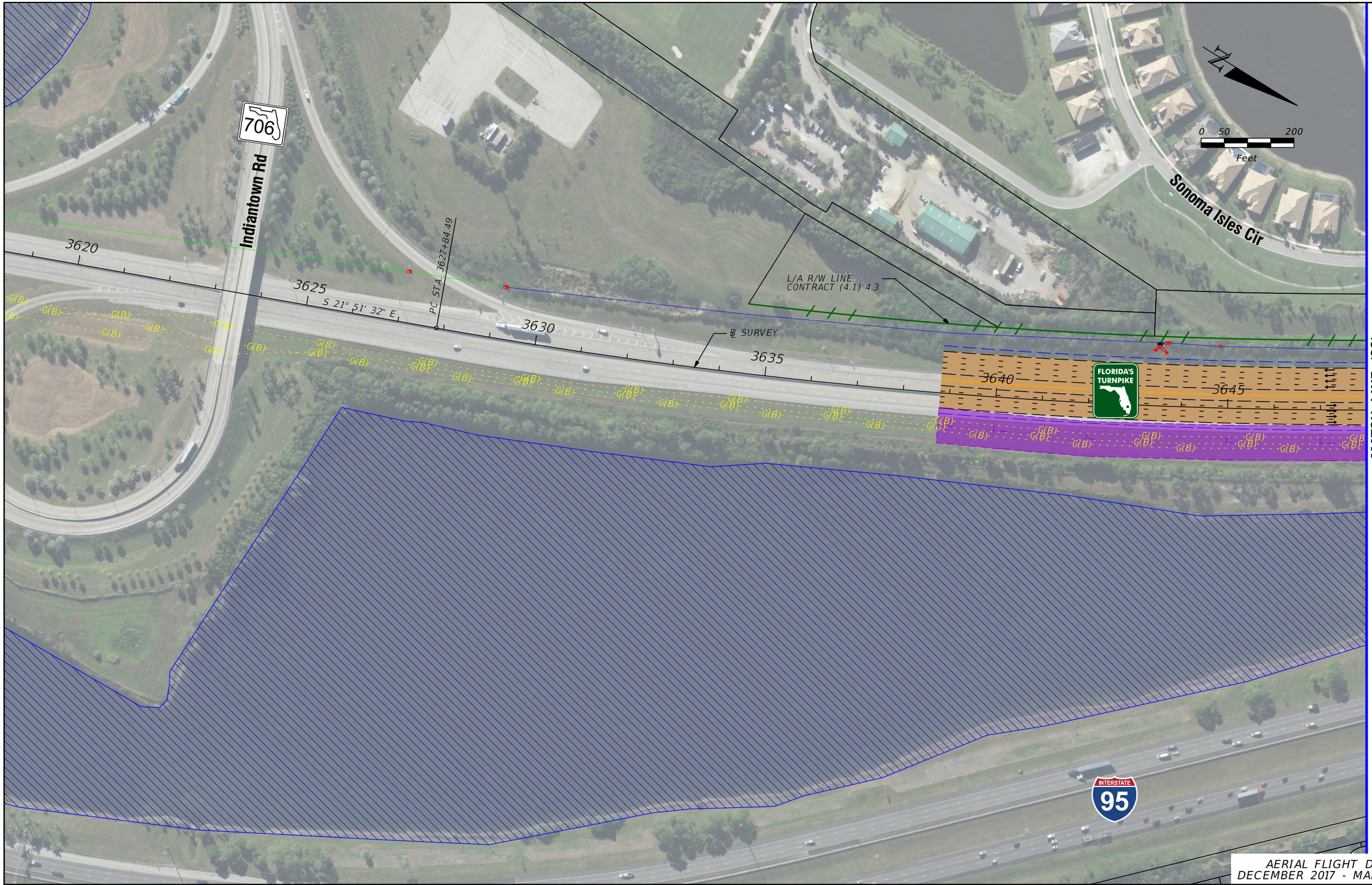
Number of Pond Sites per Risk Rating			
High	**Medium**	**Low**	**No**
0	3	10	25

Based on the conclusions of the Level I contamination screening evaluation, and the 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.

APPENDIX A

Preferred Alternative Concept Plans



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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

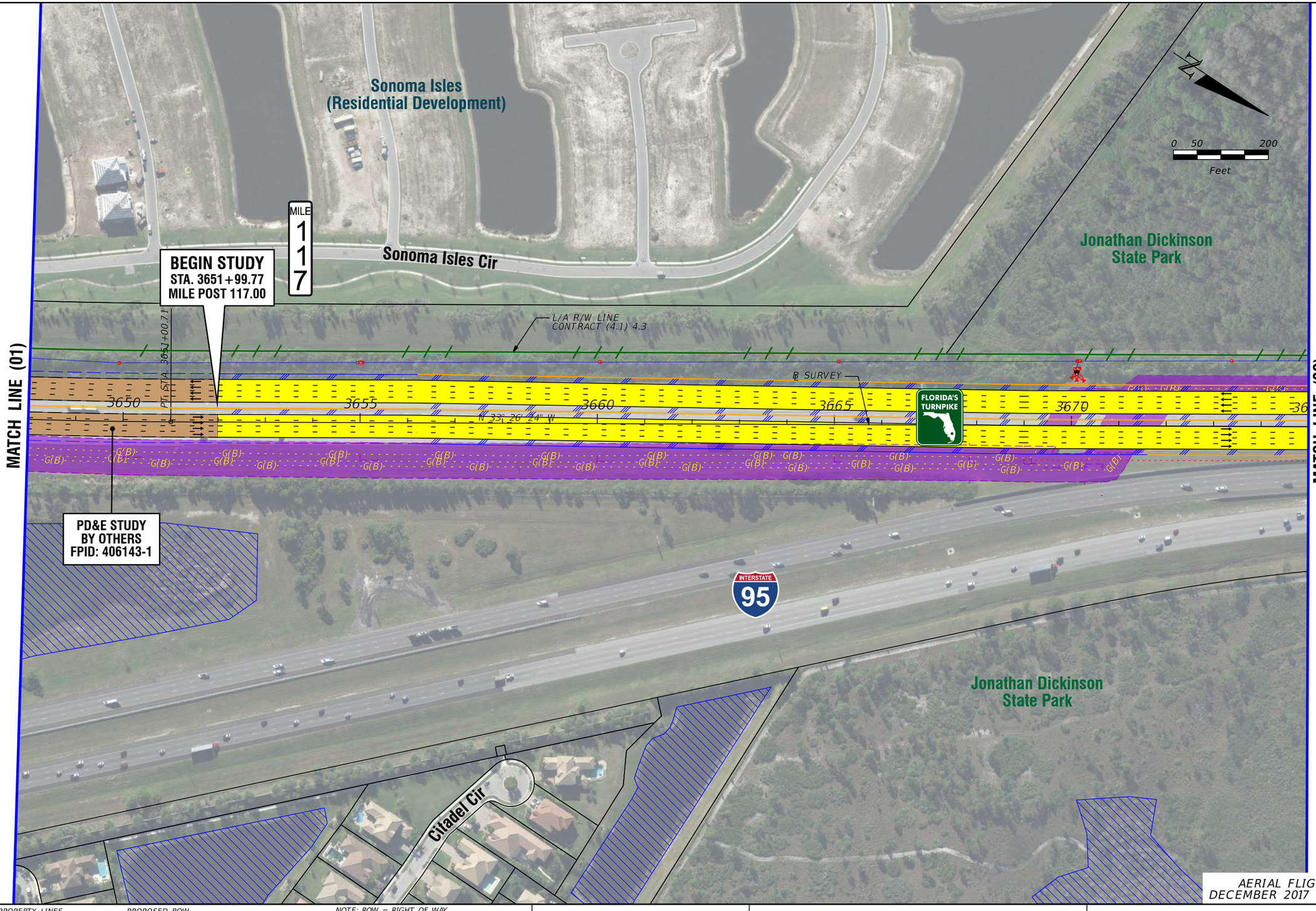
NOTE: ROW = RIGHT OF WAY

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. 1



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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

NOTE: ROW = RIGHT OF WAY

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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 2

MATCH LINE (02)

MATCH LINE (04)

Loxahatchee River

Jonathan Dickinson State Park

MILE 117.8

0 50 200 Feet

L/A R/W LINE CONTRACT (4.1) 4.3

L/A R/W LINE SPN 89095-2409

℄ SURVEY

STA. 96+50.81

3680 3685 3690 3695 3700

N 33° 26' 24" W

N 33° 27' 51" W

INTERSTATE 95

FLORIDA'S TURNPIKE

Jonathan Dickinson State Park

PALM BEACH COUNTY

MARTIN COUNTY

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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

NOTE: ROW = RIGHT OF WAY

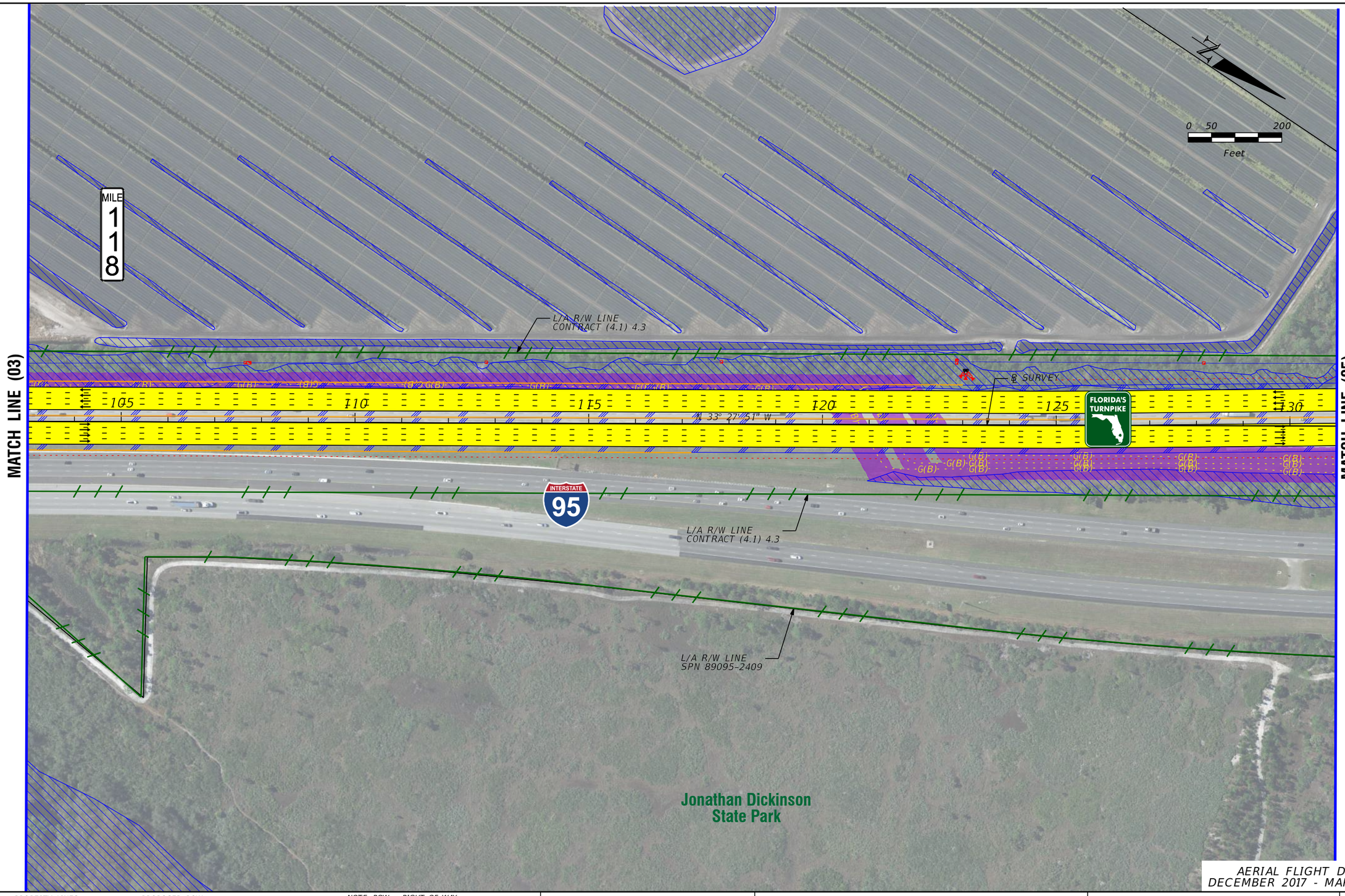
H. W. LOCHNER, INC.
4350 W. CYPRESS ST., SUITE 800
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTH. #894

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. 3



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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

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. 4

MATCH LINE (04)

MATCH LINE (06)

MILE 118.5

MILE 119

0 50 200

Feet

L/A R/W LINE
CONTRACT (4.1) 4.3

℄ SUBVEI

135 140 145 150 155

N 23° 27' 51" W

FLORIDA'S TURNPIKE

INTERSTATE 95

L/A R/W LINE
CONTRACT (4.1) 4.3

L/A R/W LINE
SPN 89095-2409

Jonathan Dickinson State Park

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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) 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.
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 5

MATCH LINE (05)

MATCH LINE (07)

Cypress Creek

0 50 200
Feet

MILE 119.5

L/A R/W LINE
CONTRACT (4.1) 4.3

℄ SURVEY

160 165 170 175 180 185

N 33° 27' 51" W

FLORIDA'S TURNPIKE

INTERSTATE 95

L/A R/W LINE
CONTRACT (4.1) 4.3

L/A R/W LINE
SPN 89095-2409

Jonathan Dickinson State Park

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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 6

MATCH LINE (06)

MATCH LINE (08)

N

0 50 200

Feet

MILE 120

L/A R/W LINE
CONTRACT (4.1) 4.3

℄ SURVEY

190 195 200 205 210 215

N 33° 22' 51.20" W

FLORIDA'S TURNPIKE

G(B)

L/A R/W LINE
CONTRACT (4.1) 4.3

INTERSTATE 95

L/A R/W LINE
SPN 89095-2409

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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 7

MATCH LINE (07)

MATCH LINE (09)

0 50 200
Feet

MILE 120.5

L/A R/W LINE
CONTRACT (4.1) 4.3

℄ SURVEY

PC STA 230+07.93

220 225 230 235 240

N 33° 27' 51.20" W

CURVE NO. 1

L/A R/W LINE
CONTRACT (4.1) 4.3

INTERSTATE 95

L/A R/W LINE
SPN 89095-2409

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
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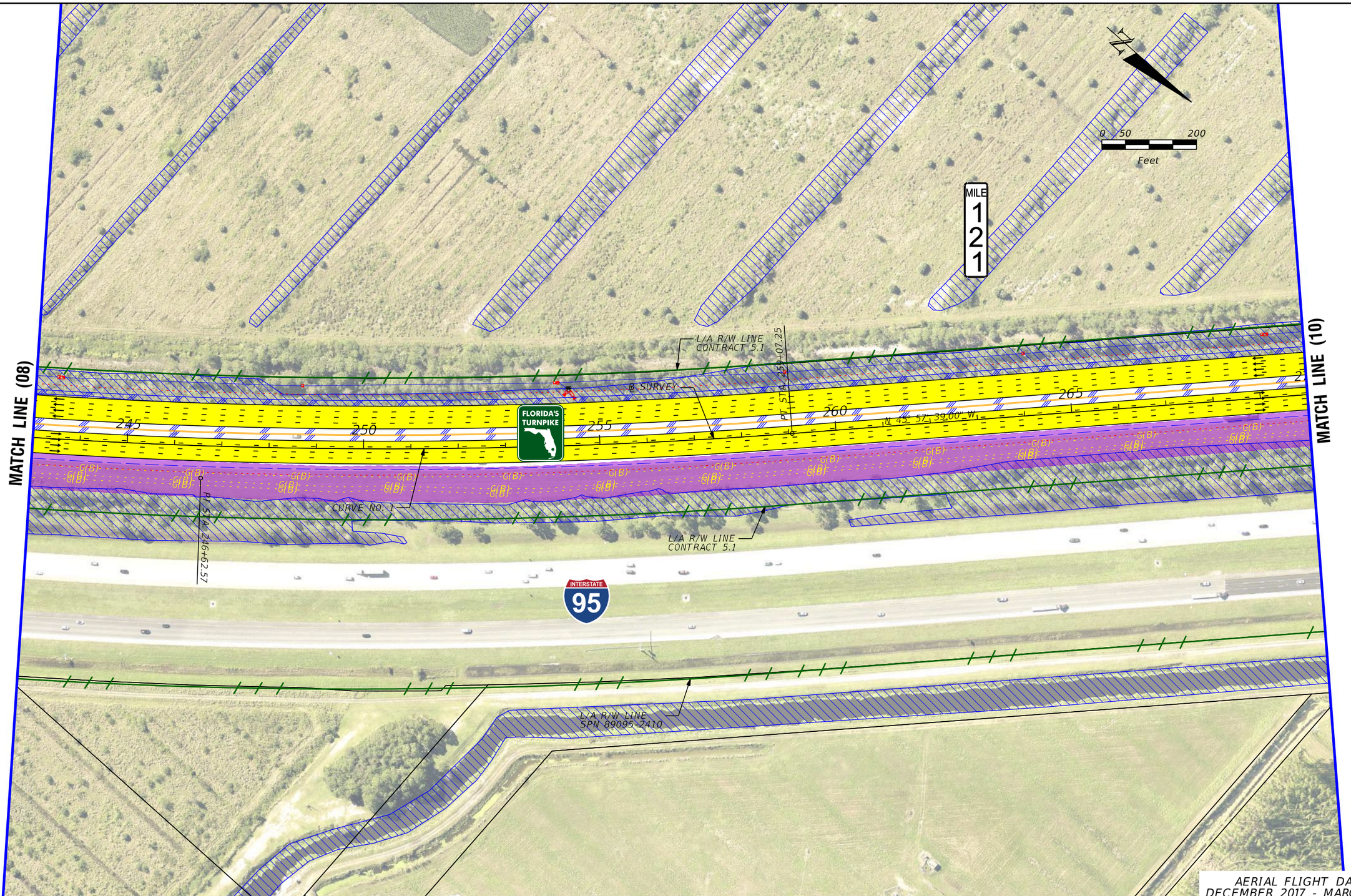
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 8



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 9

MATCH LINE (09)

MATCH LINE (11)

MILE 12 1 .5

N

0 50 200
Feet

L/A R/W LINE
CONTRACT 5.1

℄ SURVEY

N 45° 57' 39.00" W

FLORIDA'S TURNPIKE

270 275 280 285 290 295

G(B)

INTERSTATE 95

L/A R/W LINE
SPN 89095-2410

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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 10

MATCH LINE (10)

MATCH LINE (12)

MILE 12

0 50 200
Feet

L/A R/W LINE
CONTRACT 5.1

℄ SURVEY

FLORIDA'S TURNPIKE

300 305 310 315 320 325

N 45° 57' 39" W

G(B)

L/A R/W LINE
CONTRACT 5.1

INTERSTATE 95

L/A R/W LINE
SPN 89095-2410

Weigh Station

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
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- PROPOSED ITS
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- 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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 11

MATCH LINE (11)

MATCH LINE (13)

MILE 122.5

N

0 50 200

Feet

L/A R/W LINE
CONTRACT 5.1

℄ SURVEY

N 45° 13' 39" W

FLORIDA'S TURNPIKE

330 335 340 345 350

G(B)

INTERSTATE 95

L/A R/W LINE
CONTRACT 5.1

L/A R/W LINE
SPN 89095-2410

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
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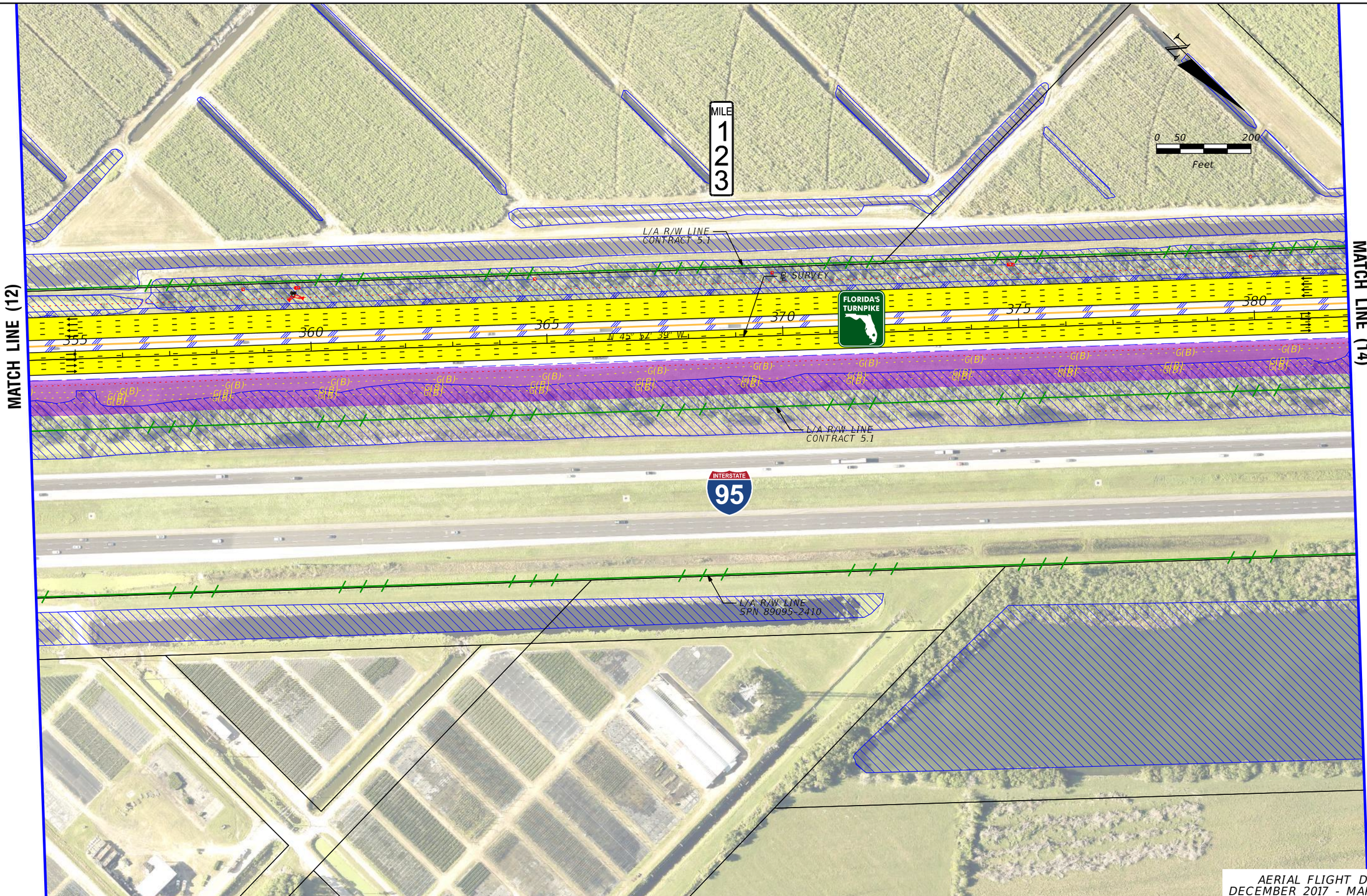
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 12



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
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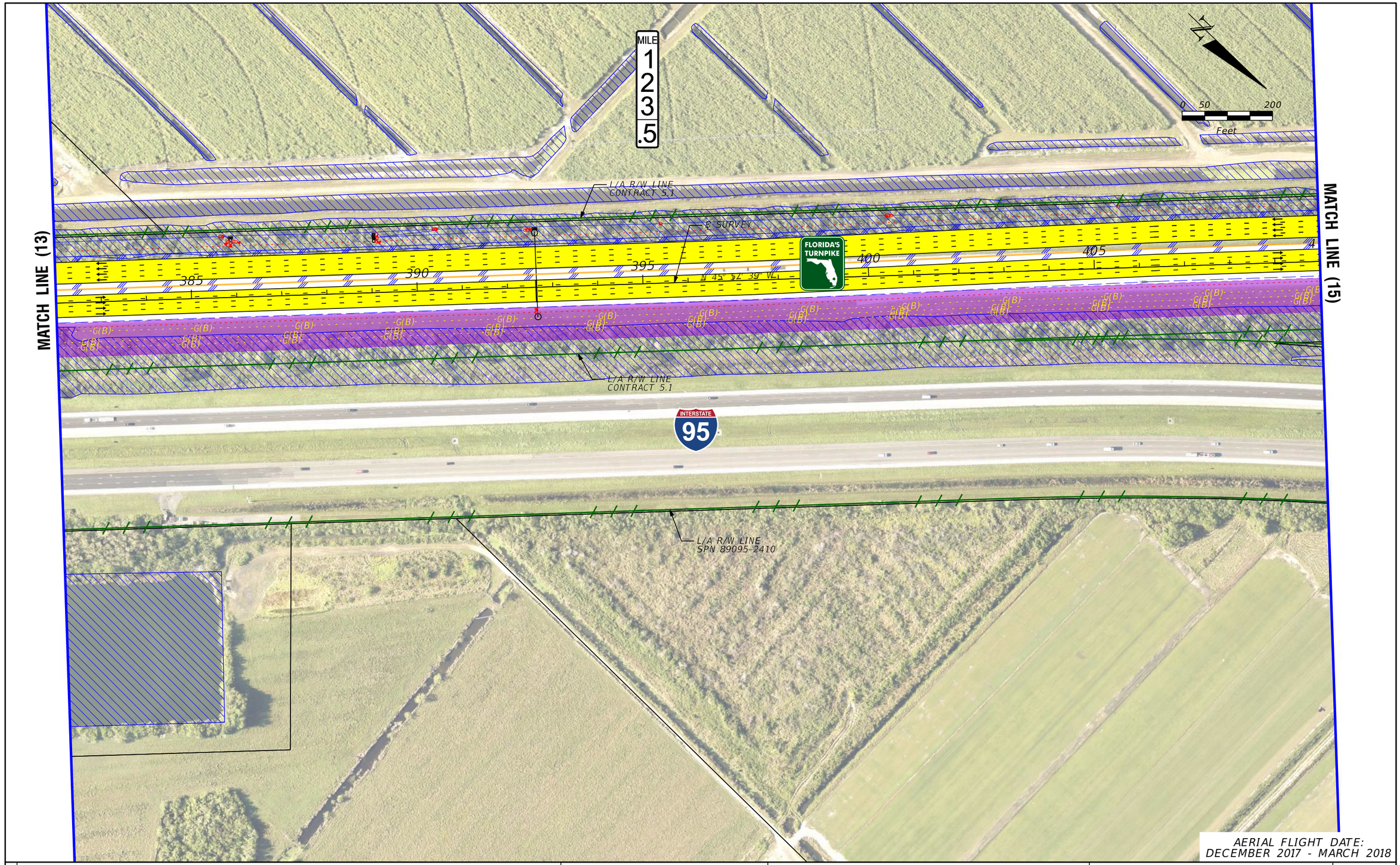
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 13



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
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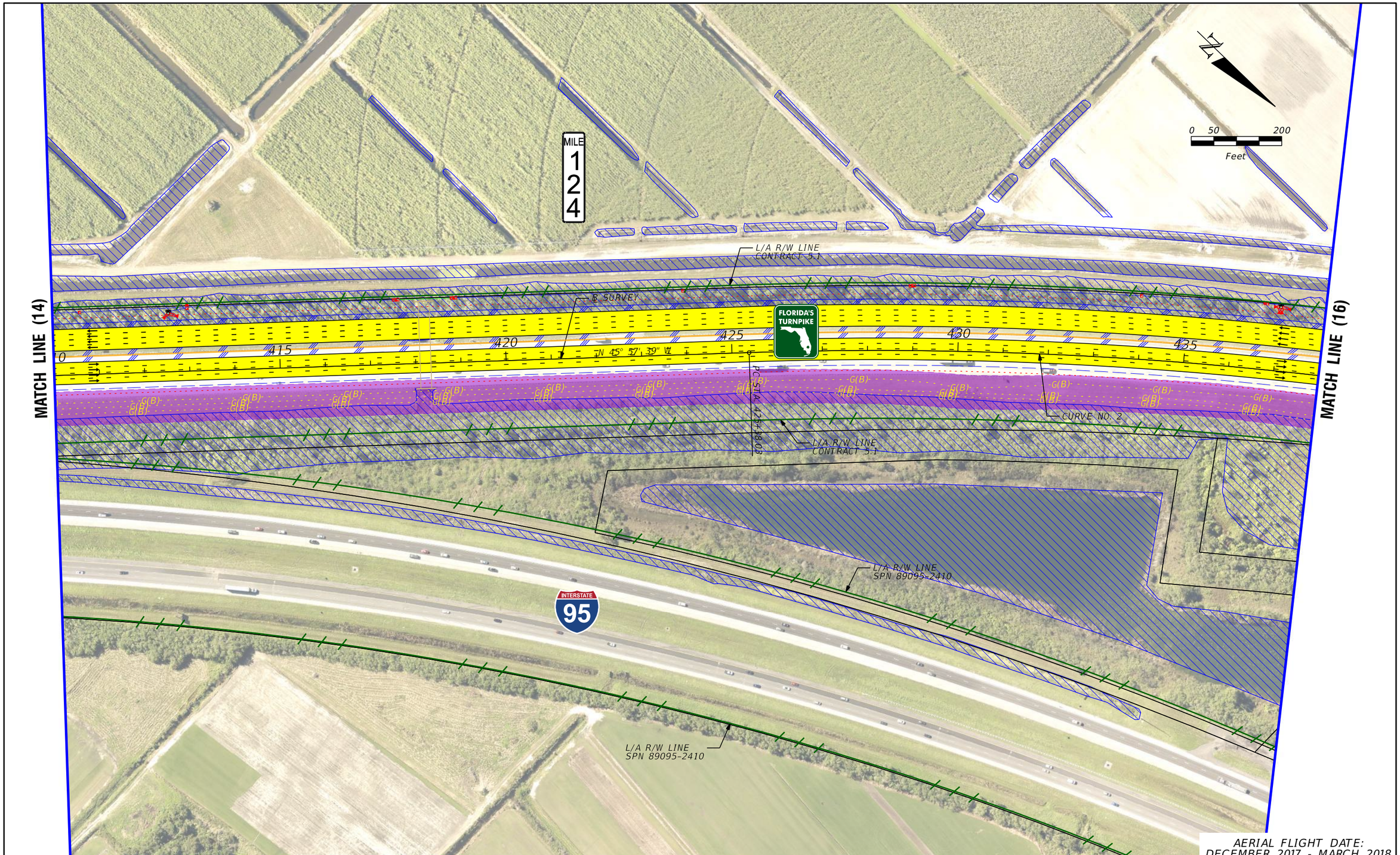
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 14



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
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- PROPOSED ROW NOISE BARRIER
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
15

MILE 124.5

MATCH LINE (15)

MATCH LINE (17)

N

0 50 200
Feet

L/A R/W LINE
CONTRACT 5.1

B SURVEY

FLORIDA'S TURNPIKE

440 445 450 455 460

CURVE NO. 2

L/A R/W LINE
CONTRACT 5.1

L/A R/W LINE
SPN 89095-2410

INTERSTATE 95

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 16

MATCH LINE (16)

MATCH LINE (18)

MILE 125

L/A R/W LINE CONTRACT 5.1

℄ SURVEY

CURVE NO. 2

FLORIDA'S TURNPIKE

470 475 480 485

405

L/A R/W LINE CONTRACT 5.1

N

0 50 200

Feet

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
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- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

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. 17

MATCH LINE (18A)

MATCH LINE (17)

MATCH LINE (19)

N

0 50 200

Feet

MILE 125.5

L/A R/W LINE CONTRACT 5.1

℄ SURVEY

N 0° 2' 4" W

FLORIDA'S TURNPIKE

495 500 505 510 515

CURVE NO. 2

PT STA 494+25.28

L/A R/W LINE CONTRACT 5.1

L/A R/W LINE SPN 89095-2410

R/W LINE SPN 89095-2410

SE Bridge Rd

ST LUCIE 708 COUNTY

L/A R/W LINE SPN 89095-2410

L/A R/W LINE CONTRACT 5.1

L/A R/W LINE CONTRACT 5.1

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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

NOTE: ROW = RIGHT OF WAY

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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. 18

N

0 50 200

Feet

ST LUCIE 708 COUNTY

SE Bridge Rd

MATCH LINE (18)

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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION

NOTE: ROW = RIGHT OF WAY

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

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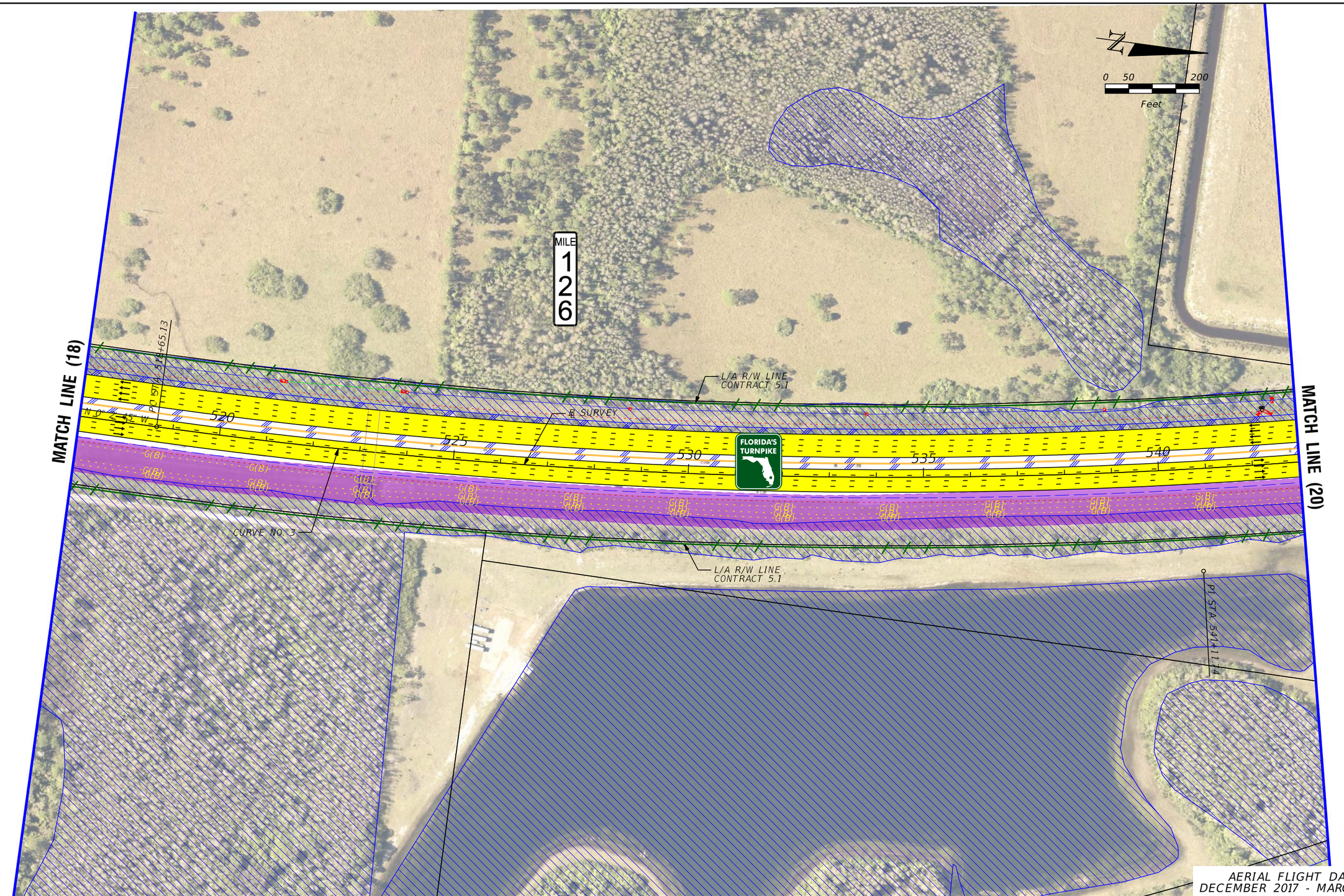
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.

18A



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
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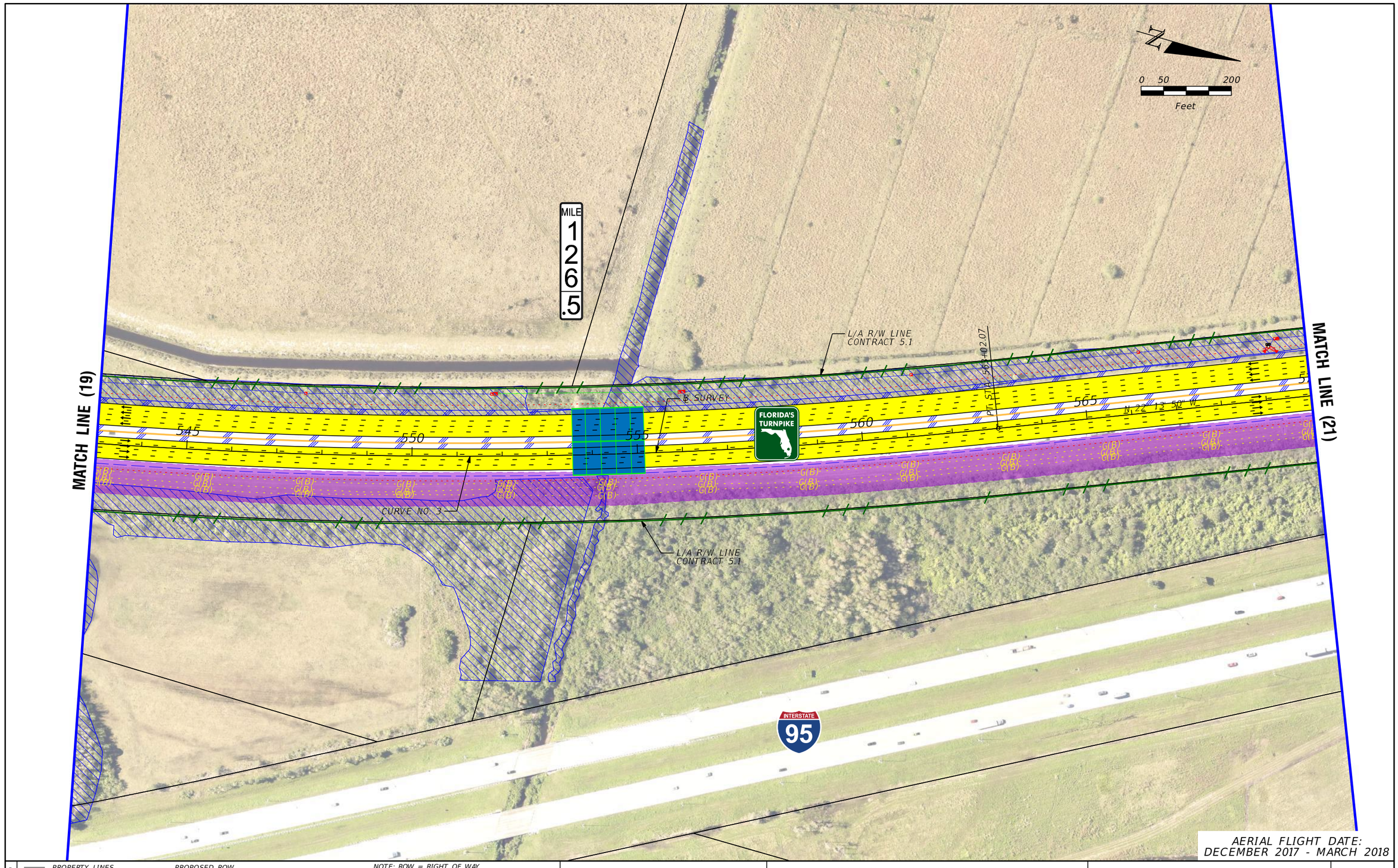
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 19



LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
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- PROPOSED ROW NOISE BARRIER
- PROPOSED SHOULDER NOISE BARRIER
- PAVEMENT REMOVAL
- WETLANDS/OTHER SURFACE WATERS
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- PROPOSED BRIDGE
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 20

MATCH LINE (20)

MATCH LINE (22)

MILE 127

L/A R/W LINE CONTRACT 5.1

℄ SURVEY

575 580 585 590 595

N 22° 13' 50" W

FLORIDA'S TURNPIKE

INTERSTATE 95

L/A R/W LINE CONTRACT 5.1

N

0 50 200

Feet

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

NOTE: ROW = RIGHT OF WAY

LEGEND

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- POTENTIAL LIMITED ACCESS ROW LINE
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H. W. LOCHNER, INC.
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 21

MATCH LINE (21)

MATCH LINE (23)

South Fork
High School

0 50 200
Feet

MILE
127
.5

℄ SURVEY

L/A R/W LINE
CONTRACT 5.1

FLORIDA'S
TURNPIKE

600 605 610 615 620 625

N 22° 13' 50" W

G(B)

L/A R/W LINE
CONTRACT 5.1

INTERSTATE
95

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
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
22

MATCH LINE (22)

MATCH LINE (24)

South Fork High School

MILE 128

L/A R/W LINE CONTRACT 5.1

℄ SURVEY

FLORIDA'S TURNPIKE

630 635 640 645 650

N 22° 13' 40" W

L/A R/W LINE CONTRACT 5.1

Worldwide Dedicated Services

INTERSTATE 95

N

0 50 200

Feet

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

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- TRAFFIC BARRIER WALL
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- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
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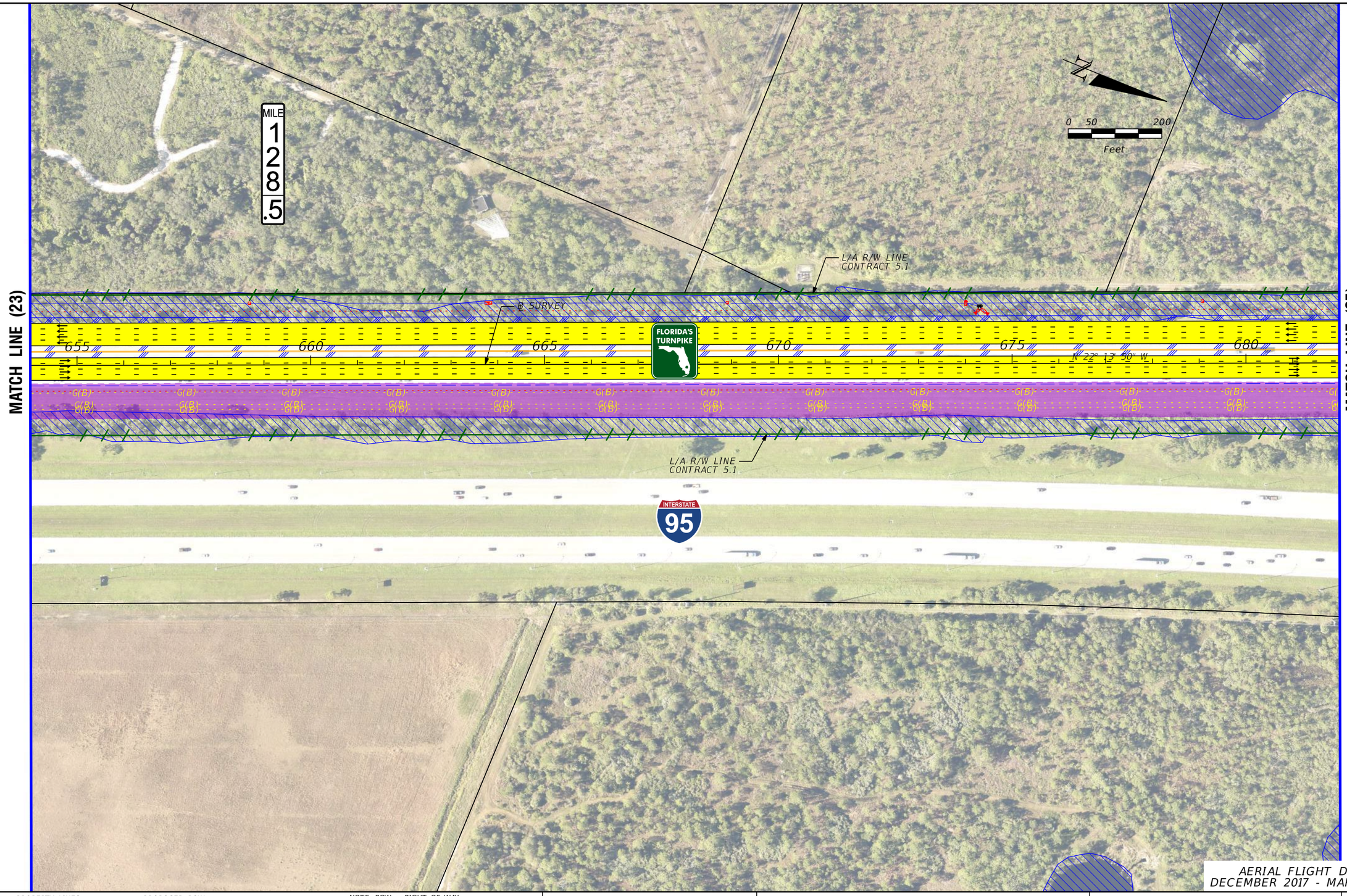
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.

23



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
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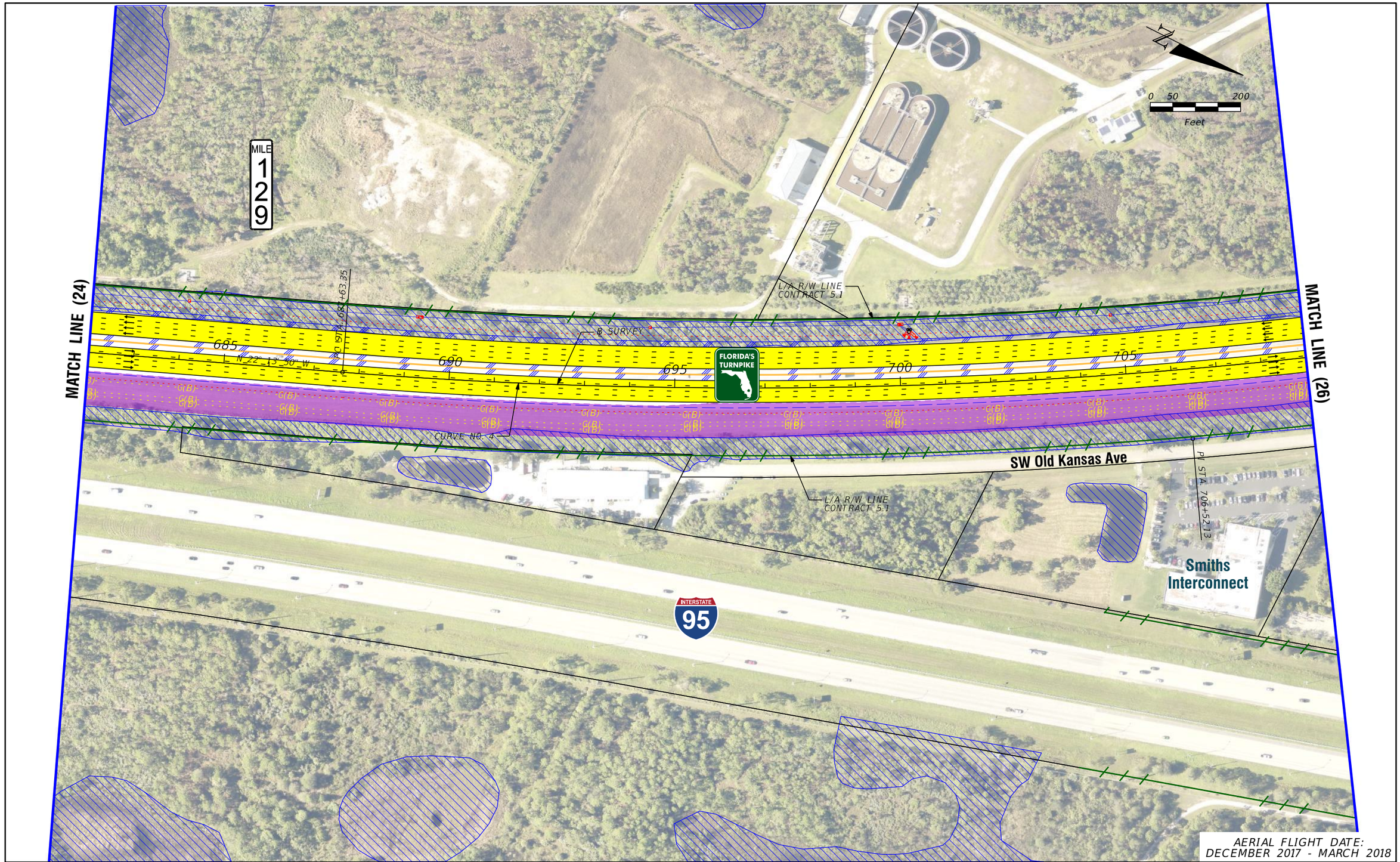
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
24



LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 25

MILE 129.5

MATCH LINE (25)

MATCH LINE (27)

SW Kansas Ave

SW Cruden Bay Ct

SW Old Kansas Ave

SW Old Kansas Ave

L/A R/W LINE CONTRACT 5.1

℄ SURVEY

STA. 725+07.25

CURVE NO. 4

L/A R/W LINE CONTRACT 5.1

710 715 720 725 730 735

N 40° 52' 0" W

FLORIDA'S TURNPIKE

0 50 200 Feet

N

Ocean Master Marine

Southeast Jeep

Palm Beach Grading

INTERSTATE 95

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
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- POTENTIAL LIMITED ACCESS ROW LINE
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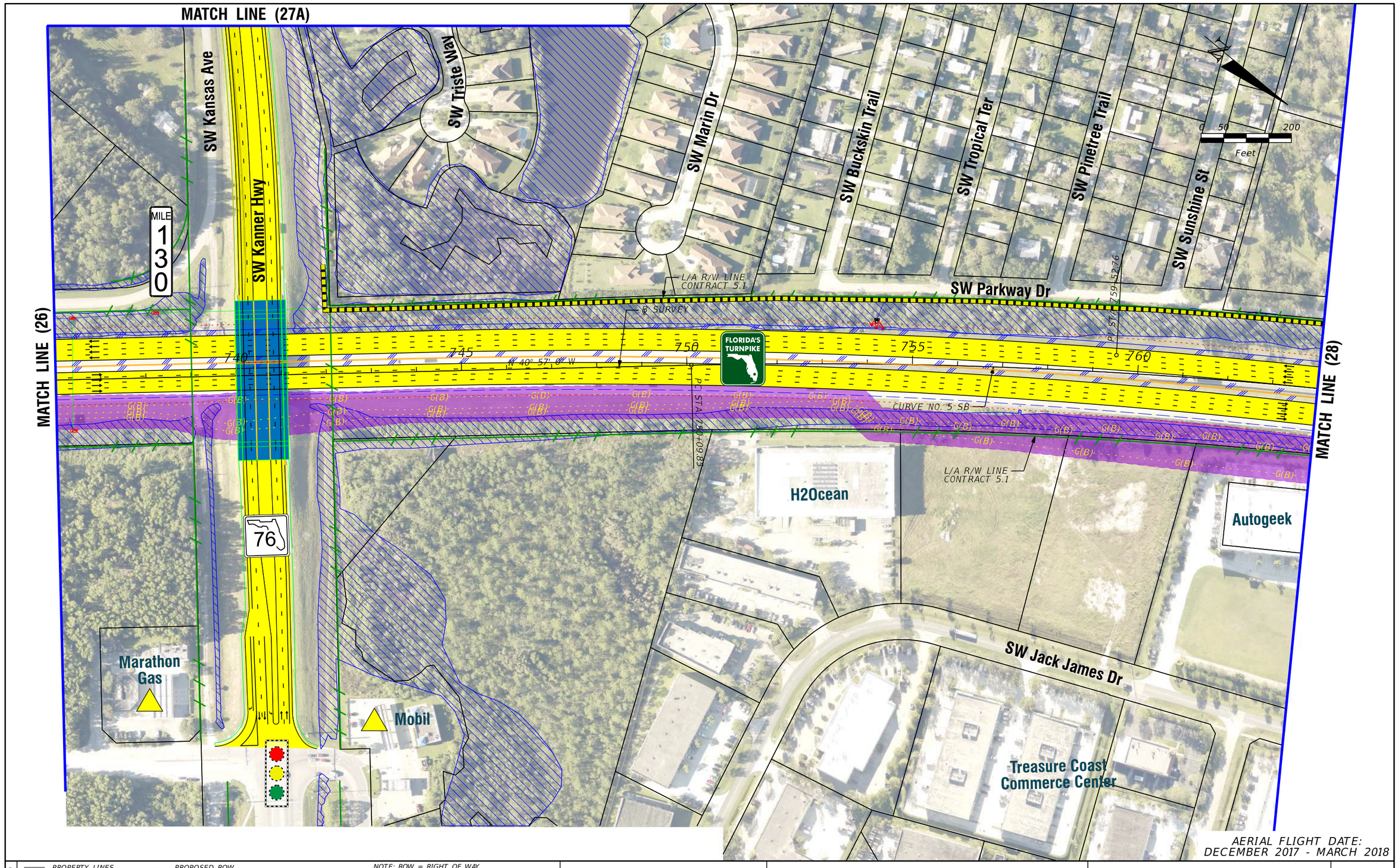
SHEET NO. 26



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

NOTE: ROW = RIGHT OF WAY

- EXISTING BRIDGE
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- OTHER PROJECTS (ROADS)
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
27A

MILE 130.5

SW Belgrave Terrace

0 50 200 Feet

BEGIN BRIDGE

L/A R/W LINE CONTRACT 5.1

L/A R/W LINE CONTRACT 6.1

CURVE NO. 5

℄ SURVEY

765 770 775 780 785 790

N 31° 32' 32" W

FLORIDA'S TURNPIKE

STA 766+91.43

MATCH LINE (27)

MATCH LINE (29)

FEA Distributors

Autogeek

Donnie Gould Restorations

SW Commerce Way

Radiotronics

Thomas B. Manuel Bridge

American Custom Yachts

SW Jack James Dr

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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 28

MATCH LINE (28)

MATCH LINE (30)

MILE 131

MILE 131.5

St. Lucie Canal C-44

0 50 200

Feet

L/A R/W LINE CONTRACT 6.1

℄ SURVEY

END BRIDGE

795 800 805 810 815

N 31° 32' 32" W

FLORIDA'S TURNPIKE

Thomas B. Manuel Bridge

L/A R/W LINE CONTRACT 6.1

INTERSTATE 95

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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

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. 29

MATCH LINE (29)

MATCH LINE (31)

INTERSTATE 95

MILE 132

0 50 200
Feet

BRIDGE BY OTHERS

BRIDGE BY OTHERS

L/A R/W LINE CONTRACT 6.1

℄ SURVEY

N 31° 32' 32" W

820 825 830 835 840 845

FLORIDA'S TURNPIKE

L/A R/W LINE CONTRACT 6.1

L/A R/W LINE CONTRACT 6.1

SW High Meadows Ave

SW Swallowtail Ln

SW Bald Eagle Dr

G(B)

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)
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- (R) POTENTIAL RESIDENTIAL RELOCATION
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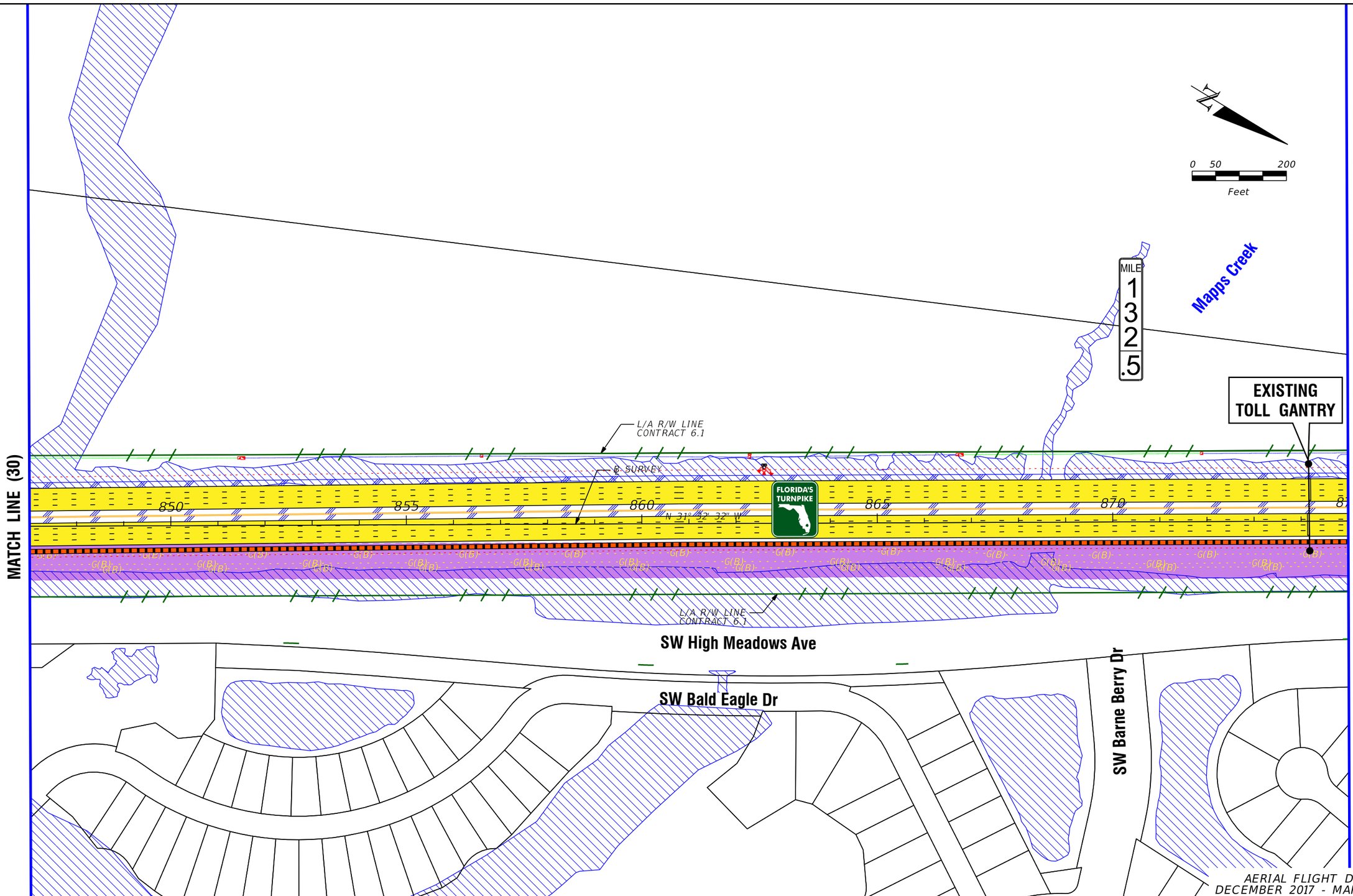
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 30



LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
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NOTE: ROW = RIGHT OF WAY

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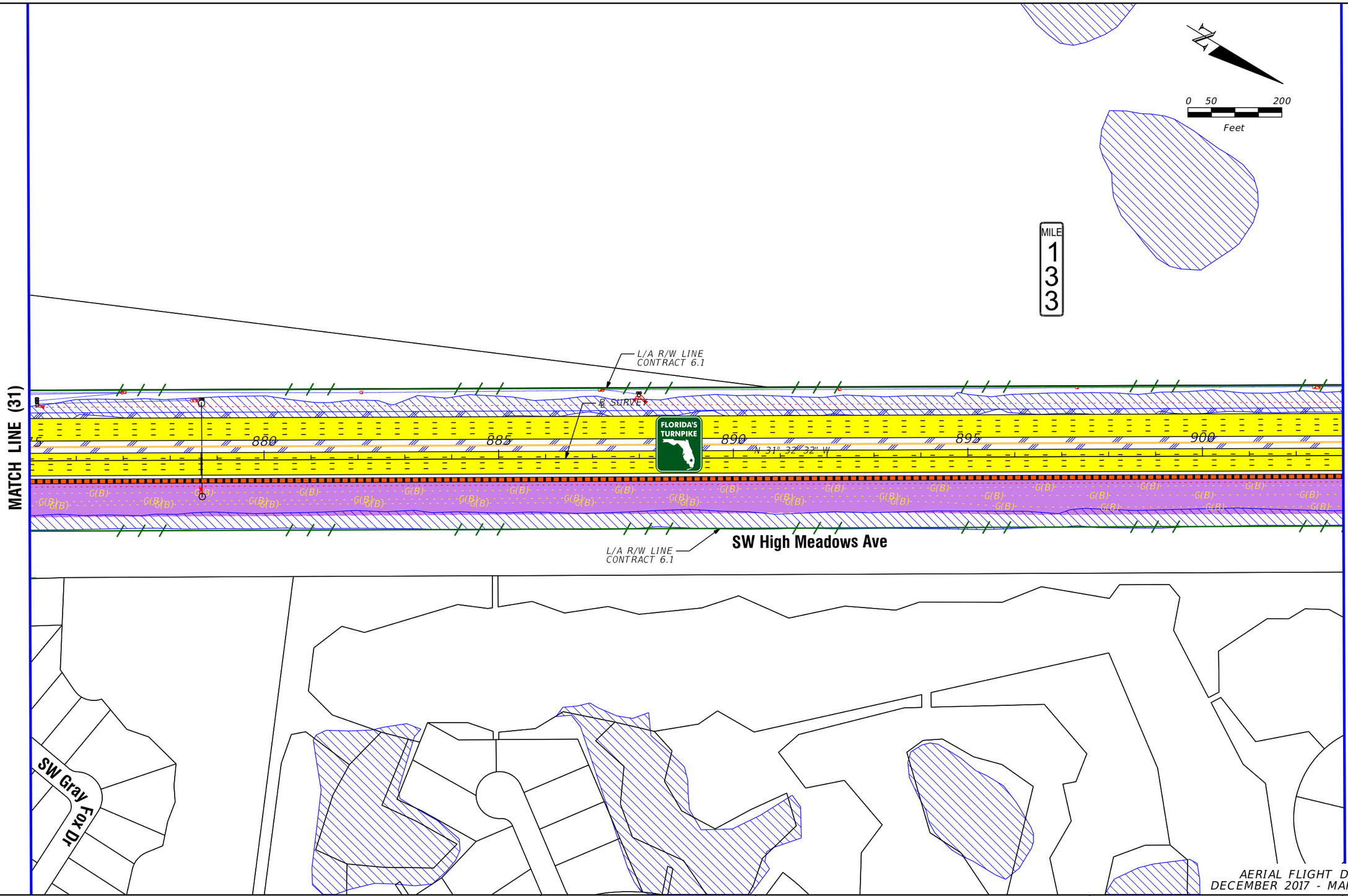
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 31



LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 32

MILE 133.5

0 50 200
Feet

MATCH LINE (32)

MATCH LINE (34)

L/A R/W LINE CONTRACT 6.1

℄ SURVEY

N 41° 32' 32" W

905 910 915 920 925 930

FLORIDA'S TURNPIKE

L/A R/W LINE CONTRACT 6.1

SW High Meadows Ave

SW Golden Bear Way

SW Hammock Creek Dr

SW Elk River Ct

SW Hammock Creek Dr

SW Glenmoor Way

SW Bear Paw Trail

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

NOTE: ROW = RIGHT OF WAY

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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 33

MATCH LINE (33)

MATCH LINE (35)

SW Leighton Farm Ave

MILE 134

0 50 200
Feet

L/A R/W LINE
CONTRACT 6.1

℄ SURVEY

FLORIDA'S TURNPIKE

935 940 945 950 955

N-31°-32'-32"-W

G(B)

L/A R/W LINE
CONTRACT 6.1

Palm City
Business Park

SW High Meadows Ave

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
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- PROPOSED ROW NOISE BARRIER
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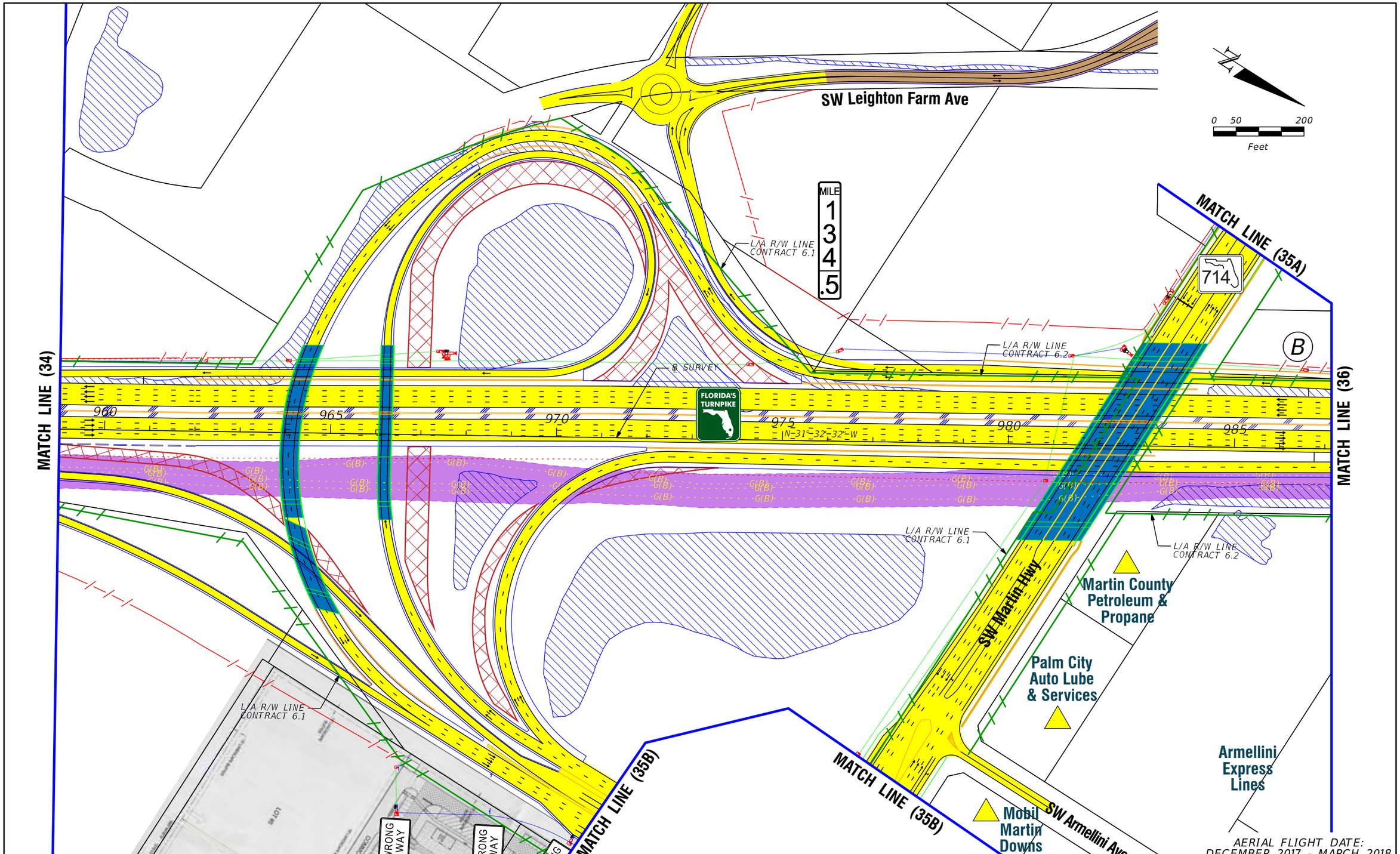
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 34



AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
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- POTENTIAL LIMITED ACCESS ROW LINE
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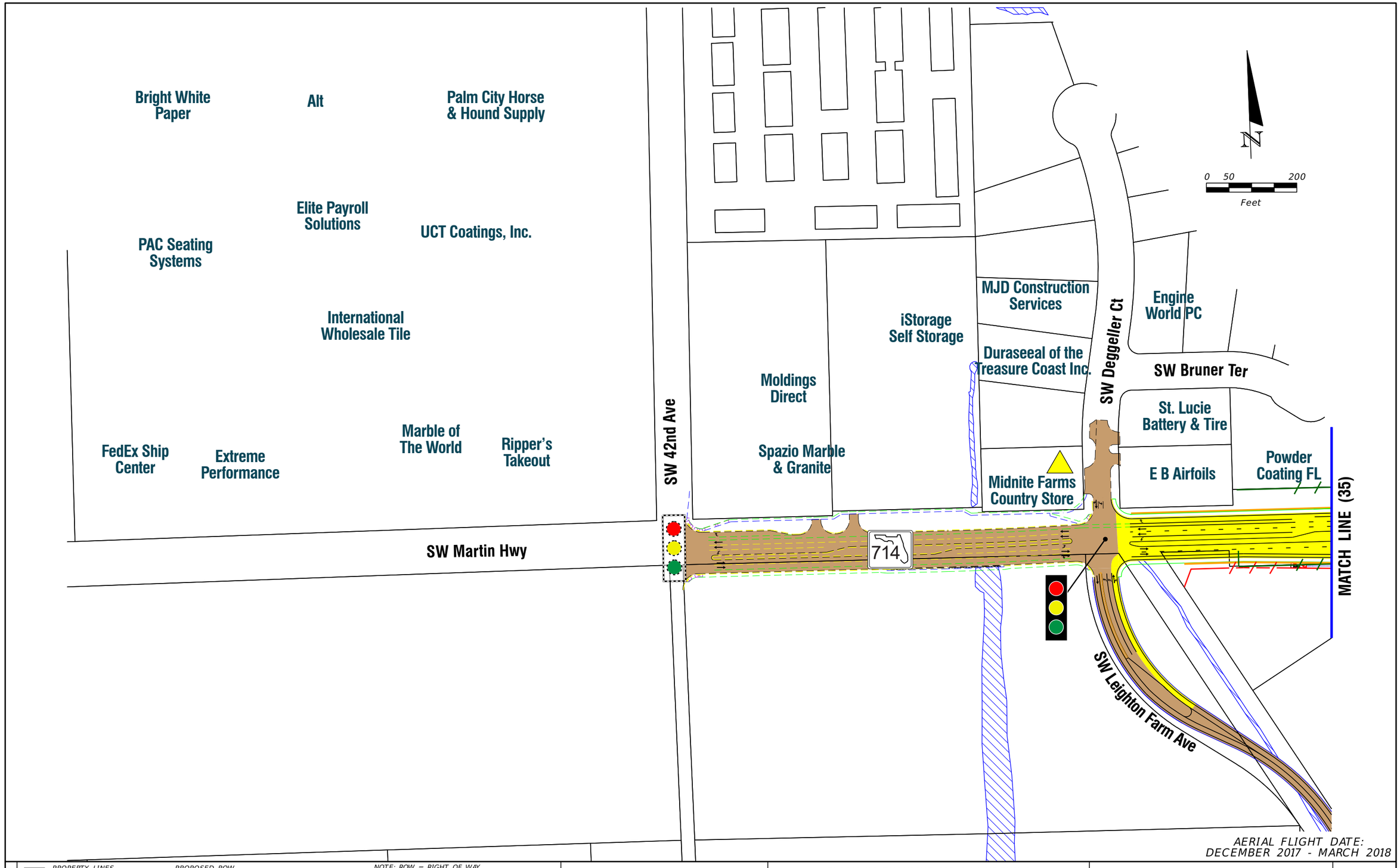
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
35



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
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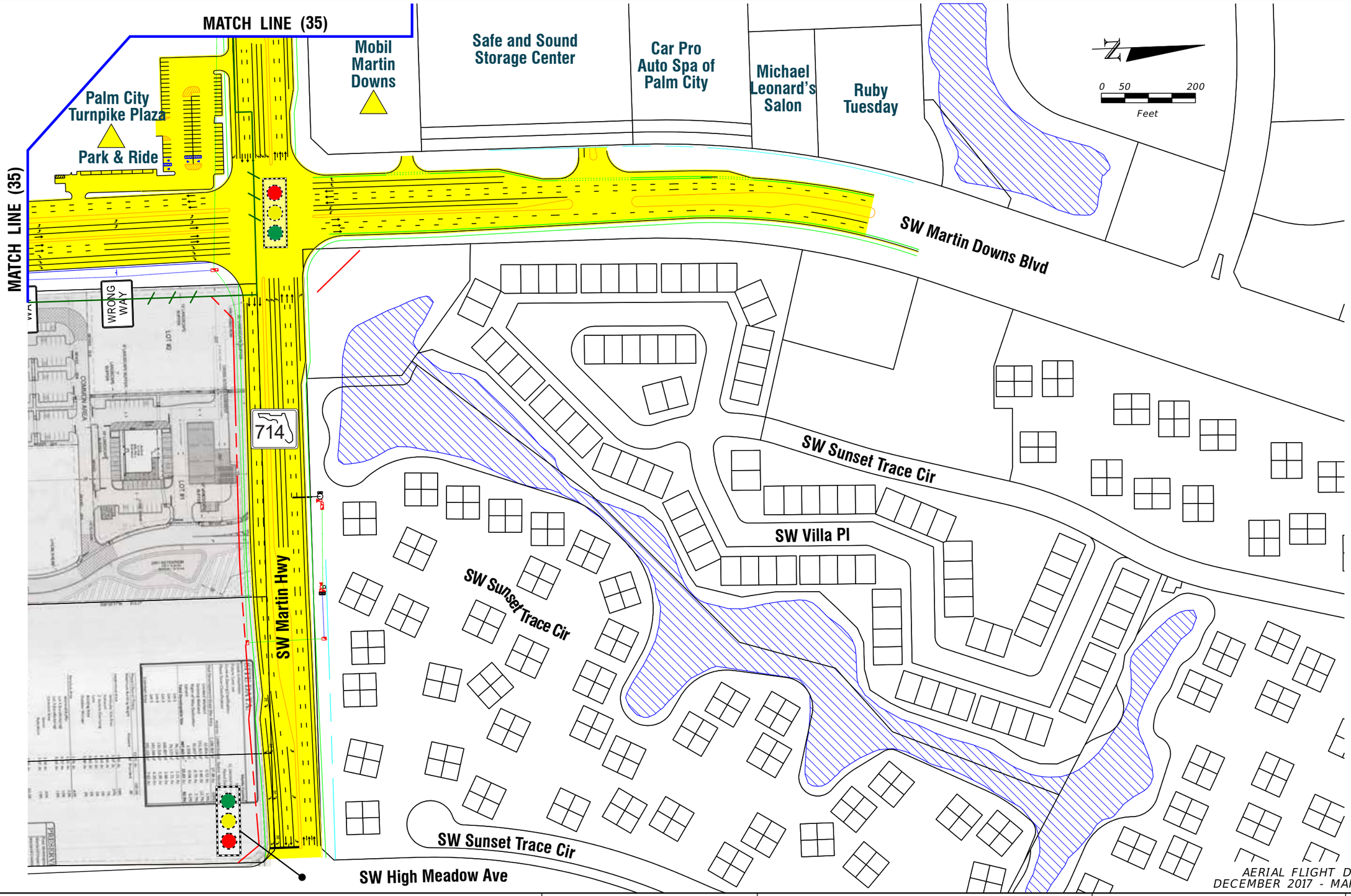
SHEET NO.
35A



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
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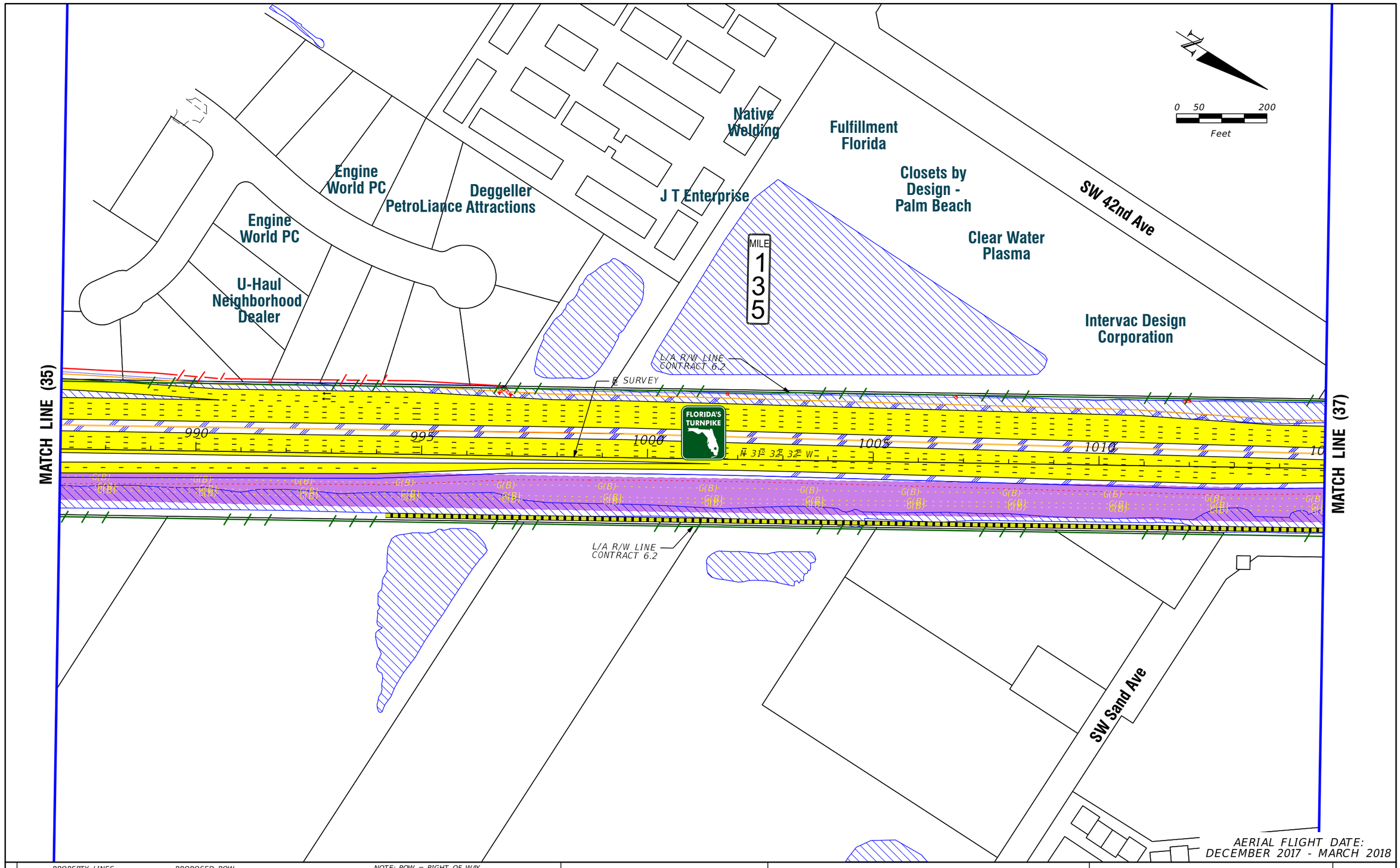
SHEET NO.
35B



LEGEND

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SHEET NO. 36

Danco Sports

Amerian Global Liquidators

Jensen Moving & Storage

SW Cargo Way

MILE 135.5

0 50 200 Feet

MATCH LINE (36)

MATCH LINE (38)

L/A R/W LINE CONTRACT 6.2

℄ SURVEY

FLORIDA'S TURNPIKE

1015 1020 1025 1030 1035 1040

N 31° 32' 32" W

SW Sand Ave

L/A R/W LINE CONTRACT 6.2

Martin Downs Golf Club

SW Egret Pond Cir

SW Egret Pond Ter

SW Westlake Cir

SW Mallard Creek Trail

SW Mallard Creek Trail

Martin Downs Golf Club

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 37

SW Citrus Blvd

Citrus Grove Elementary School

Citrus Grove Community Park

MILE 136

0 50 200
Feet

L/A R/W LINE CONTRACT 6.2

SURVEY

FLORIDA'S TURNPIKE

1045 1050 1055 1060 1065 1070

N 71° 52' 22" W

MATCH LINE (37)

MATCH LINE (39)

SW Sand Ave

L/A R/W LINE CONTRACT 6.2

SW Crane Creek Ave

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

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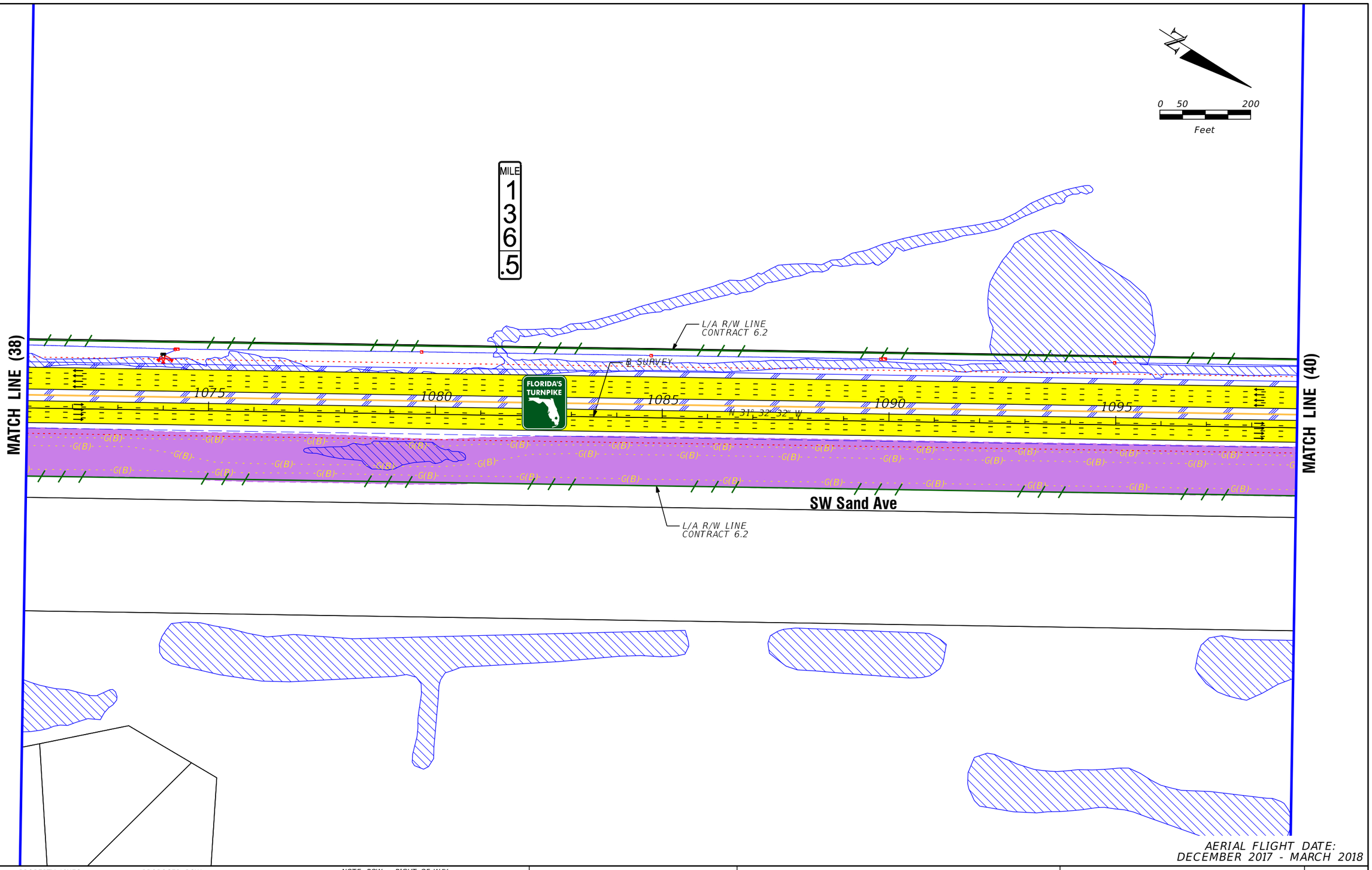
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 38



AERIAL FLIGHT DATE:
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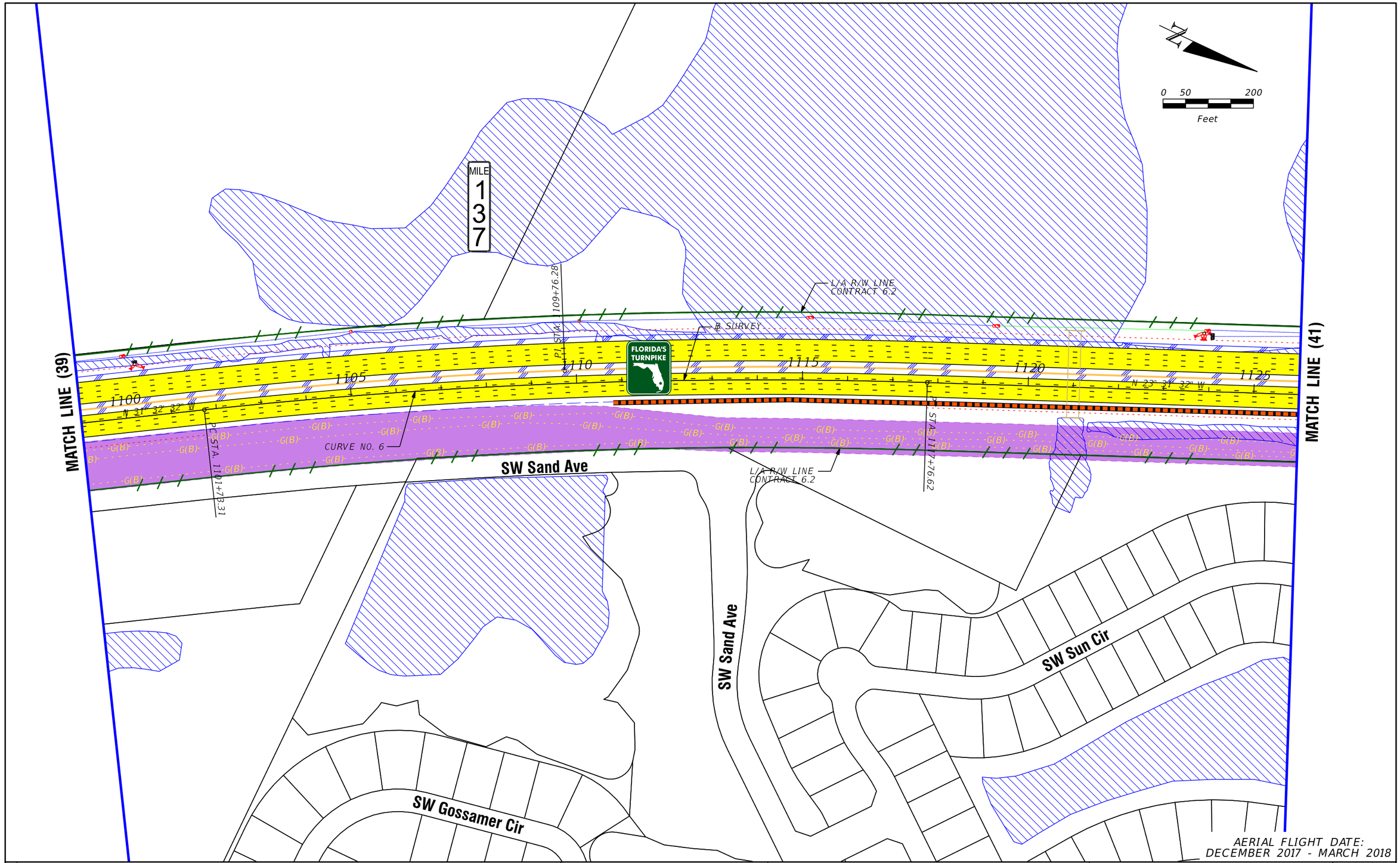
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 39



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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

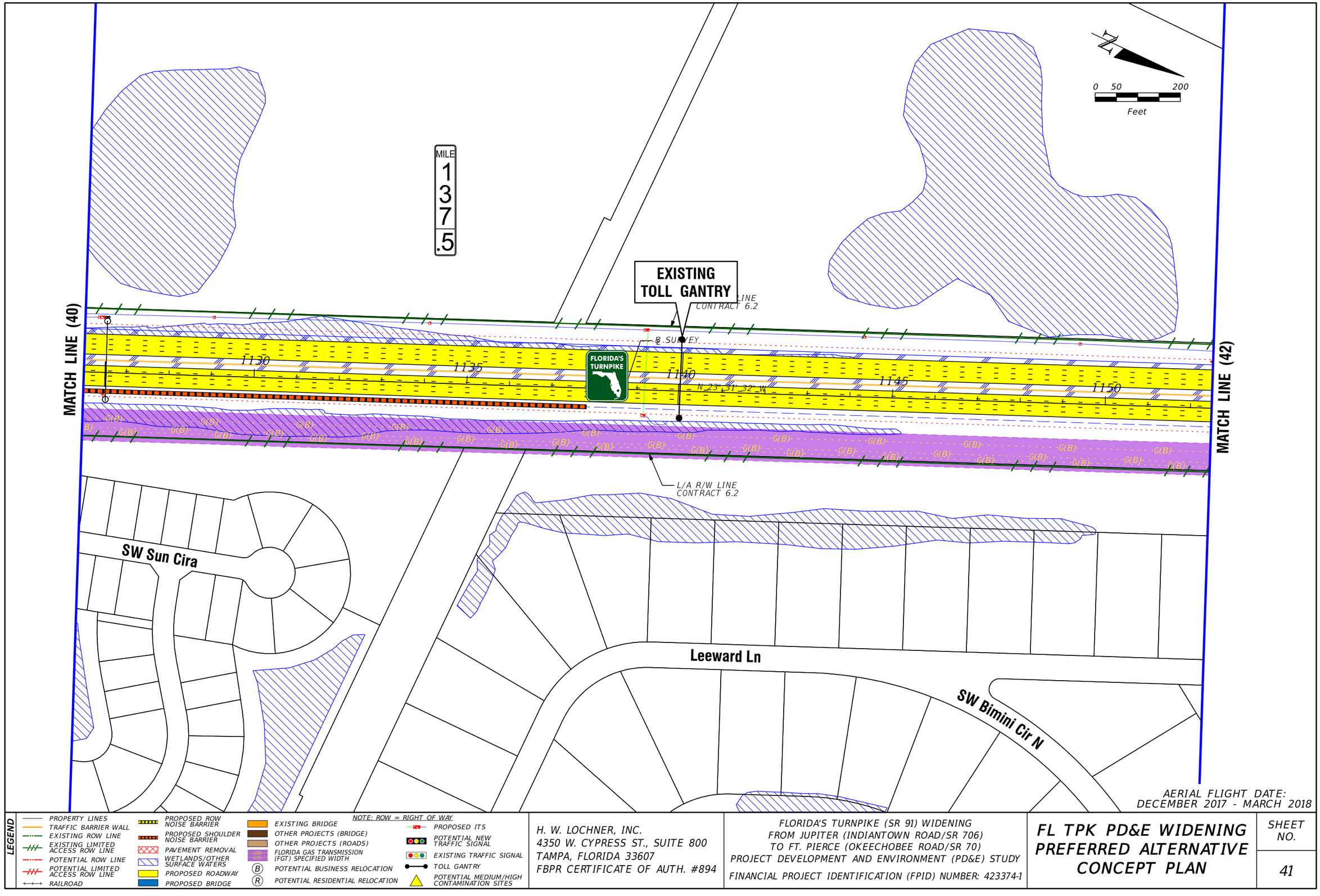
NOTE: ROW = RIGHT OF WAY

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. 40



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
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- PROPOSED SHOULDER NOISE BARRIER
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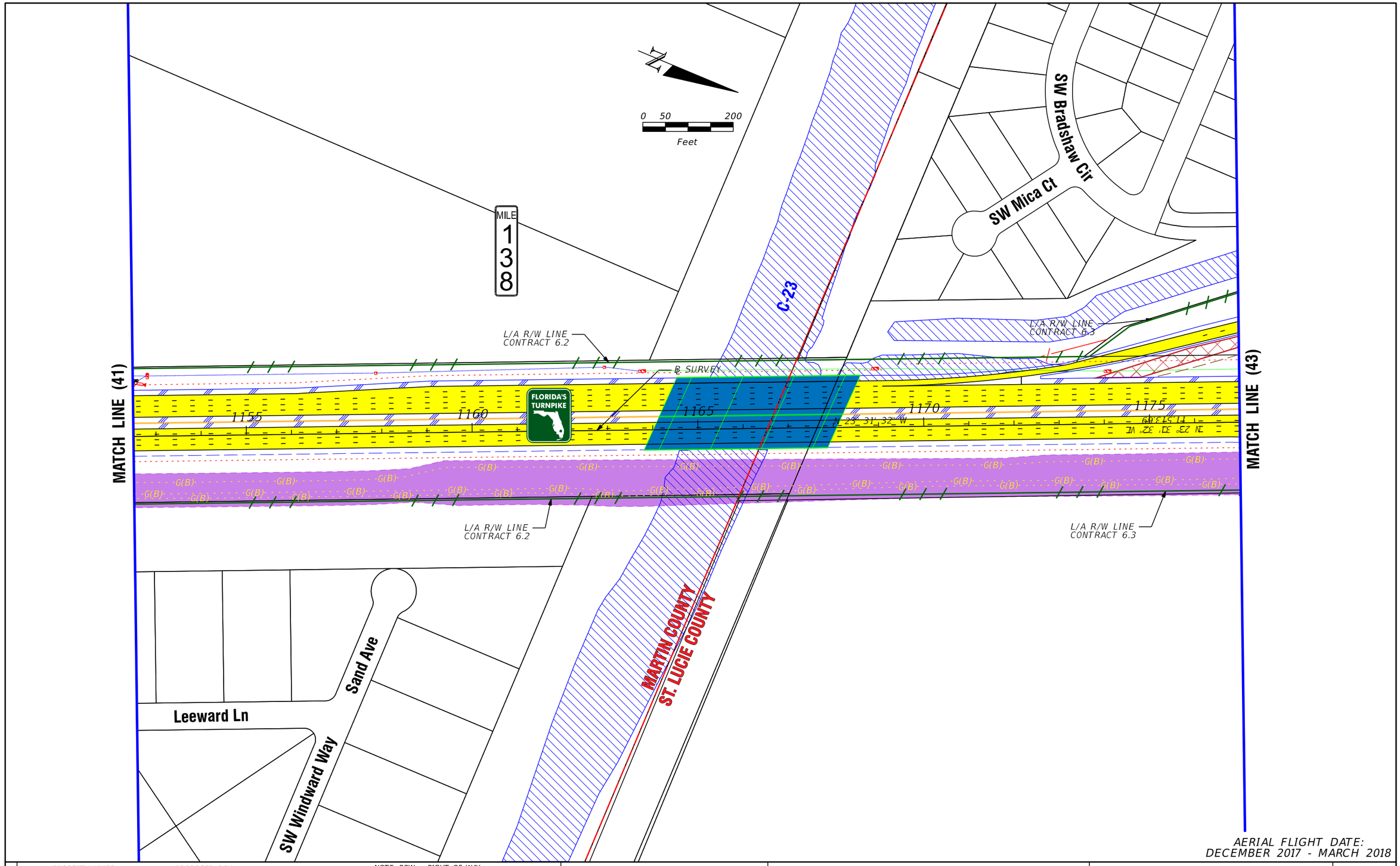
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 41



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
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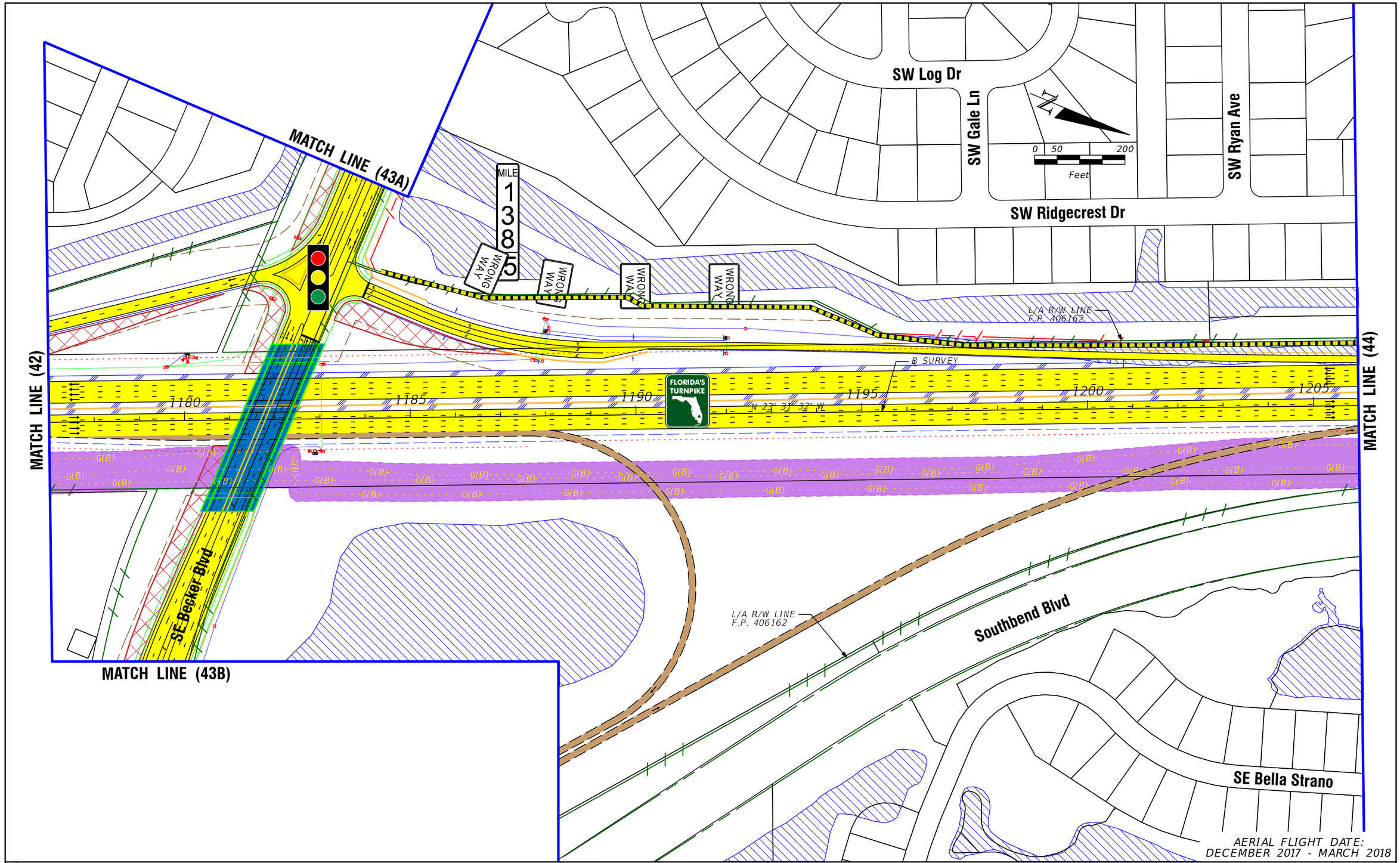
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
42



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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 43

SW Naftal Pl

SW Paley Rd

SW Kestor Dr

SW Ransom Ln

SW Illan Lan

SW Log Dr

SW Ridgecrest Dr

SW Becker Rd

SW Knackman Ter

SW Bradshaw Cir

SW Flinstone Dr

SW Backert Ave

MATCH LINE (43)

N

0 50 200

Feet

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
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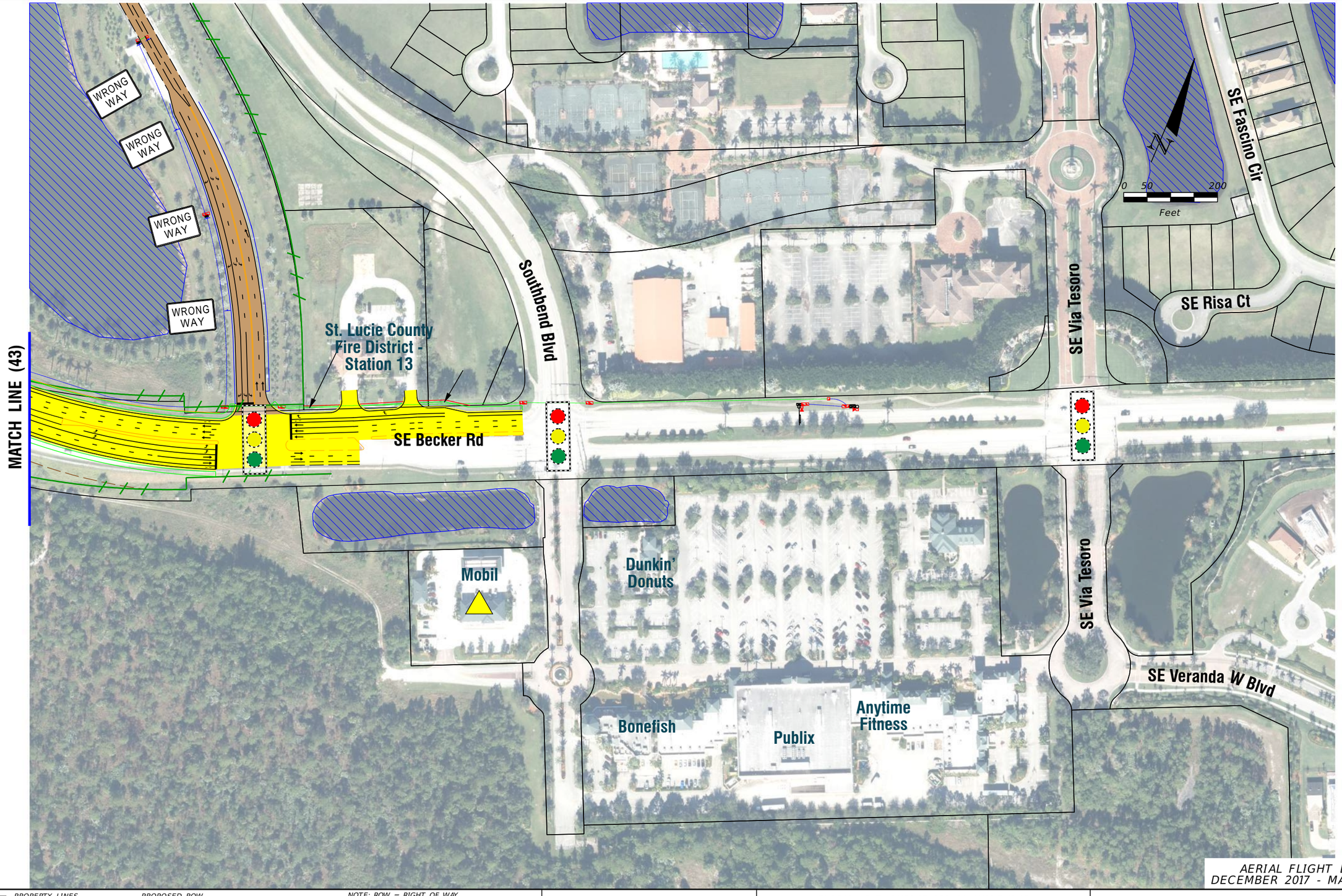
FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
43A



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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
43B

SW Calah Cir
SW Galbut Ln
SW Copperfield Ave
SW Namoit Pl
SW Saginaw Ave
SW Nabble Ave
SW Webb St
SW Ridgecrest Dr
MILE 139
0 50 200
Feet
MATCH LINE (43)
MATCH LINE (45)
L/A R/W LINE CONTRACT 6.3
CURVE NO. 7
℄ SURVEY
FLORIDA'S TURNPIKE
1210
1215
1220
1225
1230
N 25° 31' 32" W
℄ PC STA. 1232+90.31
G(B)
L/A R/W LINE CONTRACT 6.3
Southbend Blvd
SE Via Verona
SE San Privern
SE Rio Casarano
SE Mira Lavella
AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

LEGEND

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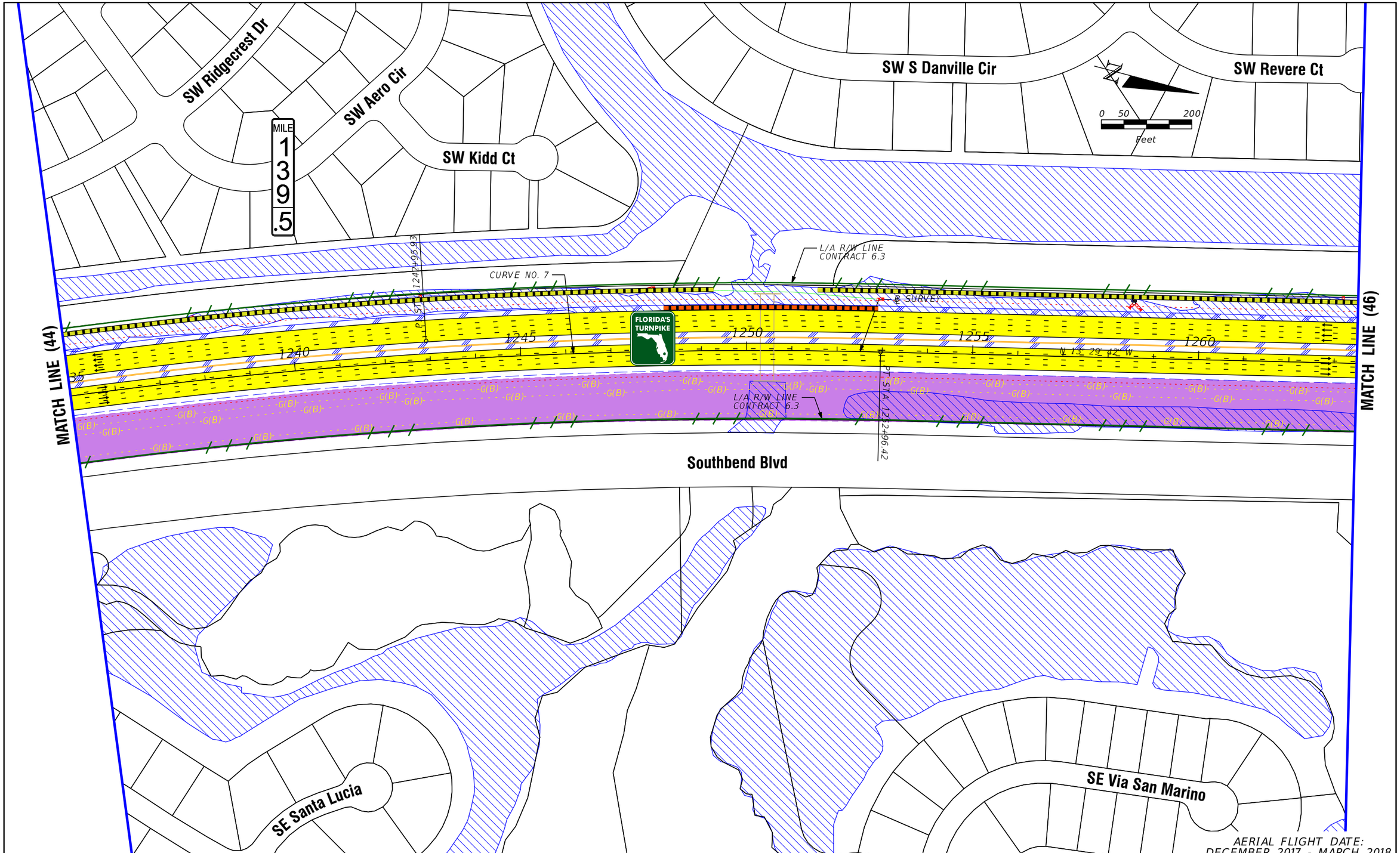
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 44



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
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- PROPOSED ROW NOISE BARRIER
- PROPOSED SHOULDER NOISE BARRIER
- PAVEMENT REMOVAL
- WETLANDS/OTHER SURFACE WATERS
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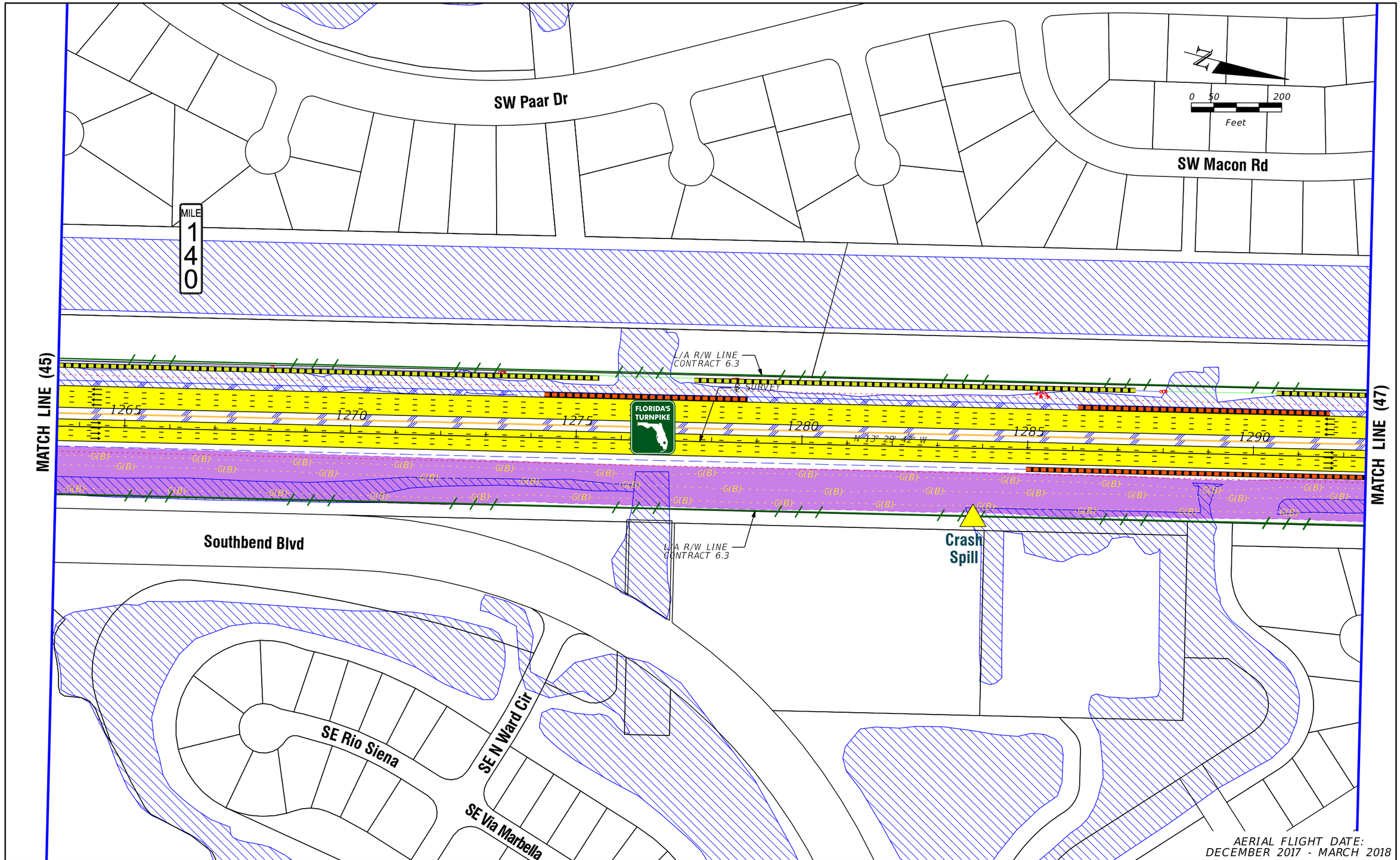
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
45



LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
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- PROPOSED SHOULDER NOISE BARRIER
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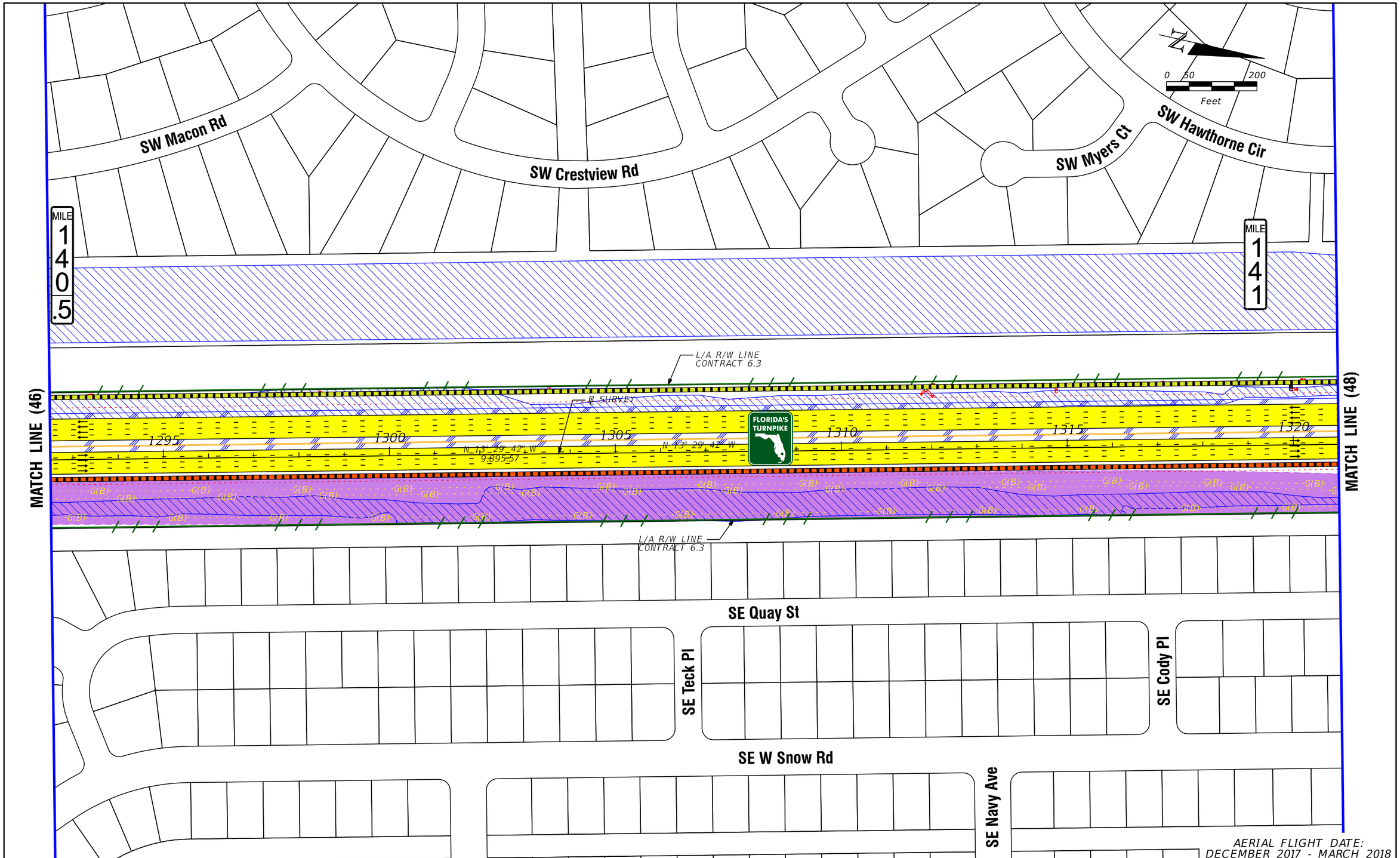
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 46



AERIAL FLIGHT DATE:
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LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
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- PROPOSED SHOULDER NOISE BARRIER
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SHEET NO.
47

SW Ann Arbor Rd

SW Hawthorne Cir

SW Andover Ct

0 50 200

Feet

MILE 141.5

EXISTING TOLL GANTRY

L/A R/W LINE CONTRACT 6.3

℄ SURVEY

FLORIDA'S TURNPIKE

1325 1330 1335 1340 1345

N 42° 29' 42" W

MATCH LINE (47)

MATCH LINE (49)

L/A R/W LINE CONTRACT 6.3

SE Sims Cir

SE Quay St

SE W Snow Rd

SE Vince Pl

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

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LEGEND

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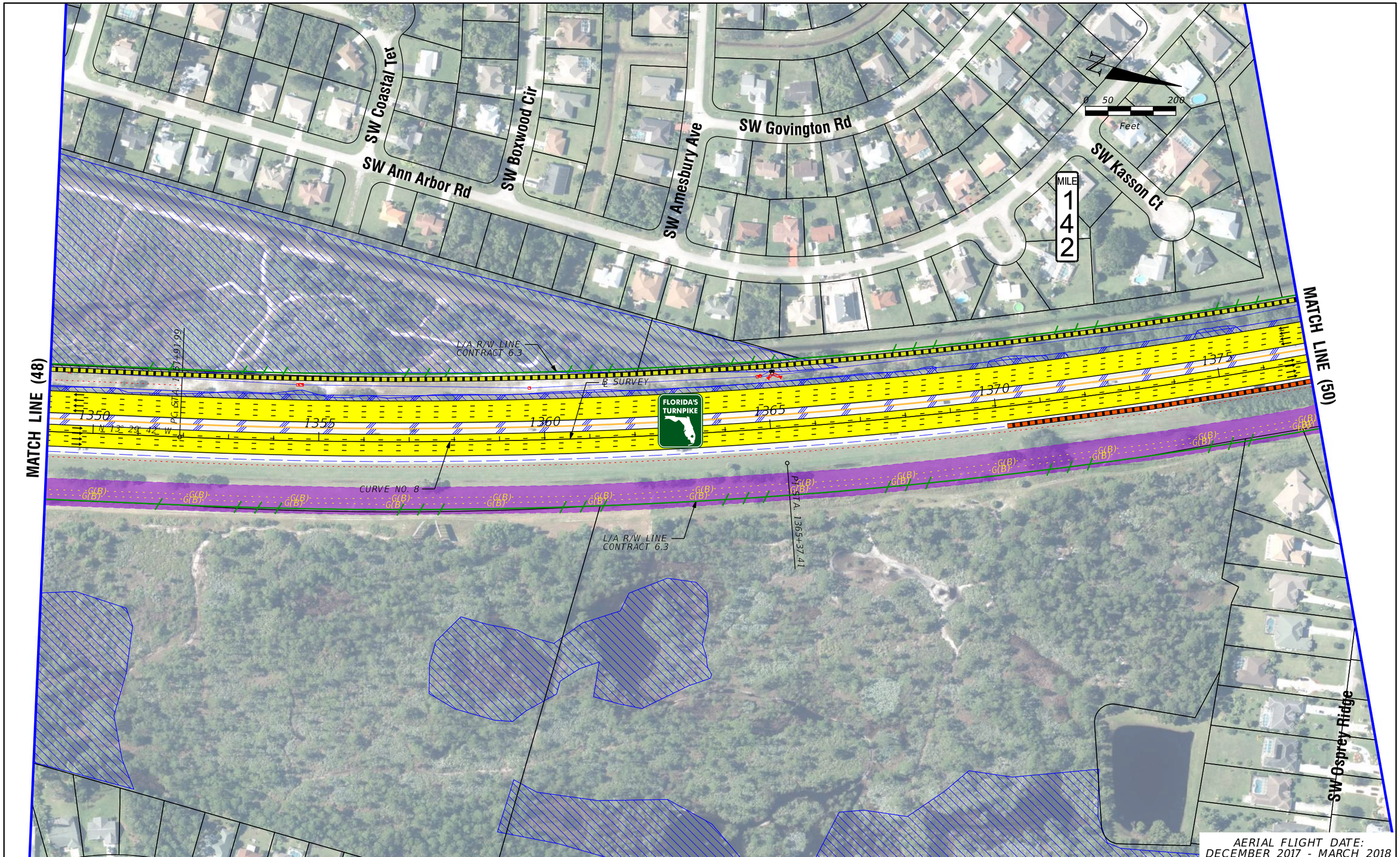
SHEET NO. 48



AERIAL FLIGHT DATE:
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LEGEND

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SHEET NO.
49

MATCH LINE (49)

MATCH LINE (51)

SW Union Ter

SW Harem Cir

SW Grotto Cir

SW Falcon Cir

MILE 142.5

C-24

0 50 200 Feet

L/A R/W LINE CONTRACT 6.3

℄ SURVEY

FLORIDA'S TURNPIKE

PT STA. 178+70.57

1380 1385 1390 1395 1400

N 26° 42' 16" W

G(B)

CURVE NO. 8

L/A R/W LINE CONTRACT 6.3

SW Barber Ln

SW Inwood Ave

SE Cooper Ln

SE Bayshore Blvd

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 50

MATCH LINE (51A)

MATCH LINE (50)

MATCH LINE (52)

MATCH LINE (51B)

SW Falcon Cir

SW Fern Cir

SW Edison Cir

SW Barber Ln

SE Cooper Ln

SE Bayshore Blvd

SW Aubudon Ave

SW Glenwood Dr

SW Port St. Lucie Blvd

716

MILE 143

0 50 200 Feet

L/A R/W LINE CONTRACT 6.3

L/A R/W LINE SPN 97940-2334

B SURVEY

FLORIDA'S TURNPIKE

1405 1410 1415 1420 1425 1430

N 26° 53' 16" W

WRONG WAY

Turnpike Sub-station

B

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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

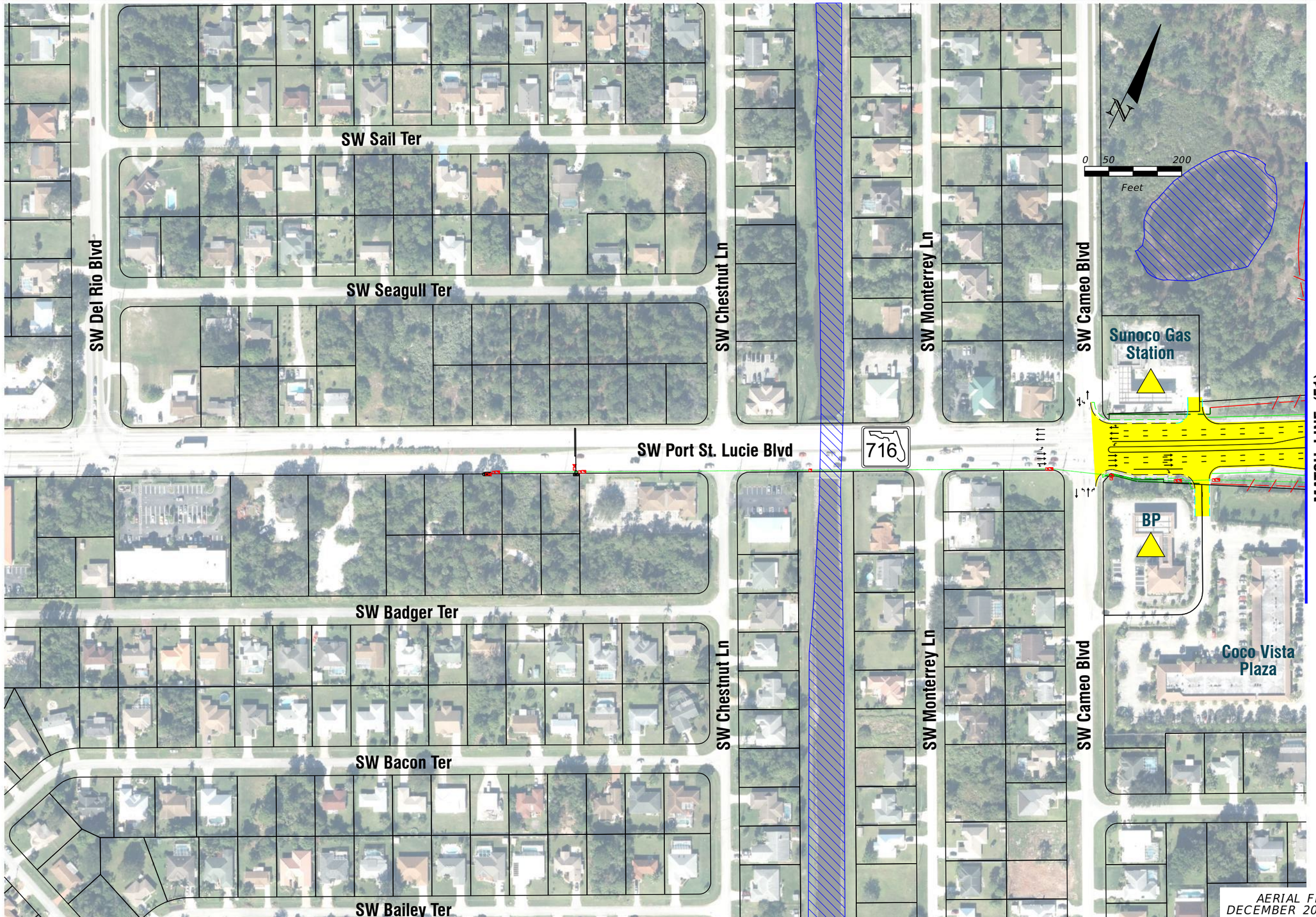
NOTE: ROW = RIGHT OF WAY

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. 51



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
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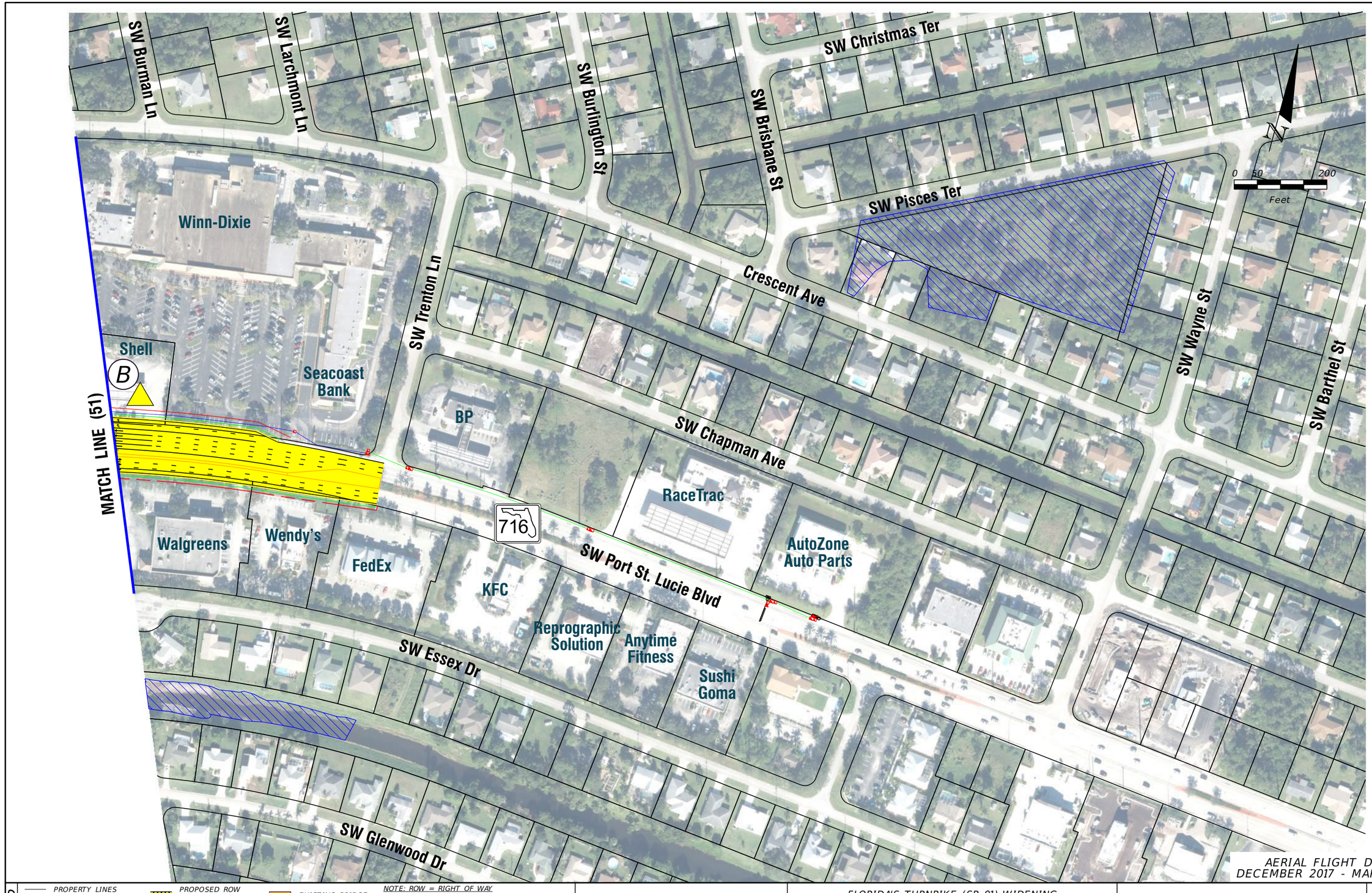
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
51A



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
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- POTENTIAL LIMITED ACCESS ROW LINE
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
51B

MATCH LINE (51)

MATCH LINE (53)

SW Natalie Ter

SW McAllister Ln

SW Gulfspray Ter

SW Hamshire Ln

MILE 143.5

0 50 200 Feet

L/A R/W LINE CONTRACT 6.3

℄ SURVEY

1435 1440 1445 1450 1455 1460

N 26° 53' 16" W

FLORIDA'S TURNPIKE

G(B)

WRONG WAY

WRONG WAY

WRONG WAY

L/A R/W LINE CONTRACT 6.3

L/A R/W LINE SPN 97940-2334

SW S Machedo Blvd

SW Thornhill Dr

SW Biltmore St

SW Bayshore Blvd

R R

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
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- POTENTIAL LIMITED ACCESS ROW LINE
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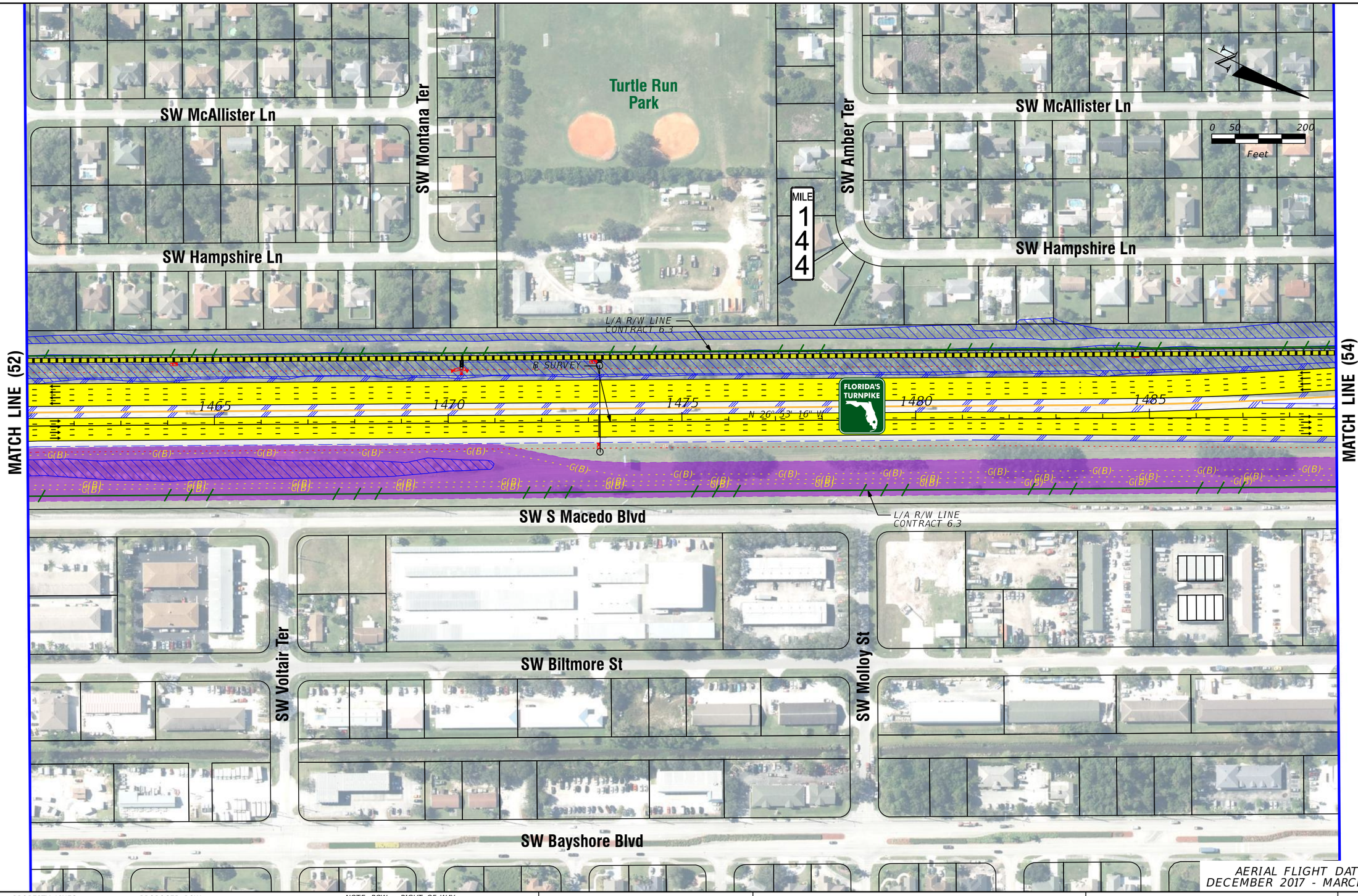
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 52



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
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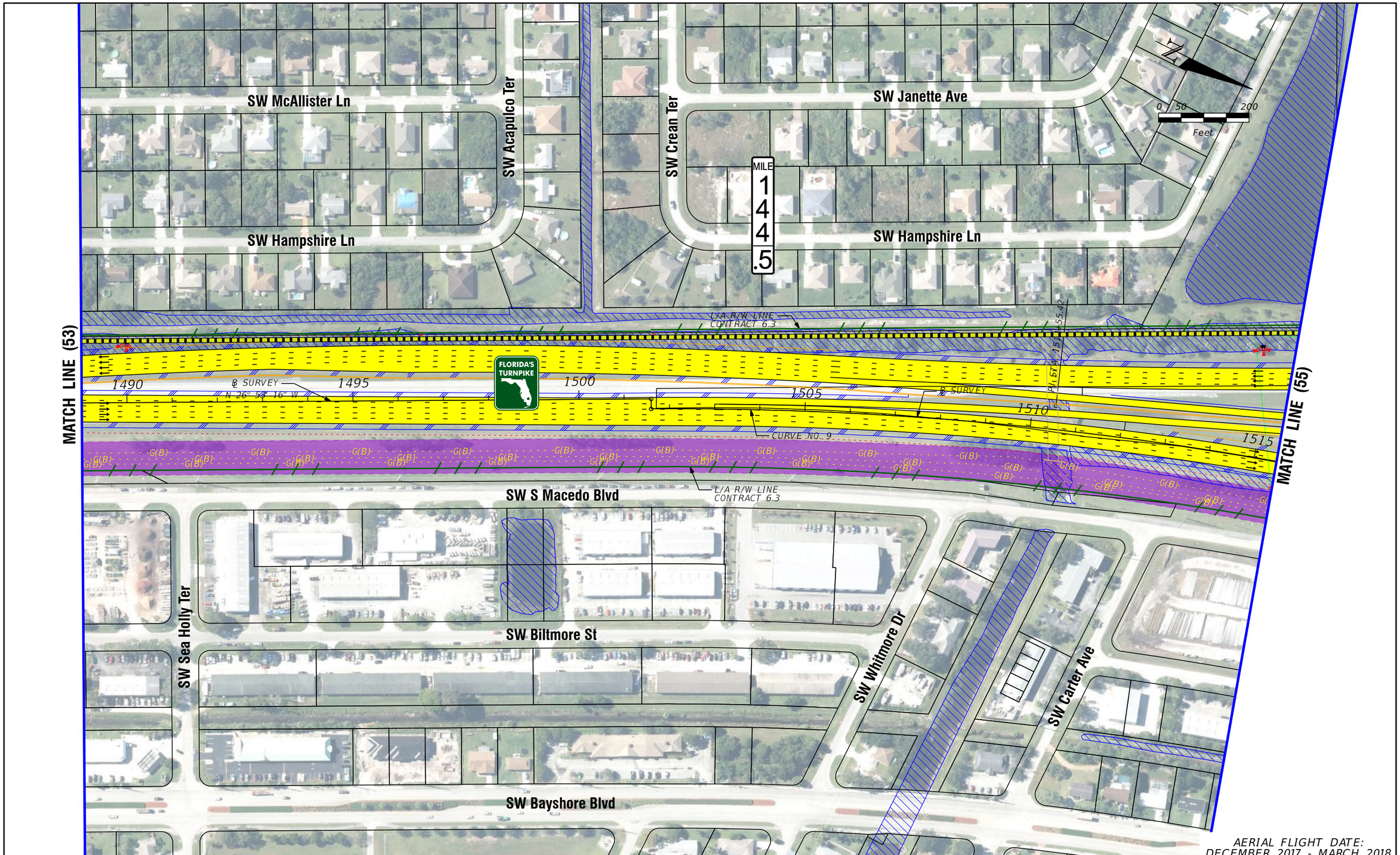
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 53



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
54

MATCH LINE (55A)

MATCH LINE (54)

MATCH LINE (56)

Crosstown Pkwy

MILE 145

WRONG WAY

WRONG WAY

FUTURE MULTI-USE TRAIL

L/A R/W LINE CONTRACT 6.3

0 50 200 Feet

FLORIDA'S TURNPIKE

Ft. Pierce Service Plaza

Ft. Pierce Service Plaza

PROPOSED TOLL GANTRY

CURVE NO. 9

1520

1525

1530

1535

1540

℄ SURVEY

N 13° 31' 52" W

PT STA 1519+43.07

L/A B/W LINE CONTRACT 6.3

SW S Macedo Blvd

SW Grove Ave

SW Biltmore St

SW Everly Ave

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

LEGEND

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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 55



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
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SHEET NO.
55A

SW Indian Key Dr

MILE 145.5

L/A R/W LINE CONTRACT 6.3

SW Lake Manatee Way

0 50 200 Feet

FLORIDA'S TURNPIKE

Ft. Pierce Service Plaza

MATCH LINE (55)

MATCH LINE (57)

℄ SURVEY

1545 1550 1555 1560 1565 1570

N 13° 31' 52" W

CURVE NO. 10

PC STA. 566+87.96

G(B)

L/A R/W LINE CONTRACT 6.3

SW S Macedo Blvd

SW Dwyer Ave

SW Biltmore St

SW Lakehurst Dr

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
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- POTENTIAL ROW LINE
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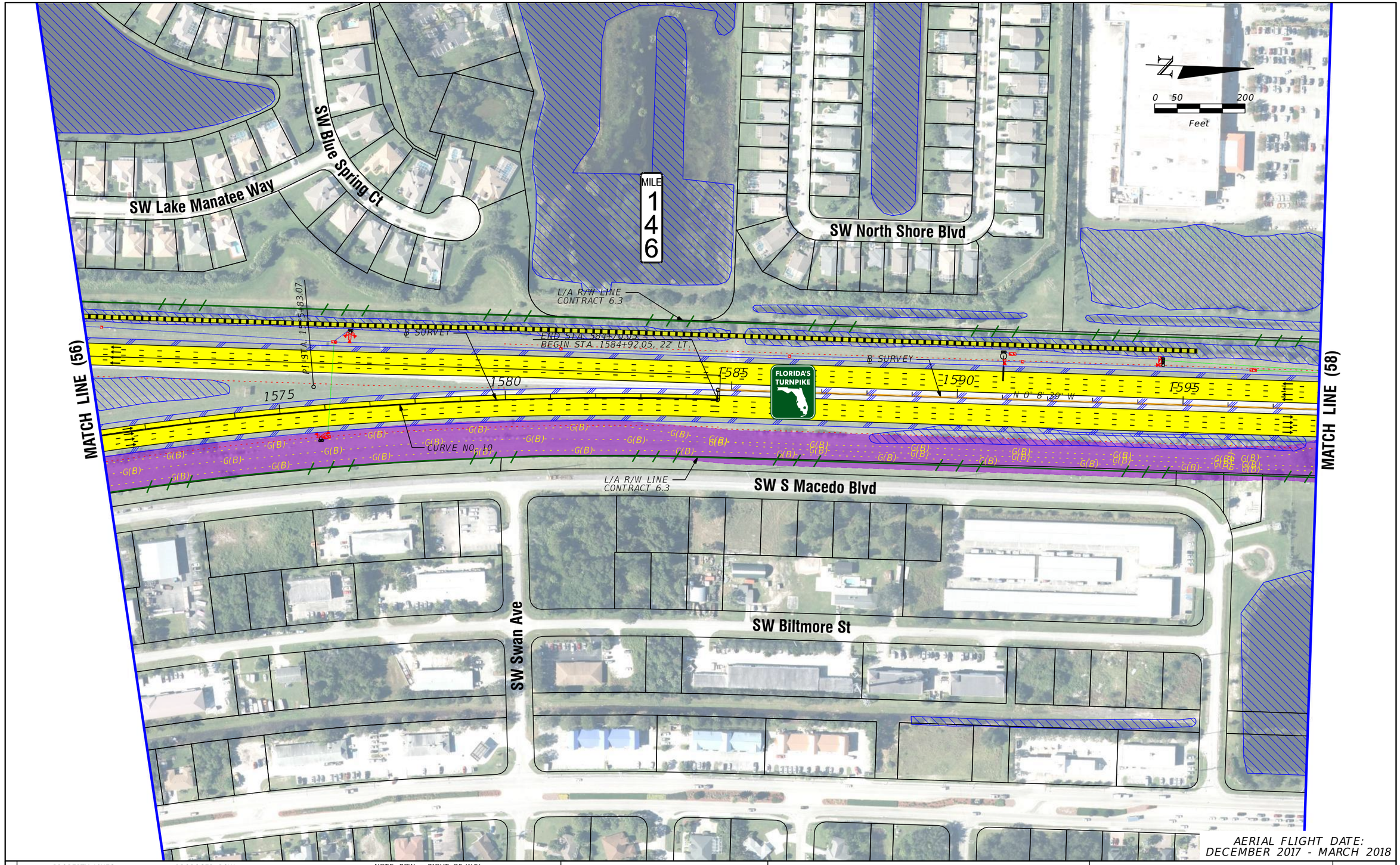
SHEET NO. 56



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
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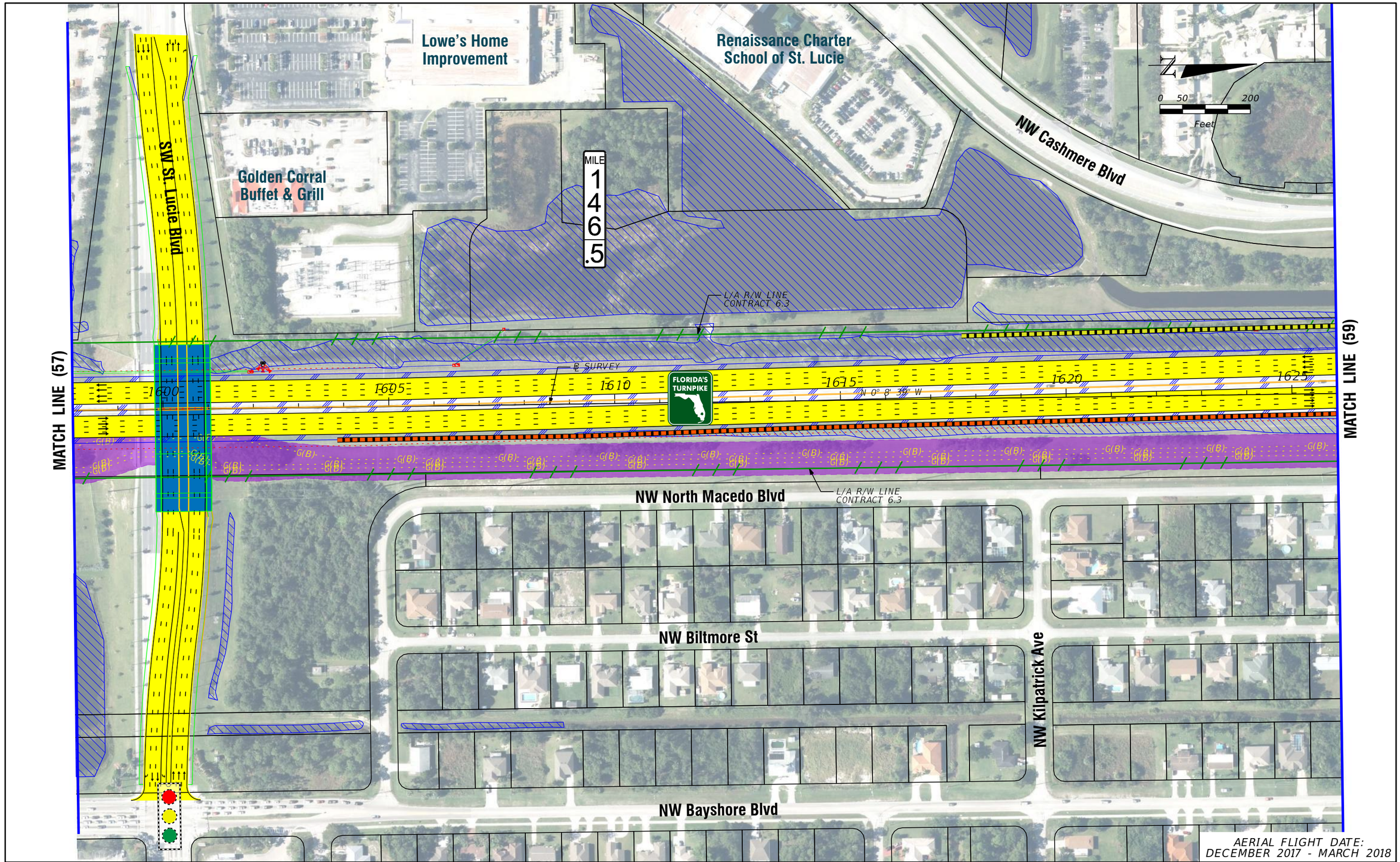
SHEET NO. 57



LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
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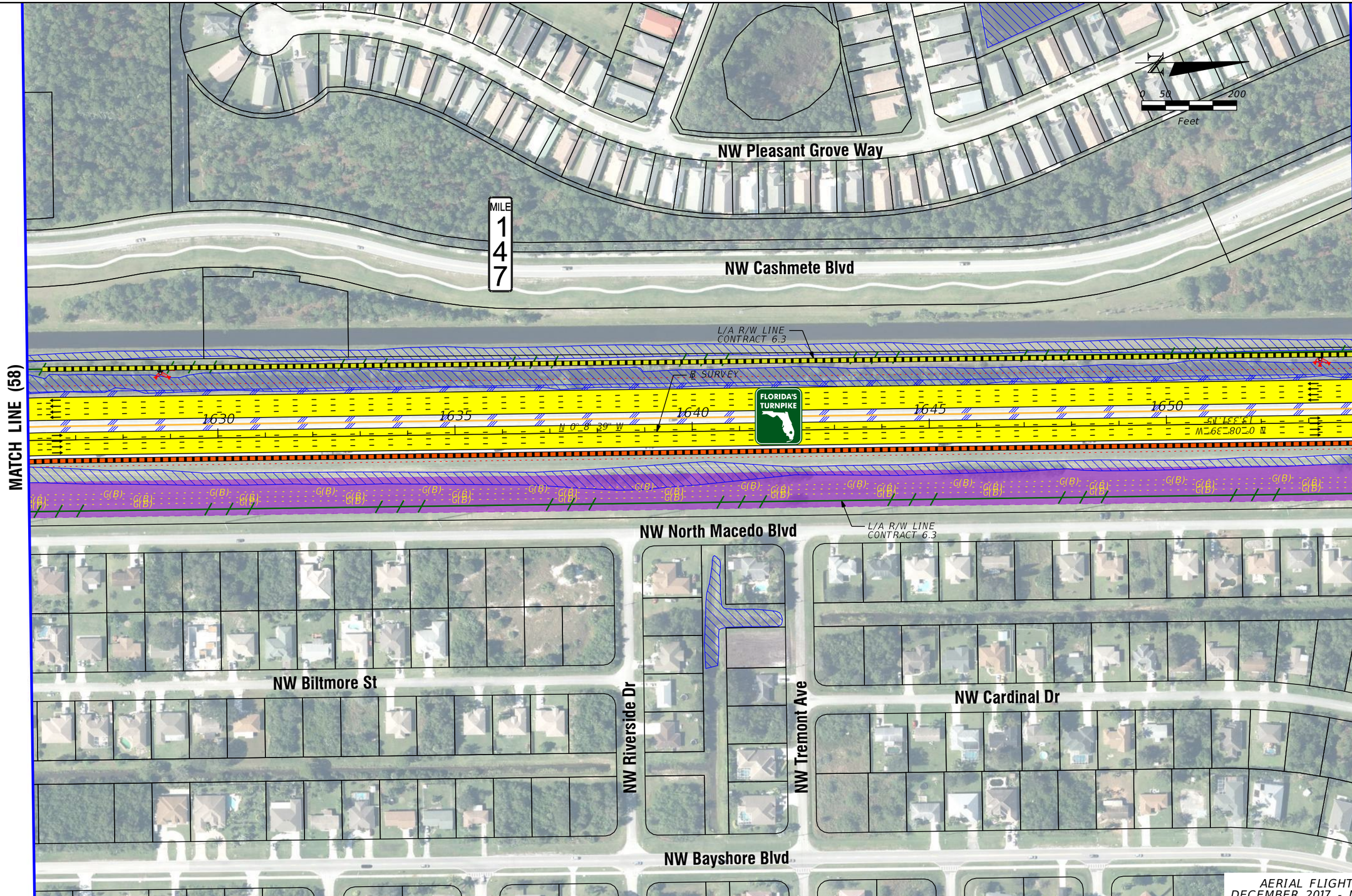
SHEET NO. 58



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

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- EXISTING ROW LINE
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
59

NW Cashmete Blvd

MILE 147.5

West Gate K-8 School

NW Aijo Cir

N

0 50 200

Feet

MATCH LINE (59)

MATCH LINE (61)

L/A R/W LINE CONTRACT 6.3

℄ SURVEY

1655 1660 1665 1670 1675 1680

FLORIDA'S TURNPIKE

N 0° 8' 39" W

G(B)

L/A R/W LINE CONTRACT 6.3

NW Cory Ave

NW Bristol St

NW Archer Ave

NW Cardinal Dr

NW Rainbow St

NW North Macedo Blvd

NW Baroda St

NW Bighorn Ave

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
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- EXISTING LIMITED ACCESS ROW LINE
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- POTENTIAL LIMITED ACCESS ROW LINE
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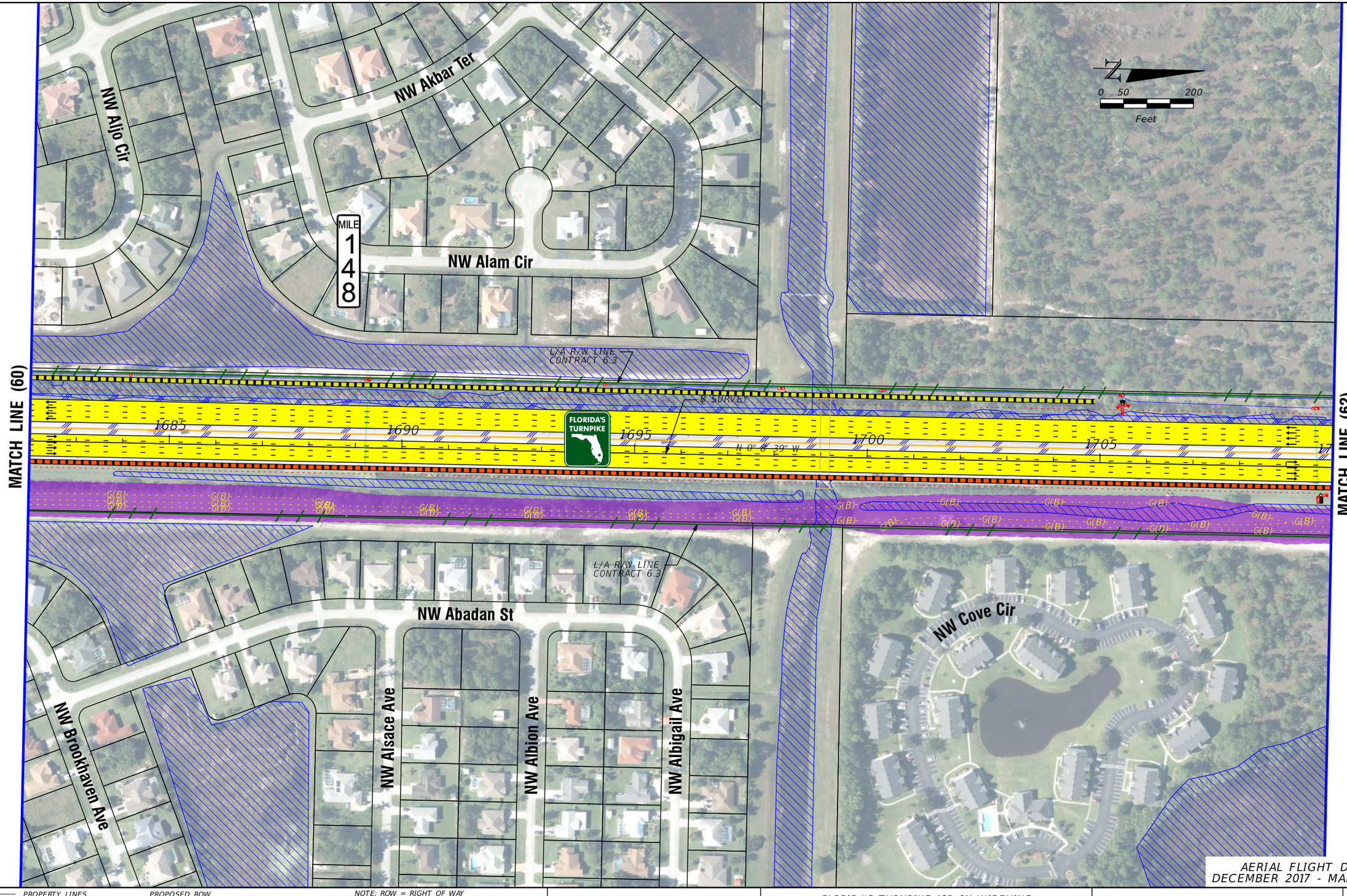
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 60



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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

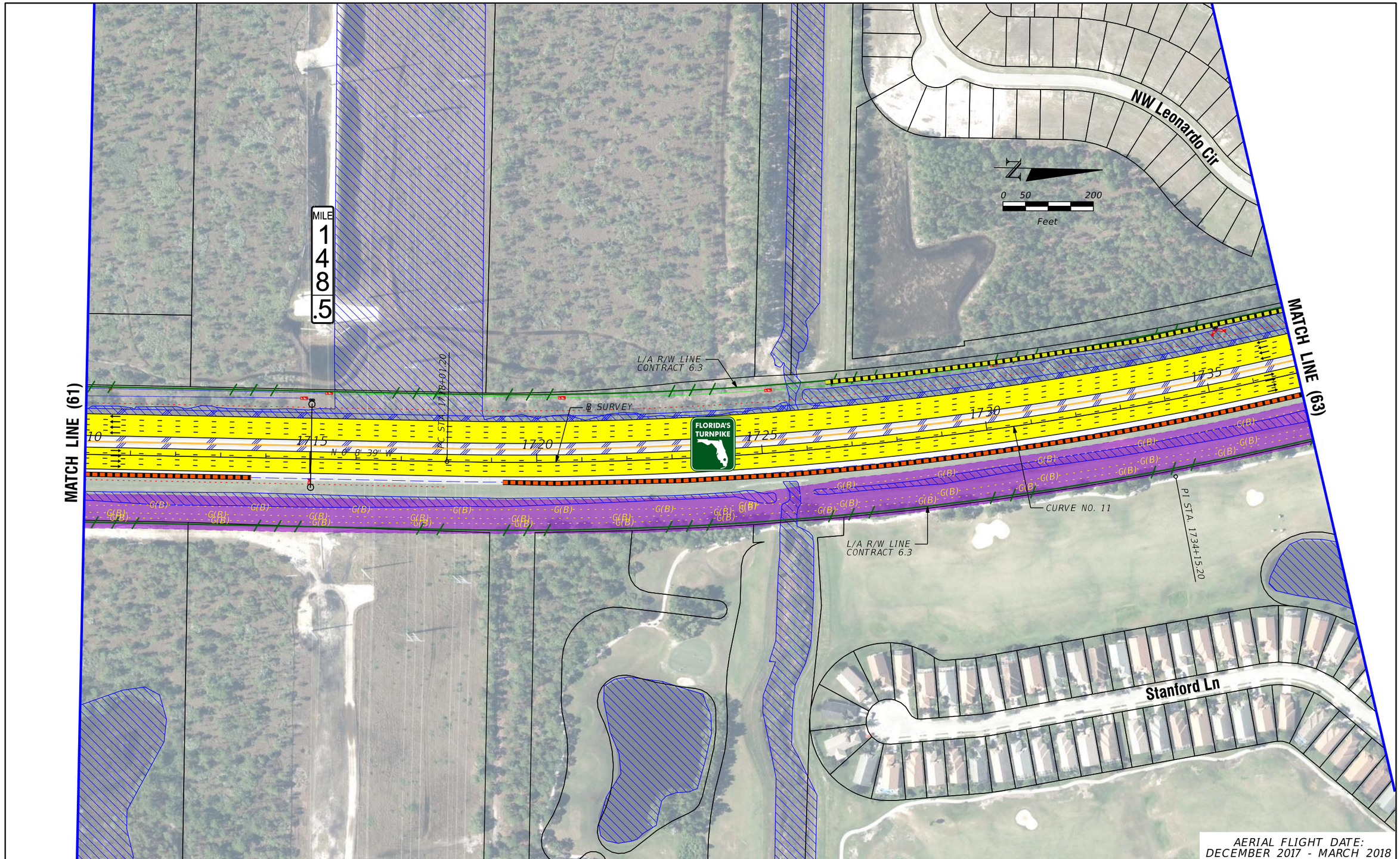
NOTE: ROW = RIGHT OF WAY

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. 61



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
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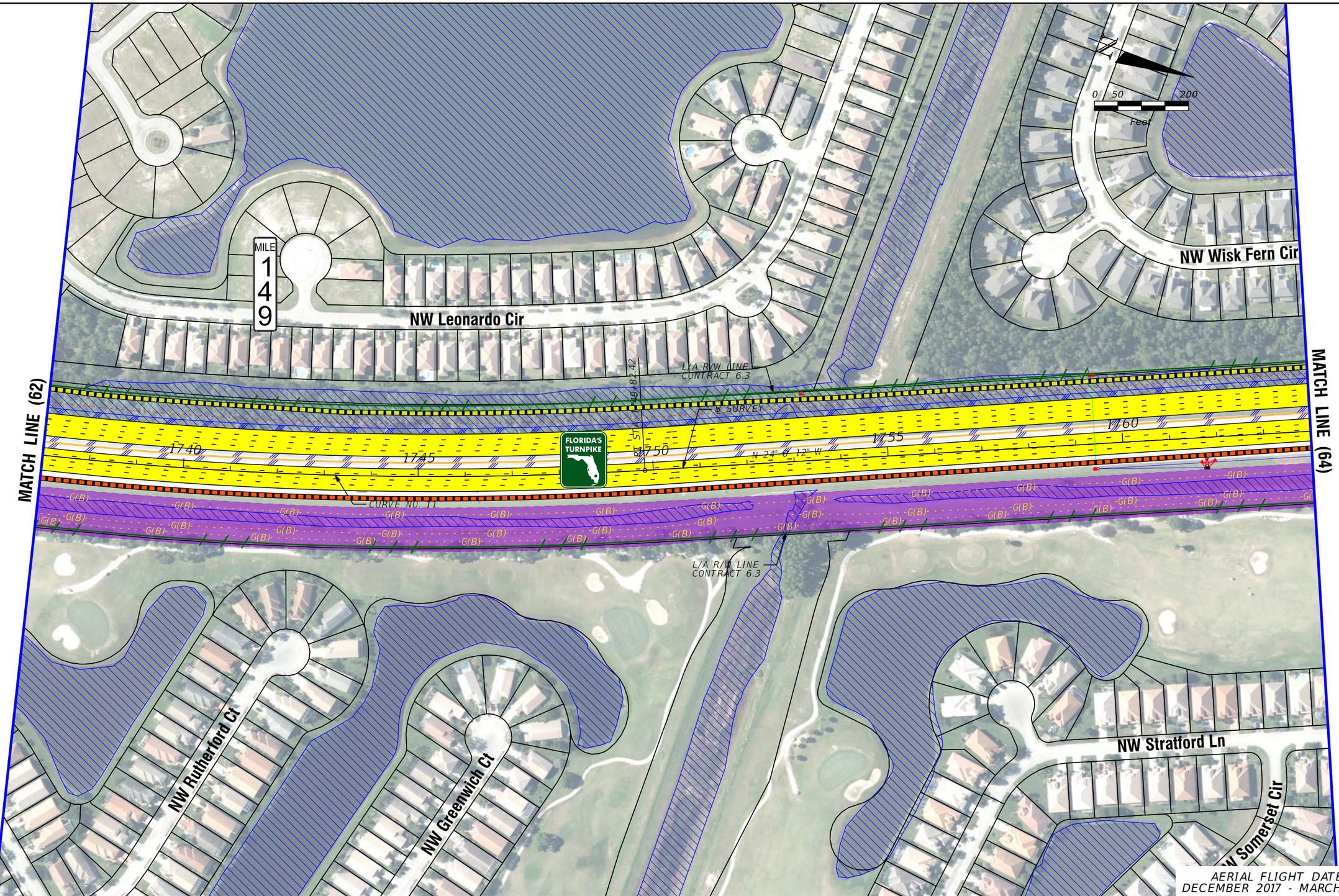
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 62



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
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 63

MATCH LINE (63)

MATCH LINE (65)

MILE 149.5

NW Wisk Fern Cir

Moorhen Trail

EXISTING TOLL GANTRY

℄ SURVEY

L/A R/W LINE CONTRACT 6.3

FLORIDA'S TURNPIKE

1765 1770 1775 1780 1785 1790

N 24° 0' 12" W

G(B)

L/A R/W LINE CONTRACT 6.3

NW Stratford Ln

NW Monoco Ct

NW Perez Ct

N

0 50 200

Feet

AERIAL FLIGHT DATE: DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
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- POTENTIAL LIMITED ACCESS ROW LINE
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 64

MATCH LINE (64)

MATCH LINE (65A)

MATCH LINE (66)

S Delwood Dr

NW Janneba St

NW Piper Cir

W Midway Rd

ST LUCIE 712 COUNTY

0 50 200

Feet

MILE 150

Winterlakes Park

City Owned Property

L/A R/W LINE CONTRACT 6.3

FLORIDA'S TURNPIKE

1795 1800 1805 1810 1815

N 24° 0' 12" W

℄ SURVEY

WRONG WAY

NW Monoco Ct

NW Corporate Way

PROPOSED TOLL GANTRY

Packers of Indian River

Midway Scape Supply

MATCH LINE (65B)

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
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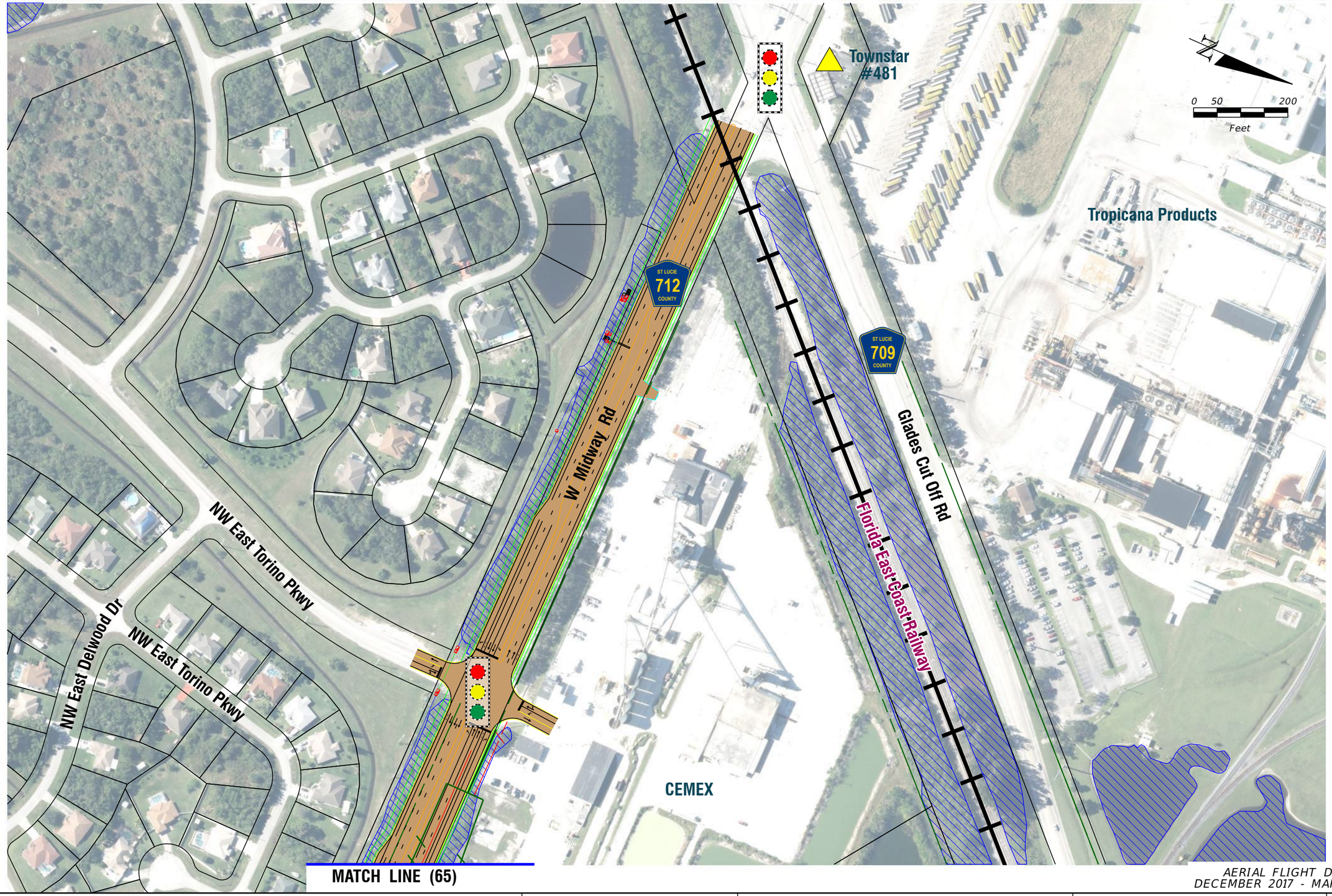
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 65



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
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FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
65A

MATCH LINE (65)

St. Lucie County Health Department

NW Milner Dr

W Midway Rd

S Jenkins Rd

Environmental Dr

NW Mamie Ct

NW Pinson Ct

NW Omega Rd

NW Mayfield Ln

ST LUCIE 712 COUNTY

Post Office Rd

N

0 50 200

Feet

AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

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- POTENTIAL ROW LINE
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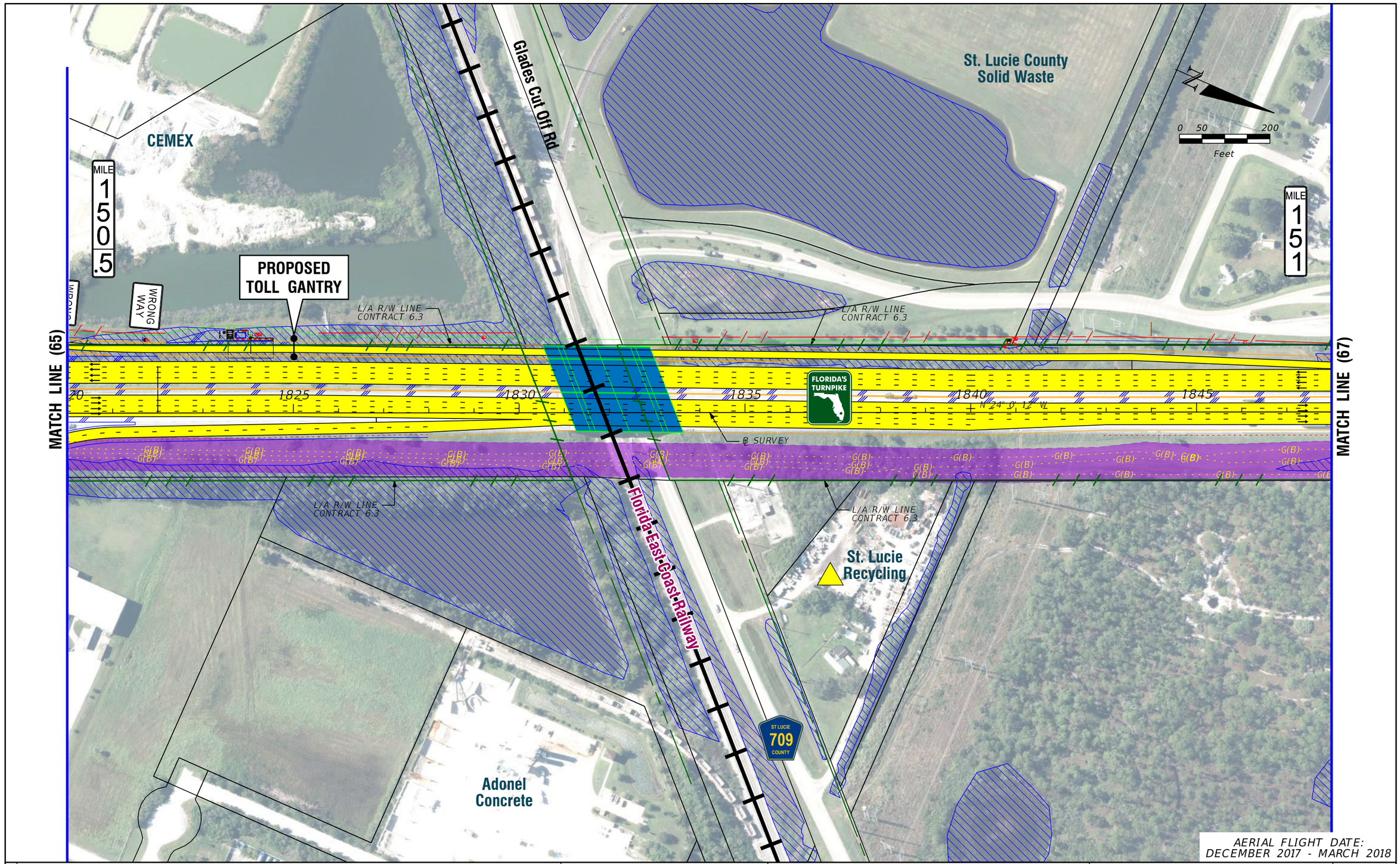
FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
65B



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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
66

St. Lucie County
Solid Waste

St. Lucie County
Sanitary Landfill

0 50 200
Feet

MILE
151.5

MATCH LINE (66)

MATCH LINE (68)

L/A R/W LINE
CONTRACT 6.3

℄ SURVEY

FLORIDA'S TURNPIKE

1850 1855 1860 1865 1870 1875

N 24° 0' 12" W

G(B)

L/A R/W LINE
CONTRACT 6.3

Walmart
Distribution Center

AERIAL FLIGHT DATE:
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LEGEND

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- POTENTIAL LIMITED ACCESS ROW LINE
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
67

MATCH LINE (67)

MATCH LINE (69)

St. Lucie County
Sanitary Landfill

Gordy Road
Preserve

INTERSTATE 95

MILE 152

0 50 200
Feet

L/A R/W LINE
CONTRACT 6.3

℄ SURVEY

FLORIDA'S TURNPIKE

1880 1885 1890 1895 1900

N 24° 0' 12" W

G(B)

L/A R/W LINE
CONTRACT 6.3

EXISTING I-95 BRIDGES
OVER FLORIDA'S TURNPIKE
TO REMAIN

Walmart
Distribution Center

AERIAL FLIGHT DATE:
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LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
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FL TPK PD&E WIDENING
PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO.
68

MATCH LINE (68)

MATCH LINE (70)

Gordy Rd

Ten Mile Creek Preserve

MILE 152.5

0 50 200

Feet

L/A R/W LINE CONTRACT 6.3

℄ SURVEY

CURVE NO. 12

1905 1910 1915 1920 1925 1930

N 24° 0' 12" W

FLORIDA'S TURNPIKE

PRC STA. 1929+33.42

L/A R/W LINE CONTRACT 6.3

Ten Mile Creek

Ft. Pierce Trail

AERIAL FLIGHT DATE:
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LEGEND

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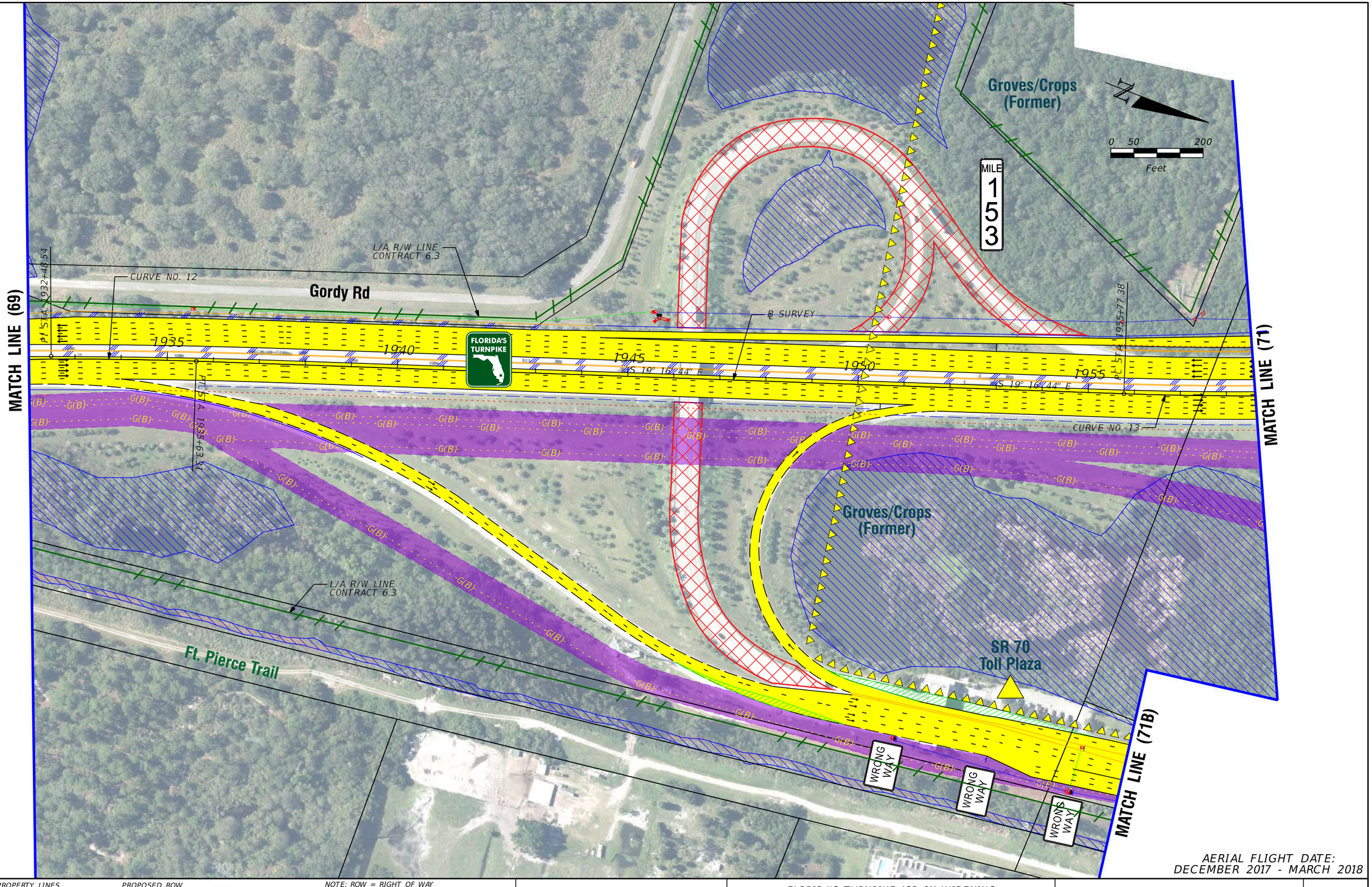
SHEET NO. 69



AERIAL FLIGHT DATE:
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LEGEND

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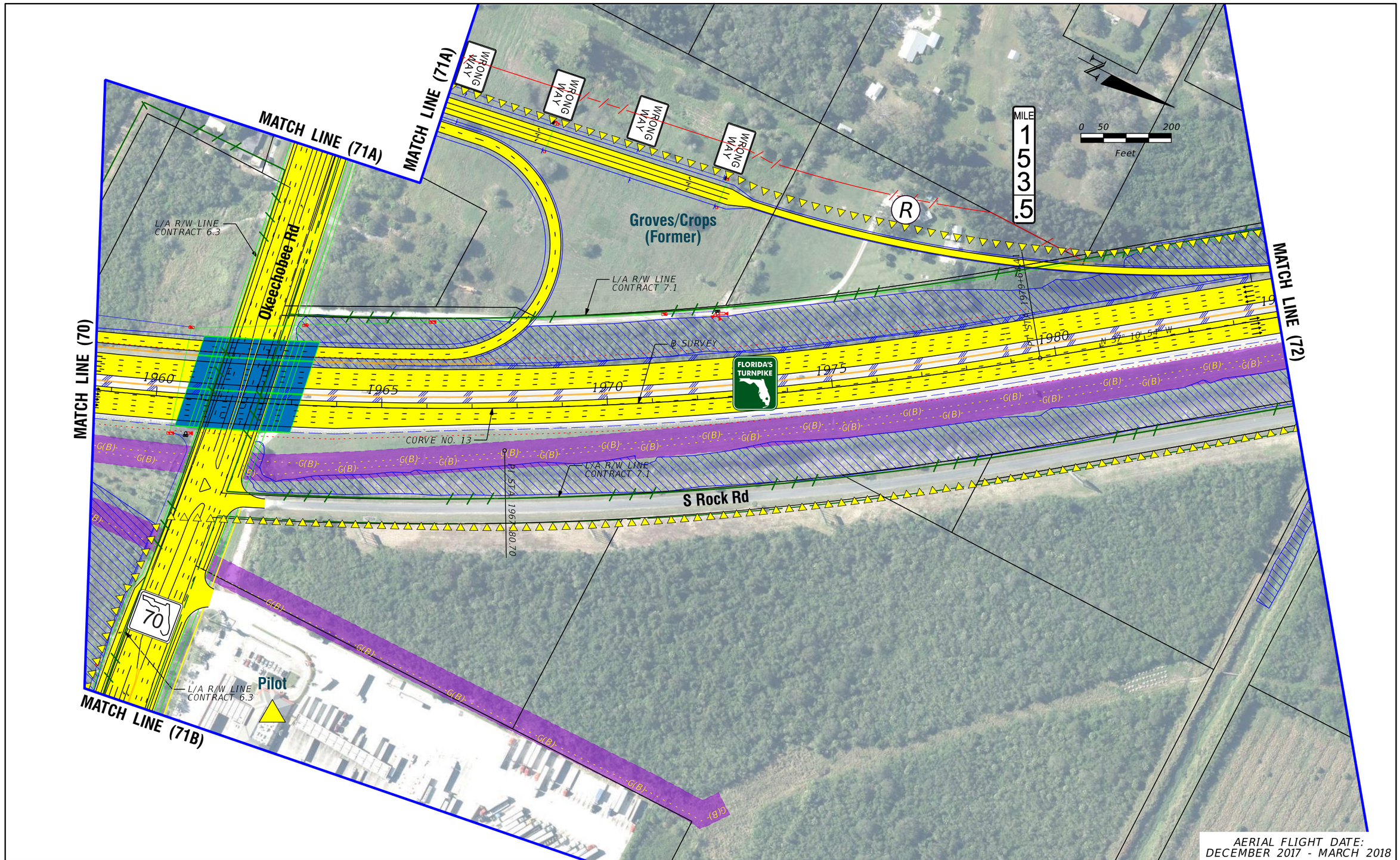
SHEET NO. 70



LEGEND

- PROPERTY LINES
- TRAFFIC BARRIER WALL
- EXISTING ROW LINE
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- POTENTIAL ROW LINE
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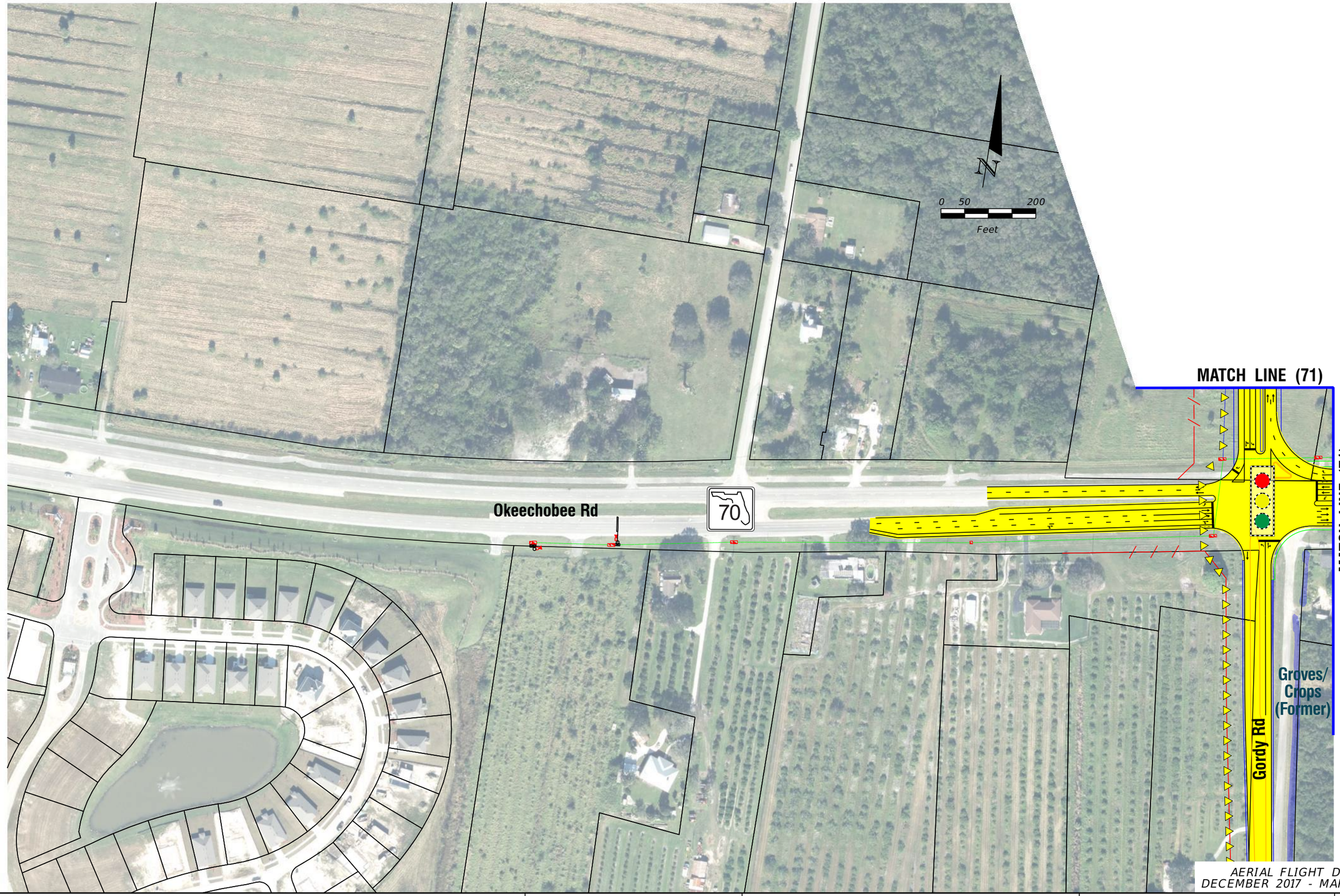
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 71



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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

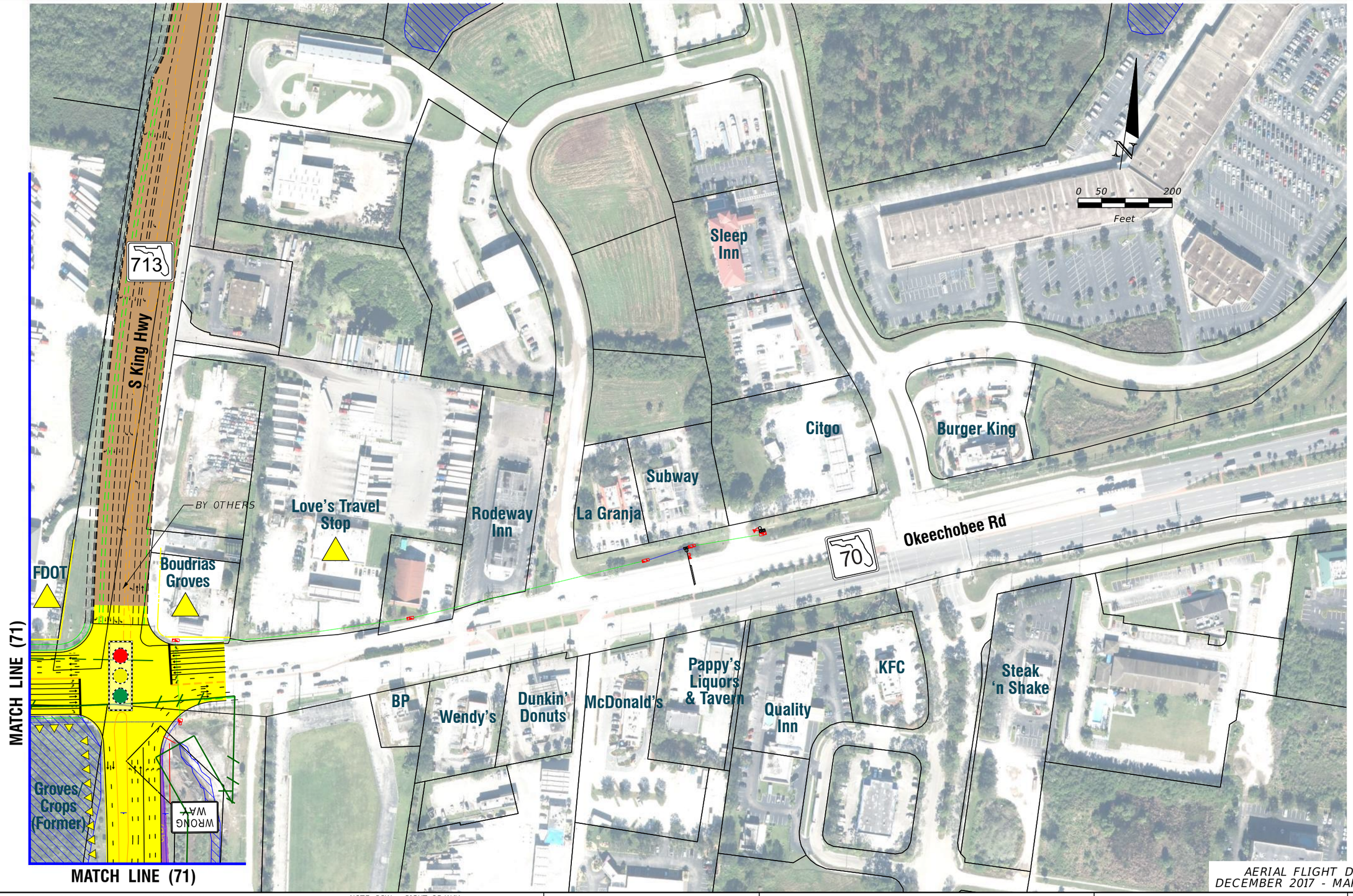
NOTE: ROW = RIGHT OF WAY

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.
71A



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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION

NOTE: ROW = RIGHT OF WAY

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

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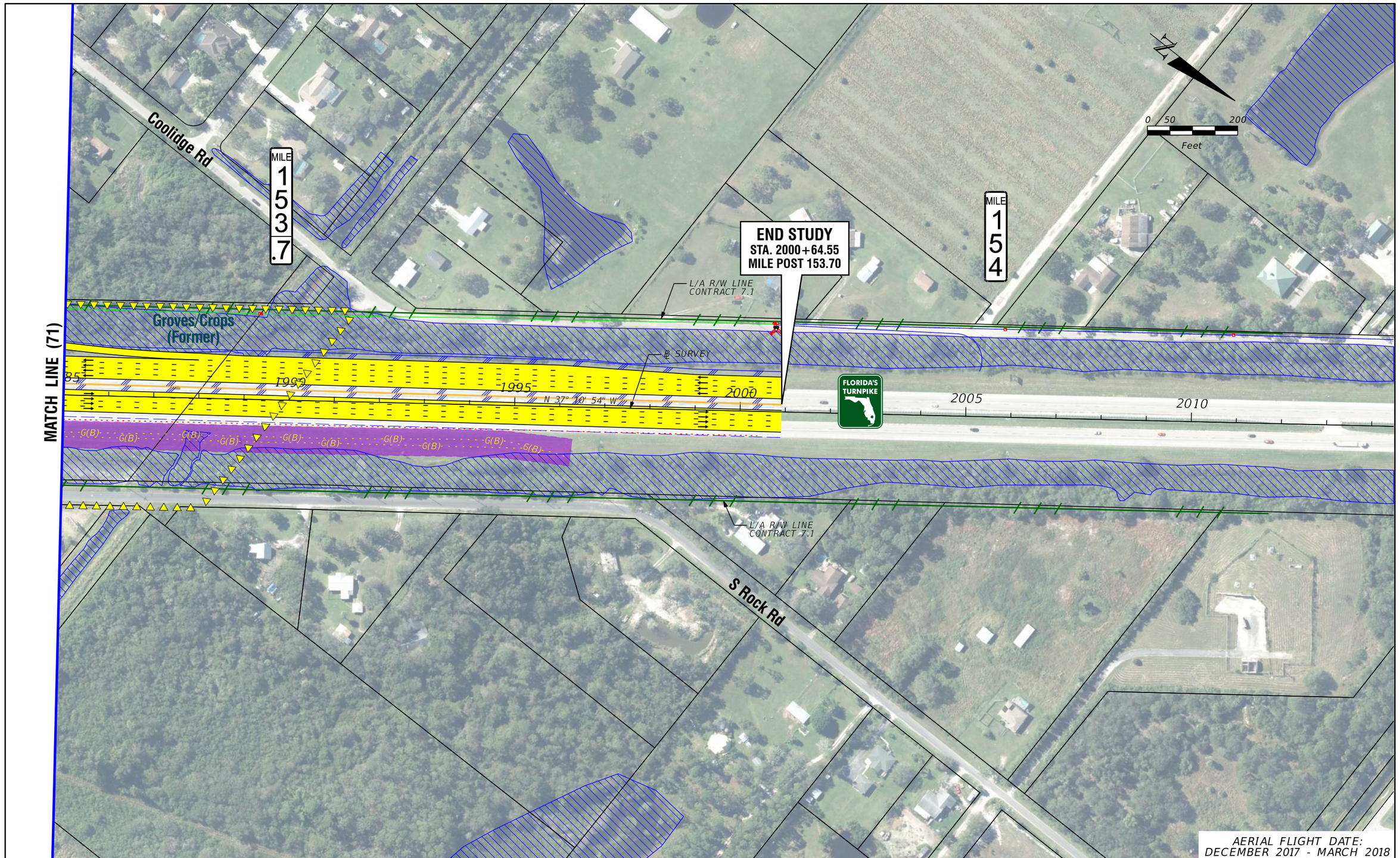
FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

FL TPK PD&E WIDENING PREFERRED ALTERNATIVE CONCEPT PLAN

SHEET NO. 71B



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
- (B) POTENTIAL BUSINESS RELOCATION
- (R) POTENTIAL RESIDENTIAL RELOCATION
- PROPOSED ITS
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

NOTE: ROW = RIGHT OF WAY

H. W. LOCHNER, INC.
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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. 72

APPENDIX B

Long Range Estimate (LRE)

Date: 4/8/2022 9:15:38 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 34 Project Grand Total **$1,161,995,226.48**

Description: 20220210 - Consultant Update 20210527 - Consultant Update 20210513 Copied from FPID 423374-1-52-01 Version 12 [Mainline SR 91 PD&E Widening]

Sequence: 1 WDR - Widen/Resurface, Divided, Rural **Net Length:** 0.080 MI 421 LF

Description: SR 91 FROM STA. 3651+99.77 TO STA 3656+20.54

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	121.00 / 39.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.080
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.55	AC	$32,838.22	$50,899.24
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	3,536.74	CY	$24.87	$87,958.72

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	2,477.87	CY	$18.41	$45,617.59
120-6	EMBANKMENT	7,994.63	CY	$20.93	$167,327.61
	Earthwork Component Total				$351,803.16

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Existing Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	770
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	48.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 24.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,797.91	SY	$11.20	$64,936.59
285-709	OPTIONAL BASE,BASE GROUP 09	3,397.39	SY	$25.30	$85,953.97
327-70-17	MILLING EXIST ASPH PAVT,3 1/4" AVG DEPTH	1,122.18	SY	$4.09	$4,589.72
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	432.04	TN	$119.42	$51,594.22
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	1,296.11	TN	$119.42	$154,781.46
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	44.89	TN	$148.28	$6,656.29
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	134.66	TN	$148.28	$19,967.38

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	75.00	EA	$7.32	$549.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.32	GM	$1,039.31	$332.58
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.48	GM	$388.03	$186.25
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.32	GM	$4,983.20	$1,594.62
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.48	GM	$1,492.26	$716.28
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.32	GM	$4,937.59	$1,580.03
	Roadway Component Total				$393,438.39

SHOULDER COMPONENT

User Input Data

Description	Value

Existing Total Outside Shoulder Width L/R	0.00 / 14.00
New Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Existing Paved Outside Shoulder Width L/R	0.00 / 12.00
New Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,153.04	SY	$25.30	$29,171.91
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	561.09	SY	$4.71	$2,642.73
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	185.16	TN	$153.46	$28,414.65
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.47	TN	$148.28	$366.25
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.16	GM	$2,004.05	$320.65
570-1-2	PERFORMANCE TURF, SOD	187.03	SY	$4.92	$920.19

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	3,649.00	SY	$4.92	$17,953.08
	Comment: 48' TURF WIDTH LT 30' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	967.88	LF	$2.08	$2,013.19
104-11	FLOATING TURBIDITY BARRIER	7.97	LF	$14.51	$115.64
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	7.97	LF	$10.38	$82.73
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	24.36	AC	$34.31	$835.79
107-2	MOWING	24.36	AC	$50.48	$1,229.69
	Shoulder Component Total				$87,149.50

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	12.00 / 12.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,153.04	SY	$25.30	$29,171.91
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	185.16	TN	$153.46	$28,414.65
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.47	TN	$148.28	$366.25
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	421.00	LF	$151.41	$63,743.61
	Median Component Total				$121,696.42

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.43	CY	$1,858.71	$2,657.96
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	64.00	LF	$114.93	$7,355.52
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	8.00	LF	$145.93	$1,167.44
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	$1,745.67	$6,982.68
570-1-2	PERFORMANCE TURF, SOD	56.11	SY	$4.92	$276.06

Retention Basin 1

Description	Value
Size	2.5 AC
Multiplier	2
Depth	6.00
Description	4.3 AC PONDS

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$32,838.22	$164,191.10
120-1	REGULAR EXCAVATION	48,400.00	CY	$18.41	$891,044.00
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$5,621.85	$11,243.70
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$668.83	$74,908.96
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,670.00	LF	$21.32	$56,924.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$3,762.92	$7,525.84
570-1-2	PERFORMANCE TURF, SOD	24,200.00	SY	$4.92	$119,064.00
	Drainage Component Total				$1,500,746.48

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18

700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	2.00	AS	$30.99	$61.98
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56
	Signing Component Total				$9,051.70

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$32,000.00	$32,000.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$32,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$743.31	$2,973.24
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	$2.17	$5,208.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	4.00	EA	$7,049.17	$28,196.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$600.24	$2,400.96
	Subcomponent Total				$46,578.88
	Lighting Component Total				$46,578.88

Sequence 1 Total $2,542,464.53

Sequence: 2 NDR - New Construction, Divided, Rural **Net Length:** 0.242 MI / 1,279 LF

Description: FROM STA. 3656+20.54 TO STA. 3669+00.00

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	85.00 / 75.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.242
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00

Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.69	AC	$32,838.22	$154,011.25

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	4,975.68	CY	$18.41	$91,602.27
120-6	EMBANKMENT	27,295.15	CY	$20.93	$571,287.49
	Earthwork Component Total				$816,901.01

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Roadway Pavement Width L/R	48.00 / 48.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	21,029.42	SY	$11.20	$235,529.50
285-709	OPTIONAL BASE,BASE GROUP 09	13,828.26	SY	$25.30	$349,854.98
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	5,251.67	TN	$119.42	$627,154.43
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	545.63	TN	$148.28	$80,906.02

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	229.00	EA	$7.32	$1,676.28
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.97	GM	$1,039.31	$1,008.13
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.45	GM	$388.03	$562.64
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.97	GM	$4,983.20	$4,833.70
711-15-131	THERMOPLASTIC, STD-OP,	1.45	GM	$1,492.26	$2,163.78

	WHITE, SKIP, 6"				
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.97	GM	$4,937.59	$4,789.46

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,279.00	LF	$315.35	$403,332.65
	Roadway Component Total				$1,711,811.57

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	3,503.96	SY	$25.30	$88,650.19
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	562.68	TN	$153.46	$86,348.87
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7.50	TN	$148.28	$1,112.10
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.48	GM	$2,004.05	$961.94
570-1-2	PERFORMANCE TURF, SOD	568.36	SY	$4.92	$2,796.33

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,324.92	LF	$2.08	$6,915.83
104-11	FLOATING TURBIDITY BARRIER	60.55	LF	$14.51	$878.58
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	60.55	LF	$10.38	$628.51
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	2.00	EA	$115.32	$230.64
107-1	LITTER REMOVAL	246.54	AC	$34.31	$8,458.79
107-2	MOWING	246.54	AC	$50.48	$12,445.34
	Shoulder Component Total				$212,510.12

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	3,503.96	SY	$25.30	$88,650.19
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	562.68	TN	$153.46	$86,348.87
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7.50	TN	$148.28	$1,112.10
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	1,279.00	LF	$151.41	$193,653.39
	Median Component Total				$369,764.55

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.36	CY	$1,858.71	$8,103.98
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00	EA	$5,081.01	$10,162.02
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	200.00	LF	$114.93	$22,986.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	88.00	LF	$126.09	$11,095.92
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	72.00	LF	$145.93	$10,506.96
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	10.00	EA	$1,745.67	$17,456.70
524-1-1	CONCRETE DITCH PAVT, NR, 3"	484.40	SY	$71.56	$34,663.66
570-1-2	PERFORMANCE TURF, SOD	170.51	SY	$4.92	$838.91

Retention Basin 1

Description	Value
Size	2.5 AC
Multiplier	2
Depth	6.00
Description	5.9AC POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$32,838.22	$164,191.10
120-1	REGULAR EXCAVATION	48,400.00	CY	$18.41	$891,044.00
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$5,621.85	$11,243.70
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$668.83	$74,908.96

430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,670.00	LF	$21.32	$56,924.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$3,762.92	$7,525.84
570-1-1	PERFORMANCE TURF	24,200.00	SY	$2.19	$52,998.00
	Drainage Component Total				$1,532,054.97

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	2.00	AS	$6,638.71	$13,277.42
	Signing Component Total				$26,742.53

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$96,800.00	$96,800.00
	Comment: Assume cost per mile when express lane not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$96,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	14

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,800.00	LF	$9.75	$27,300.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	14.00	EA	$743.31	$10,406.34
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	8,400.00	LF	$2.17	$18,228.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	14.00	EA	$7,049.17	$98,688.38
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	14.00	EA	$600.24	$8,403.36
	Subcomponent Total				$163,026.08
	Lighting Component Total				$163,026.08

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,279.00
Begin height	10.00
End Height	10.00
Multiplier	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	25,580.00	SF	$38.25	$978,435.00
	Retaining Walls Component Total				$978,435.00

Sequence 2 Total $5,908,045.83

Sequence: 3 NDR - New Construction, Divided, Rural **Net Length:** 1.018 MI 5,377 LF

Description: FROM STA. 3669+00.00 TO STA. 125+00 with stn eqn at 3696+50.81

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	75.00 / 75.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.018
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	18.51	AC	$32,838.22	$607,835.45

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	20,908.92	CY	$18.41	$384,933.22
120-6	EMBANKMENT	114,700.37	CY	$20.93	$2,400,678.74
	Earthwork Component Total				$3,393,447.41

ROADWAY COMPONENT

User Input Data

Description	Value

Number of Lanes	8
Roadway Pavement Width L/R	48.00 / 48.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	88,424.28	SY	$11.20	$990,351.94
285-709	OPTIONAL BASE,BASE GROUP 09	58,144.94	SY	$25.30	$1,471,066.98
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	22,082.17	TN	$119.42	$2,637,052.74
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2,294.25	TN	$148.28	$340,191.39

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	962.00	EA	$7.32	$7,041.84
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	4.07	GM	$1,039.31	$4,229.99
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	6.11	GM	$388.03	$2,370.86
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	4.07	GM	$4,983.20	$20,281.62
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	6.11	GM	$1,492.26	$9,117.71
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	4.07	GM	$4,937.59	$20,095.99

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	16.67	TN	$280.64	$4,678.27
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	9,513.00	LF	$315.35	$2,999,924.55
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	500.00	LF	$19.44	$9,720.00

Roadway Component Total $8,516,123.88

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	14,733.40	SY	$25.30	$372,755.02
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	2,365.95	TN	$153.46	$363,078.69
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	31.55	TN	$148.28	$4,678.23
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	2.04	GM	$2,004.05	$4,088.26
570-1-2	PERFORMANCE TURF, SOD	2,389.85	SY	$4.92	$11,758.06

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	13,980.60	LF	$2.08	$29,079.65
104-11	FLOATING TURBIDITY BARRIER	254.60	LF	$14.51	$3,694.25
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	254.60	LF	$10.38	$2,642.75
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	$3,083.00	$6,166.00
104-18	INLET PROTECTION SYSTEM	7.00	EA	$115.32	$807.24
107-1	LITTER REMOVAL	1,036.98	AC	$34.31	$35,578.78
107-2	MOWING	1,036.98	AC	$50.48	$52,346.75
	Shoulder Component Total				$886,673.68

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	14,733.40	SY	$25.30	$372,755.02
334-1-52	SUPERPAVE ASPH CONC, TRAF B, PG76-22	2,365.95	TN	$142.02	$336,012.22

337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	31.55	TN	$148.28	$4,678.23
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	5,377.00	LF	$151.41	$814,131.57
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	2.00	GM	$2,004.05	$4,008.10
	Median Component Total				$1,531,585.14

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	18.33	CY	$1,858.71	$34,070.15
425-1-551	INLETS, DT BOT, TYPE E, <10'	7.00	EA	$5,081.01	$35,567.07
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	816.00	LF	$114.93	$93,782.88
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	352.00	LF	$126.09	$44,383.68
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	304.00	LF	$145.93	$44,362.72
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	41.00	EA	$1,745.67	$71,572.47
524-1-1	CONCRETE DITCH PAVT, NR, 3"	2,036.80	SY	$71.56	$145,753.41
570-1-2	PERFORMANCE TURF, SOD	716.95	SY	$4.92	$3,527.39

Retention Basin 1

Description	Value
Size	5 AC
Multiplier	1
Depth	6.00
Description	4.8 AC POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$32,838.22	$164,191.10
120-1	REGULAR EXCAVATION	48,400.00	CY	$18.41	$891,044.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$5,018.84	$5,018.84
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00	LF	$21.32	$39,655.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$3,762.92	$7,525.84
570-1-2	PERFORMANCE TURF, SOD	24,200.00	SY	$4.92	$119,064.00
	Drainage Component Total				$1,894,378.05

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93
700-1-12	SINGLE POST SIGN, F&I GM, 12-	25.00	AS	$1,399.59	$34,989.75

	20 SF			
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	3.00 AS	$4,665.26	$13,995.78
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	7.00 AS	$6,638.71	$46,470.97
	Signing Component Total			$96,663.43

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$407,200.00	$407,200.00
	Comment: Assume cost per mile when express lane not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$407,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	54

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	10,800.00	LF	$9.75	$105,300.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	54.00	EA	$743.31	$40,138.74
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	32,400.00	LF	$2.17	$70,308.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	54.00	EA	$7,049.17	$380,655.18
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	54.00	EA	$600.24	$32,412.96
	Subcomponent Total				$628,814.88
	Lighting Component Total				$628,814.88

BRIDGES COMPONENT

Bridge 3.1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	200.00
Width (LF)	149.00
Type	Overpass Bridge
Cost Factor	1.50
Structure No.	930241
Removal of Existing Structures area	16,380.00
Default Cost per SF	$75.00
Factored Cost per SF	$112.50
Final Cost per SF	**$120.28**
Basic Bridge Cost	**$3,352,500.00**
Description	BRIDGE OVER LOXAHATCHEE CREEK

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	16,380.00	SF	$68.85	$1,127,763.00
400-2-10	CONC CLASS II, APPROACH SLABS	331.11	CY	$485.22	$160,661.19
415-1-9	REINF STEEL- APPROACH SLABS	57,944.25	LB	$1.23	$71,271.43
	Bridge 3.1 Total				$4,712,195.62
	Bridges Component Total				$4,712,195.62

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	5,176.50
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	51,765.00	SF	$38.25	$1,980,011.25

Retaining Wall 2

Description	Value
Length	4,336.60
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	43,366.00	SF	$38.25	$1,658,749.50

Retaining Wall 3

Description	Value
Length	417.00
Begin height	18.00
End Height	18.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,506.00	SF	$38.25	$287,104.50
	Retaining Walls Component Total				$3,925,865.25

Sequence 3 Total $25,992,947.34

Sequence: 4 NDR - New Construction, Divided, Rural **Net Length:** 0.269 MI 1,418 LF

Description: FROM STA. 125+00 TO STA. 139+17.66

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	75.00 / 75.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.268
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.89	AC	$32,838.22	$160,578.90

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	5,513.12	CY	$18.41	$101,496.54
120-6	EMBANKMENT	30,243.41	CY	$20.93	$632,994.57
	Earthwork Component Total				$895,070.01

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Roadway Pavement Width L/R	48.00 / 48.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	23,321.64	SY	$11.20	$261,202.37
285-709	OPTIONAL BASE,BASE GROUP 09	15,335.56	SY	$25.30	$387,989.67
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	5,824.11	TN	$119.42	$695,515.22
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	605.10	TN	$148.28	$89,724.23

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1

Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	254.00	EA	$7.32	$1,859.28
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.07	GM	$1,039.31	$1,112.06
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.61	GM	$388.03	$624.73
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	1.07	GM	$4,983.20	$5,332.02
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	1.61	GM	$1,492.26	$2,402.54
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	1.07	GM	$4,937.59	$5,283.22
	Roadway Component Total				$1,451,045.34

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	3,885.89	SY	$25.30	$98,313.02
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	624.01	TN	$153.46	$95,760.57
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	8.32	TN	$148.28	$1,233.69
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.54	GM	$2,004.05	$1,082.19
570-1-2	PERFORMANCE TURF, SOD	630.31	SY	$4.92	$3,101.13

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	12,605.00	SY	$4.92	$62,016.60
	Comment: 60' TURF WIDTH LT 20' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,687.34	LF	$2.08	$7,669.67
104-11	FLOATING TURBIDITY BARRIER	67.15	LF	$14.51	$974.35
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	67.15	LF	$10.38	$697.02
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00

104-18	INLET PROTECTION SYSTEM	2.00	EA	$115.32	$230.64
107-1	LITTER REMOVAL	273.42	AC	$34.31	$9,381.04
107-2	MOWING	273.42	AC	$50.48	$13,802.24
	Shoulder Component Total				$297,345.16

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	3,885.89	SY	$25.30	$98,313.02
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	624.01	TN	$153.46	$95,760.57
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	8.32	TN	$148.28	$1,233.69
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	1,418.00	LF	$151.41	$214,699.38
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.00	GM	$2,004.05	$2,004.05
	Median Component Total				$412,010.71

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.83	CY	$1,858.71	$8,977.57
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00	EA	$5,081.01	$10,162.02
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	216.00	LF	$114.93	$24,824.88
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	96.00	LF	$126.09	$12,104.64
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	80.00	LF	$145.93	$11,674.40
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	11.00	EA	$1,745.67	$19,202.37
524-1-1	CONCRETE DITCH PAVT, NR, 3"	537.20	SY	$71.56	$38,442.03
570-1-2	PERFORMANCE TURF, SOD	189.09	SY	$4.92	$930.32

Box Culvert 1

Description	Value
Size	Dbl. 10 x 10
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

400-4-1	CONC CLASS IV, CULVERTS	520.88	CY	$1,248.27	$650,198.88
415-1-1	REINF STEEL- ROADWAY	76,547.60	LB	$1.93	$147,736.87

Retention Basin 1

Description	Value
Size	2 AC
Multiplier	2
Depth	6.00
Description	3.8 AC POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.00	AC	$32,838.22	$131,352.88
120-1	REGULAR EXCAVATION	38,720.00	CY	$18.41	$712,835.20
400-2-2	CONC CLASS II, ENDWALLS	36.00	CY	$1,858.71	$66,913.56
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$668.83	$74,908.96
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,360.00	LF	$21.32	$50,315.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$3,762.92	$7,525.84
570-1-2	PERFORMANCE TURF, SOD	19,360.00	SY	$4.92	$95,251.20
	Drainage Component Total				$2,230,799.32

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	7.00	AS	$1,399.59	$9,797.13
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	2.00	AS	$6,638.71	$13,277.42
	Signing Component Total				$28,142.12

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$107,200.00	$107,200.00
	Comment: Assume cost per mile when express lane not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$107,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	16

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	3,200.00	LF	$9.75	$31,200.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00	EA	$743.31	$11,892.96
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	9,600.00	LF	$2.17	$20,832.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	16.00	EA	$7,049.17	$112,786.72
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	16.00	EA	$600.24	$9,603.84
	Subcomponent Total				$186,315.52
	Lighting Component Total				$186,315.52

BRIDGES COMPONENT

Bridge 890072

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		890072
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	2,560.00	SF	$68.85	$176,256.00
	Bridge 890072 Total				$176,256.00
	Bridges Component Total				$176,256.00

Sequence 4 Total $5,784,184.18

Sequence: 5 WDR - Widen/Resurface, Divided, Rural **Net Length:** 11.889 MI 62,775 LF

Description: FROM STA. 139+17.65 TO STA. 769+15.78

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	121.00 / 39.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	11.890
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00

Horizontal Elevation For End Section	120.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	230.57	AC	$32,838.22	$7,571,508.39

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	369,675.71	CY	$18.41	$6,805,729.82
120-6	EMBANKMENT	1,192,727.28	CY	$20.93	$24,963,781.97
	Earthwork Component Total				$39,341,020.18

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Existing Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	770
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	48.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 24.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	864,899.67	SY	$11.20	$9,686,876.30
285-709	OPTIONAL BASE,BASE GROUP 09	506,803.31	SY	$25.30	$12,822,123.74
327-70-17	MILLING EXIST ASPH PAVT,3 1/4" AVG DEPTH	167,399.94	SY	$4.09	$684,665.75
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	64,448.98	TN	$119.42	$7,696,497.19
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	193,346.93	TN	$119.42	$23,089,490.38
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6,696.00	TN	$148.28	$992,882.88
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	20,087.99	TN	$148.28	$2,978,647.16

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1

Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	11,235.00	EA	$7.32	$82,240.20
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	47.56	GM	$1,039.31	$49,429.58
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	71.34	GM	$388.03	$27,682.06
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	47.56	GM	$4,983.20	$237,000.99
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	71.34	GM	$1,492.26	$106,457.83
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	47.56	GM	$4,937.59	$234,831.78

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	33.33	TN	$280.64	$9,353.73
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,000.00	LF	$19.44	$19,440.00
	Roadway Component Total				$58,717,619.57

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 14.00
New Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Existing Paved Outside Shoulder Width L/R	0.00 / 12.00
New Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	172,003.43	SY	$25.30	$4,351,686.78
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	83,699.97	SY	$4.71	$394,226.86
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	27,620.99	TN	$153.46	$4,238,717.13
337-7-25	ASPH CONC FC,INC BIT,FC-	368.28	TN	$148.28	$54,608.56

	5,PG76-22				
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	23.78	GM	$2,004.05	$47,656.31
570-1-2	PERFORMANCE TURF, SOD	27,899.99	SY	$4.92	$137,267.95

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	544,050.00	SY	$4.92	$2,676,726.00
	Comment: 48' TURF WIDTH LT 30' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	144,382.44	LF	$2.08	$300,315.48
104-11	FLOATING TURBIDITY BARRIER	1,188.92	LF	$14.51	$17,251.23
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	1,188.92	LF	$10.38	$12,340.99
104-15	SOIL TRACKING PREVENTION DEVICE	12.00	EA	$3,083.00	$36,996.00
107-1	LITTER REMOVAL	3,630.06	AC	$34.31	$124,547.36
107-2	MOWING	3,630.06	AC	$50.48	$183,245.43
	Shoulder Component Total				$12,575,586.08

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	12.00 / 12.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	172,003.43	SY	$25.30	$4,351,686.78
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	27,620.99	TN	$153.46	$4,238,717.13
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	368.28	TN	$148.28	$54,608.56
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	62,775.00	LF	$151.41	$9,504,762.75
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	24.00	GM	$2,004.05	$48,097.20
	Median Component Total				$18,197,872.42

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	214.01	CY	$1,858.71	$397,782.53
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	9,512.00	LF	$114.93	$1,093,214.16
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	952.00	LF	$145.93	$138,925.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	476.00	EA	$1,745.67	$830,938.92
570-1-2	PERFORMANCE TURF, SOD	8,370.00	SY	$4.92	$41,180.40

Box Culvert 1

Description	Value
Size	10 x 10
Length	62.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	128.10	CY	$1,248.27	$159,903.39
415-1-1	REINF STEEL- ROADWAY	13,291.40	LB	$1.93	$25,652.40

Box Culvert 2

Description	Value
Size	10 x 5
Length	30.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	52.10	CY	$1,248.27	$65,034.87
415-1-1	REINF STEEL- ROADWAY	5,673.00	LB	$1.93	$10,948.89

Box Culvert 3

Description	Value
Size	10 x 5
Length	25.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	47.05	CY	$1,248.27	$58,731.10
415-1-1	REINF STEEL- ROADWAY	5,042.50	LB	$1.93	$9,732.02

Box Culvert 4

Description	Value
Size	10 x 5
Length	26.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	48.06	CY	$1,248.27	$59,991.86
415-1-1	REINF STEEL- ROADWAY	5,168.60	LB	$1.93	$9,975.40

Box Culvert 5

Description	Value

Size	10 x 5
Length	39.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	61.19	CY	$1,248.27	$76,381.64
415-1-1	REINF STEEL- ROADWAY	6,807.90	LB	$1.93	$13,139.25

Box Culvert 6

Description	Value
Size	12 x 10
Length	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	48.80	CY	$1,248.27	$60,915.58
415-1-1	REINF STEEL- ROADWAY	2,674.50	LB	$1.93	$5,161.78

Box Culvert 7

Description	Value
Size	10 x 5
Length	24.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	46.04	CY	$1,248.27	$57,470.35
415-1-1	REINF STEEL- ROADWAY	4,916.40	LB	$1.93	$9,488.65

Box Culvert 8

Description	Value
Size	10 x 5
Length	49.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	71.29	CY	$1,248.27	$88,989.17
415-1-1	REINF STEEL- ROADWAY	8,068.90	LB	$1.93	$15,572.98

Box Culvert 9

Description	Value
Size	10 x 10
Length	22.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	70.10	CY	$1,248.27	$87,503.73
415-1-1	REINF STEEL- ROADWAY	6,543.40	LB	$1.93	$12,628.76

Box Culvert 10

Description	Value

Size	10 x 10
Length	25.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	74.45	CY	$1,248.27	$92,933.70
415-1-1	REINF STEEL- ROADWAY	7,049.50	LB	$1.93	$13,605.54

Box Culvert 11

Description	Value
Size	Dbl. 10 x 10
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	520.88	CY	$1,248.27	$650,198.88
415-1-1	REINF STEEL- ROADWAY	76,547.60	LB	$1.93	$147,736.87

Box Culvert 12

Description	Value
Size	12 x 10
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	377.92	CY	$1,248.27	$471,746.20
415-1-1	REINF STEEL- ROADWAY	40,542.00	LB	$1.93	$78,246.06

Box Culvert 13

Description	Value
Size	Dbl. 10 x 10
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	520.88	CY	$1,248.27	$650,198.88
415-1-1	REINF STEEL- ROADWAY	76,547.60	LB	$1.93	$147,736.87

Box Culvert 14

Description	Value
Size	Dbl. 10 x 8
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	434.24	CY	$1,248.27	$542,048.76
415-1-1	REINF STEEL- ROADWAY	69,885.20	LB	$1.93	$134,878.44

Box Culvert 15

Description	Value

Size	Dbl. 10 x 8
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	434.24	CY	$1,248.27	$542,048.76
415-1-1	REINF STEEL- ROADWAY	69,885.20	LB	$1.93	$134,878.44

Retention Basin 1

Description	Value
Size	10 AC
Multiplier	2
Depth	6.00
Description	1.8ac., 5.7ac., 9.7ac. Ponds

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	20.00	AC	$32,838.22	$656,764.40
120-1	REGULAR EXCAVATION	193,600.00	CY	$18.41	$3,564,176.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	4.00	EA	$5,018.84	$20,075.36
425-2-71	MANHOLES, J-7, <10'	4.00	EA	$9,648.41	$38,593.64
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	208.00	LF	$668.83	$139,116.64
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00	LF	$345.27	$276,216.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	5,560.00	LF	$21.32	$118,539.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	6.00	EA	$3,762.92	$22,577.52
570-1-2	PERFORMANCE TURF, SOD	96,800.00	SY	$4.92	$476,256.00

Retention Basin 2

Description	Value
Size	10 AC
Multiplier	2
Depth	6.00
Description	4.8ac., 6.2ac., 9.9ac. Ponds

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	20.00	AC	$32,838.22	$656,764.40
120-1	REGULAR EXCAVATION	193,600.00	CY	$18.41	$3,564,176.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	4.00	EA	$5,018.84	$20,075.36
425-2-71	MANHOLES, J-7, <10'	4.00	EA	$9,648.41	$38,593.64
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	208.00	LF	$668.83	$139,116.64
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00	LF	$345.27	$276,216.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	5,560.00	LF	$21.32	$118,539.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	6.00	EA	$3,762.92	$22,577.52
570-1-1	PERFORMANCE TURF	96,800.00	SY	$2.19	$211,992.00

Retention Basin 3

Description	Value

Size	5 AC
Multiplier	2
Depth	6.00
Description	4.6ac., 3.3ac., 3.8ac. PONDS

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00	AC	$32,838.22	$328,382.20
120-1	REGULAR EXCAVATION	96,800.00	CY	$18.41	$1,782,088.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	4.00	EA	$9,648.41	$38,593.64
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$668.83	$74,908.96
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00	LF	$345.27	$276,216.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	3,720.00	LF	$21.32	$79,310.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	4.00	EA	$3,762.92	$15,051.68
570-1-2	PERFORMANCE TURF, SOD	48,400.00	SY	$4.92	$238,128.00

Retention Basin 4

Description	Value
Size	2.5 AC
Multiplier	4
Depth	6.00
Description	3.4AC., 2.6AC., 3.3AC. PONDS

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00	AC	$32,838.22	$328,382.20
120-1	REGULAR EXCAVATION	96,800.00	CY	$18.41	$1,782,088.00
400-2-2	CONC CLASS II, ENDWALLS	72.00	CY	$1,858.71	$133,827.12
425-1-361	INLETS, CURB, TYPE P-6, <10'	4.00	EA	$5,621.85	$22,487.40
425-2-71	MANHOLES, J-7, <10'	4.00	EA	$9,648.41	$38,593.64
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	224.00	LF	$668.83	$149,817.92
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00	LF	$345.27	$276,216.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	5,340.00	LF	$21.32	$113,848.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	4.00	EA	$3,762.92	$15,051.68
570-1-2	PERFORMANCE TURF, SOD	48,400.00	SY	$4.92	$238,128.00

Retention Basin 5

Description	Value
Size	2.5 AC
Multiplier	2
Depth	6.00
Description	2.1, 3.5, 1.4 AC PONDS

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$32,838.22	$164,191.10
120-1	REGULAR EXCAVATION	48,400.00	CY	$18.41	$891,044.00
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$5,621.85	$11,243.70

425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$668.83	$74,908.96
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,670.00	LF	$21.32	$56,924.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$3,762.92	$7,525.84
570-1-2	PERFORMANCE TURF, SOD	24,200.00	SY	$4.92	$119,064.00

Retention Basin 6

Description	Value
Size	10 AC
Multiplier	1
Depth	6.00
Description	6.24 AC POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00	AC	$32,838.22	$328,382.20
120-1	REGULAR EXCAVATION	96,800.00	CY	$18.41	$1,782,088.00
400-2-2	CONC CLASS II, ENDWALLS	36.00	CY	$1,858.71	$66,913.56
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	104.00	LF	$668.83	$69,558.32
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00	LF	$21.32	$59,269.60
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00	EA	$3,762.92	$11,288.76
570-1-1	PERFORMANCE TURF	48,400.00	SY	$2.19	$105,996.00

Retention Basin 7

Description	Value
Size	2 AC
Multiplier	4
Depth	6.00
Description	2.2, 3.5, 2.2 AC. PONDS

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	8.00	AC	$32,838.22	$262,705.76
120-1	REGULAR EXCAVATION	77,440.00	CY	$18.41	$1,425,670.40
400-2-2	CONC CLASS II, ENDWALLS	72.00	CY	$1,858.71	$133,827.12
425-1-541	INLETS, DT BOT, TYPE D, <10'	4.00	EA	$5,018.84	$20,075.36
425-2-71	MANHOLES, J-7, <10'	4.00	EA	$9,648.41	$38,593.64
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	224.00	LF	$668.83	$149,817.92
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00	LF	$345.27	$276,216.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	4,720.00	LF	$21.32	$100,630.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	4.00	EA	$3,762.92	$15,051.68
570-1-2	PERFORMANCE TURF, SOD	38,720.00	SY	$4.92	$190,502.40

Retention Basin 8

Description	Value
Size	5 AC
Multiplier	7
Depth	6.00
Description	3.9, 20.8, 9.8 AC. PONDS

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	35.00	AC	$32,838.22	$1,149,337.70
120-1	REGULAR EXCAVATION	338,800.00	CY	$18.41	$6,237,308.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	7.00	EA	$5,018.84	$35,131.88
425-2-71	MANHOLES, J-7, <10'	14.00	EA	$9,648.41	$135,077.74
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	392.00	LF	$668.83	$262,181.36
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	2,800.00	LF	$345.27	$966,756.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	13,020.00	LF	$21.32	$277,586.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	14.00	EA	$3,762.92	$52,680.88
570-1-1	PERFORMANCE TURF	169,400.00	SY	$2.19	$370,986.00

Retention Basin 9

Description	Value
Size	10 AC
Multiplier	3
Depth	6.00
Description	2.2, 4.2, 18.6, 3.8 AC. PONDS

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	30.00	AC	$32,838.22	$985,146.60
120-1	REGULAR EXCAVATION	290,400.00	CY	$18.41	$5,346,264.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	6.00	EA	$5,018.84	$30,113.04
425-2-71	MANHOLES, J-7, <10'	6.00	EA	$9,648.41	$57,890.46
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	312.00	LF	$668.83	$208,674.96
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	1,200.00	LF	$345.27	$414,324.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	8,340.00	LF	$21.32	$177,808.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	9.00	EA	$3,762.92	$33,866.28
570-1-2	PERFORMANCE TURF, SOD	145,200.00	SY	$4.92	$714,384.00

Retention Basin 10

Description	Value
Size	10 AC
Multiplier	3
Depth	6.00
Description	8.6, 3.1, 15.6, 5.6 AC. PONDS

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	30.00	AC	$32,838.22	$985,146.60

120-1	REGULAR EXCAVATION	290,400.00	CY	$18.41	$5,346,264.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	6.00	EA	$5,018.84	$30,113.04
425-2-71	MANHOLES, J-7, <10'	6.00	EA	$9,648.41	$57,890.46
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	312.00	LF	$668.83	$208,674.96
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	1,200.00	LF	$345.27	$414,324.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	8,340.00	LF	$21.32	$177,808.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	9.00	EA	$3,762.92	$33,866.28
570-1-2	PERFORMANCE TURF, SOD	145,200.00	SY	$4.92	$714,384.00
	Drainage Component Total				$55,347,370.13

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	24.00	AS	$402.31	$9,655.44
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	286.00	AS	$1,399.59	$400,282.74
700-1-50	SINGLE POST SIGN, RELOCATE	24.00	AS	$297.41	$7,137.84
700-1-60	SINGLE POST SIGN, REMOVE	286.00	AS	$30.99	$8,863.14
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	24.00	AS	$4,665.26	$111,966.24
700-2-60	MULTI- POST SIGN, REMOVE	24.00	AS	$825.56	$19,813.44
	Signing Component Total				$557,718.84

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$4,755,600.00	$4,755,600.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$4,755,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	628

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	125,600.00	LF	$9.75	$1,224,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	628.00	EA	$743.31	$466,798.68
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	376,800.00	LF	$2.17	$817,656.00
715-4-14	LIGHT POLE COMPLETE, F&I-	628.00	EA	$7,049.17	$4,426,878.76

	STD, 45'				
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	628.00	EA	$600.24	$376,950.72
	Subcomponent Total				$7,312,884.16
	Lighting Component Total				$7,312,884.16

BRIDGES COMPONENT

Bridge 5.1

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	192.00
Width (LF)	149.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	890079
Removal of Existing Structures area	16,380.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$101.86**
Basic Bridge Cost	**$2,682,000.00**
Description	CYPRESS CREEK #2

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	16,380.00	SF	$68.85	$1,127,763.00
400-2-10	CONC CLASS II, APPROACH SLABS	331.11	CY	$485.22	$160,661.19
415-1-9	REINF STEEL- APPROACH SLABS	57,944.25	LB	$1.23	$71,271.43
	Bridge 5.1 Total				$4,041,695.62

Bridge 5.2

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	100.00
Width (LF)	149.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	890082
Removal of Existing Structures area	7,280.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$109.32**
Basic Bridge Cost	**$1,396,875.00**
Description	PHILIP CANAL

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	7,280.00	SF	$68.85	$501,228.00
400-2-10	CONC CLASS II, APPROACH SLABS	331.11	CY	$485.22	$160,661.19

415-1-9	REINF STEEL- APPROACH SLABS	57,944.25 LB	$1.23	$71,271.43
	Bridge 5.2 Total			$2,130,035.62

Bridge 5.3

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	293.83
Width (LF)	109.08
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	890126
Removal of Existing Structures area	17,484.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$99.05**
Basic Bridge Cost	**$3,004,779.04**
Description	KANNER HGWY

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	17,484.00	SF	$68.85	$1,203,773.40
400-2-10	CONC CLASS II, APPROACH SLABS	242.40	CY	$485.22	$117,617.33
415-1-9	REINF STEEL- APPROACH SLABS	42,420.00	LB	$1.23	$52,176.60
	Bridge 5.3 Total				$4,378,346.37

Bridge 5.4

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	292.00
Width (LF)	100.67
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	890119
Removal of Existing Structures area	16,926.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$99.08**
Basic Bridge Cost	**$2,755,841.25**
Description	BRIDGE ROAD

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	16,926.00	SF	$68.85	$1,165,355.10
400-2-10	CONC CLASS II, APPROACH SLABS	223.71	CY	$485.22	$108,548.57
415-1-9	REINF STEEL- APPROACH SLABS	39,149.25	LB	$1.23	$48,153.58
	Bridge 5.4 Total				$4,077,898.50

Bridge 890073

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		890073
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	2,448.00	SF	$68.85	$168,544.80
	Bridge 890073 Total				$168,544.80

Bridge 890074

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		890074
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	2,448.00	SF	$68.85	$168,544.80
	Bridge 890074 Total				$168,544.80

Bridge 890076

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		890076
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	2,468.40	SF	$68.85	$169,949.34
	Bridge 890076 Total				$169,949.34

Bridge 890077

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		890077
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	2,576.00 SF	$68.85	$177,357.60
	Bridge 890077 Total			$177,357.60

Bridge 890078

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		890078
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	2,867.20 SF	$68.85	$197,406.72
	Bridge 890078 Total			$197,406.72
	Bridges Component Total			$15,509,779.37

Sequence 5 Total $212,315,450.75

Sequence: 6 WDR - Widen/Resurface, Divided, Rural **Net Length:** 0.199 MI 1,049 LF

Description: FROM STA. 769+15.78 TO STA. 810+12.60

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	85.00 / 40.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.199
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.02 AC	$32,838.22	$99,171.42

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount

120-6	EMBANKMENT	21,375.85	CY	$20.93	$447,396.54
	Earthwork Component Total				$546,567.96

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Existing Roadway Pavement Width L/R	0.00 / 36.00
Structural Spread Rate	770
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	48.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 12.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	13,055.91	SY	$11.20	$146,226.19
285-709	OPTIONAL BASE,BASE GROUP 09	7,071.18	SY	$25.30	$178,900.85
327-70-17	MILLING EXIST ASPH PAVT,3 1/4" AVG DEPTH	4,196.54	SY	$4.09	$17,163.85
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	1,615.67	TN	$119.42	$192,943.31
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	2,692.78	TN	$119.42	$321,571.79
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	167.86	TN	$148.28	$24,890.28
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	279.77	TN	$148.28	$41,484.30

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	188.00	EA	$7.32	$1,376.16
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.79	GM	$1,039.31	$821.05
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.19	GM	$388.03	$461.76
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.79	GM	$4,983.20	$3,936.73
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	1.19	GM	$1,492.26	$1,775.79
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.79	GM	$4,937.59	$3,900.70

Peripherals Subcomponent

Description	Value

Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	963.00	LF	$315.35	$303,682.05
	Roadway Component Total				$1,239,134.81

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 12.00
New Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Existing Paved Outside Shoulder Width L/R	0.00 / 10.00
New Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	2,874.63	SY	$25.30	$72,728.14
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	1,165.71	SY	$4.71	$5,490.49
334-1-52	SUPERPAVE ASPH CONC, TRAF B, PG76-22	461.62	TN	$142.02	$65,559.27
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.15	TN	$148.28	$911.92
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.40	GM	$2,004.05	$801.62
570-1-2	PERFORMANCE TURF, SOD	466.28	SY	$4.92	$2,294.10

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,413.01	LF	$2.08	$5,019.06
104-11	FLOATING TURBIDITY BARRIER	19.87	LF	$14.51	$288.31
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	19.87	LF	$10.38	$206.25
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	60.48	AC	$34.31	$2,075.07
107-2	MOWING	60.48	AC	$50.48	$3,053.03
	Shoulder Component Total				$161,510.26

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	36.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	12.00 / 12.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	2,874.63	SY	$25.30	$72,728.14
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	461.62	TN	$153.46	$70,840.21
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.15	TN	$148.28	$911.92
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	2,099.00	LF	$151.41	$317,809.59
	Median Component Total				$462,289.86

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.58	CY	$1,858.71	$6,654.18
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	160.00	LF	$114.93	$18,388.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$145.93	$2,334.88
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00	EA	$1,745.67	$13,965.36
570-1-2	PERFORMANCE TURF, SOD	139.88	SY	$4.92	$688.21

Retention Basin 1

Description	Value
Size	2.5 AC
Multiplier	3
Depth	6.00
Description	5.6 & 2.6 AC POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	7.50	AC	$32,838.22	$246,286.65
120-1	REGULAR EXCAVATION	72,600.00	CY	$18.41	$1,336,566.00
425-1-361	INLETS, CURB, TYPE P-6, <10'	3.00	EA	$5,621.85	$16,865.55
425-2-71	MANHOLES, J-7, <10'	3.00	EA	$9,648.41	$28,945.23
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	168.00	LF	$668.83	$112,363.44
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	600.00	LF	$345.27	$207,162.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	4,005.00	LF	$21.32	$85,386.60
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00	EA	$3,762.92	$11,288.76

570-1-2	PERFORMANCE TURF, SOD	36,300.00	SY	$4.92	$178,596.00

Retention Basin 2

Description	Value
Size	10 AC
Multiplier	1
Depth	6.00
Description	11.2 AC POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00	AC	$32,838.22	$328,382.20
120-1	REGULAR EXCAVATION	96,800.00	CY	$18.41	$1,782,088.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	104.00	LF	$668.83	$69,558.32
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00	LF	$21.32	$59,269.60
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00	EA	$3,762.92	$11,288.76
570-1-2	PERFORMANCE TURF, SOD	48,400.00	SY	$4.92	$238,128.00
	Drainage Component Total				$4,921,649.04

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	5.00	AS	$30.99	$154.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56
	Signing Component Total				$13,343.44

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$79,600.00	$79,600.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$79,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	12

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,400.00	LF	$9.75	$23,400.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	$743.31	$8,919.72
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7,200.00	LF	$2.17	$15,624.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	12.00	EA	$7,049.17	$84,590.04
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	12.00	EA	$600.24	$7,202.88
	Subcomponent Total				$139,736.64
	Lighting Component Total				$139,736.64

BRIDGES COMPONENT

Bridge 891000

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	2,989.00
Width (LF)	20.33
Type	Overpass Widening
Cost Factor	1.25
Structure No.	891000
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$94.27**
Basic Bridge Cost	**$5,696,847.19**
Description	ST LUCIE CANAL WIDENING

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	45.18	CY	$485.22	$21,922.24
415-1-9	REINF STEEL- APPROACH SLABS	7,906.50	LB	$1.23	$9,725.00
	Bridge 891000 Total				$5,728,494.43

Bridge 6.1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	2,989.00
Width (LF)	75.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$94.27**
Basic Bridge Cost	**$21,016,406.25**

Description	ST LUCIE CANAL

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	166.67	CY	$485.22	$80,871.62
415-1-9	REINF STEEL- APPROACH SLABS	29,167.25	LB	$1.23	$35,875.72
	Bridge 6.1 Total				$21,133,153.59

Bridge 890066

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Type	Misc/Rehab
Structure No.	
Description	ST LUCIE CANAL REMOVE

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	165,000.00	SF	$68.85	$11,360,250.00
	Bridge 890066 Total				$11,360,250.00
	Bridges Component Total				$38,221,898.02

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	964.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,640.00	SF	$38.25	$368,730.00

Retaining Wall 2

Description	Value
Length	99.00
Begin height	22.00
End Height	22.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	2,178.00	SF	$38.25	$83,308.50

Retaining Wall 3

Description	Value

Length	240.00
Begin height	21.00
End Height	21.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,040.00	SF	$38.25	$192,780.00
	Retaining Walls Component Total				$644,818.50

Sequence 6 Total $46,430,548.53

Sequence: 7 NDR - New Construction, Divided, Rural **Net Length:** 0.278 MI 1,469 LF

Description: FROM STA. 810+12.60 TO STA. 824+81.85

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	75.00 / 75.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.278
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.05	AC	$32,838.22	$165,833.01

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	40,268.33	CY	$20.93	$842,816.15
	Earthwork Component Total				$1,008,649.16

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Roadway Pavement Width L/R	48.00 / 48.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	24,155.18	SY	$11.20	$270,538.02
285-709	OPTIONAL BASE,BASE GROUP 09	15,883.66	SY	$25.30	$401,856.60
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	6,032.27	TN	$119.42	$720,373.68
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	626.73	TN	$148.28	$92,931.52

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	263.00	EA	$7.32	$1,925.16
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.11	GM	$1,039.31	$1,153.63
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.67	GM	$388.03	$648.01
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	1.11	GM	$4,983.20	$5,531.35
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	1.67	GM	$1,492.26	$2,492.07
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	1.11	GM	$4,937.59	$5,480.72

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	8.33	TN	$280.64	$2,337.73
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	2,350.00	LF	$315.35	$741,072.50
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	250.00	LF	$19.44	$4,860.00
	Roadway Component Total				$2,251,200.99

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 14.00

Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	4,024.78	SY	$25.30	$101,826.93
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	646.31	TN	$153.46	$99,182.73
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	8.62	TN	$148.28	$1,278.17
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.56	GM	$2,004.05	$1,122.27
570-1-2	PERFORMANCE TURF, SOD	652.84	SY	$4.92	$3,211.97

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,819.13	LF	$2.08	$7,943.79
104-11	FLOATING TURBIDITY BARRIER	69.55	LF	$14.51	$1,009.17
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	69.55	LF	$10.38	$721.93
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	2.00	EA	$115.32	$230.64
107-1	LITTER REMOVAL	283.08	AC	$34.31	$9,712.47
107-2	MOWING	283.08	AC	$50.48	$14,289.88
	Shoulder Component Total				$243,612.95

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	4,024.78	SY	$25.30	$101,826.93
334-1-52	SUPERPAVE ASPH CONC, TRAF B, PG76-22	646.31	TN	$142.02	$91,788.95
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	8.62	TN	$148.28	$1,278.17
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	2,939.00	LF	$151.41	$444,993.99
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.00	GM	$2,004.05	$2,004.05
	Median Component Total				$641,892.09

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.01	CY	$1,858.71	$9,312.14
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00	EA	$5,081.01	$10,162.02
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	224.00	LF	$114.93	$25,744.32
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	96.00	LF	$126.09	$12,104.64
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	88.00	LF	$145.93	$12,841.84
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	12.00	EA	$1,745.67	$20,948.04
524-1-1	CONCRETE DITCH PAVT, NR, 3"	556.40	SY	$71.56	$39,815.98
570-1-2	PERFORMANCE TURF, SOD	195.85	SY	$4.92	$963.58
	Drainage Component Total				$131,892.56

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	7.00	AS	$1,399.59	$9,797.13
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	2.00	AS	$6,638.71	$13,277.42
	Signing Component Total				$28,142.12

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$111,200.00	$111,200.00
	Comment: Assume cost per mile when express lane not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$111,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	16

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	3,200.00	LF	$9.75	$31,200.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00	EA	$743.31	$11,892.96

715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	9,600.00	LF	$2.17	$20,832.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	16.00	EA	$7,049.17	$112,786.72
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	16.00	EA	$600.24	$9,603.84
	Subcomponent Total				$186,315.52
	Lighting Component Total				$186,315.52

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	889.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,890.00	SF	$38.25	$340,042.50

Retaining Wall 2

Description	Value
Length	1,468.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	14,680.00	SF	$38.25	$561,510.00
	Retaining Walls Component Total				$901,552.50

Sequence 7 Total $5,504,457.89

Sequence: 8 WDR - Widen/Resurface, Divided, Rural **Net Length:** 0.117 MI 618 LF

Description: FROM STA. 824+81.85 TO STA. 831+00.00

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	48.00 / 48.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.117
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00

Horizontal Elevation For End Section	120.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.36	AC	$32,838.22	$44,659.98

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	11,905.11	CY	$20.93	$249,173.95

Earthwork Component Total $293,833.93

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Existing Roadway Pavement Width L/R	11.00 / 11.00
Structural Spread Rate	770
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	23.00 / 23.00
Widened Inside Pavement Width L/R	11.00 / 11.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	8,236.80	SY	$11.20	$92,252.16
285-709	OPTIONAL BASE,BASE GROUP 09	4,758.12	SY	$25.30	$120,380.44
327-70-17	MILLING EXIST ASPH PAVT,3 1/4" AVG DEPTH	1,510.08	SY	$4.09	$6,176.23
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	581.38	TN	$119.42	$69,428.40
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	1,797.00	TN	$119.42	$214,597.74
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	60.40	TN	$148.28	$8,956.11
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	186.70	TN	$148.28	$27,683.88

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	111.00	EA	$7.32	$812.52
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.47	GM	$1,039.31	$488.48
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.70	GM	$388.03	$271.62
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.47	GM	$4,983.20	$2,342.10
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.70	GM	$1,492.26	$1,044.58
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.47	GM	$4,937.59	$2,320.67

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	16.67	TN	$280.64	$4,678.27
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,209.00	LF	$315.35	$381,258.15
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	500.00	LF	$19.44	$9,720.00
	Roadway Component Total				$942,411.35

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,692.66	SY	$25.30	$42,824.30
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	271.81	TN	$153.46	$41,711.96
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.62	TN	$148.28	$536.77
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.23	GM	$2,004.05	$460.93
570-1-2	PERFORMANCE TURF, SOD	274.56	SY	$4.92	$1,350.84

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,420.85	LF	$2.08	$2,955.37
104-11	FLOATING TURBIDITY BARRIER	11.70	LF	$14.51	$169.77
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	11.70	LF	$10.38	$121.45
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	35.70	AC	$34.31	$1,224.87
107-2	MOWING	35.70	AC	$50.48	$1,802.14
	Shoulder Component Total				$96,241.40

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	12.00 / 12.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,692.66	SY	$25.30	$42,824.30
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	271.81	TN	$153.46	$41,711.96
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.62	TN	$148.28	$536.77
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	618.00	LF	$151.41	$93,571.38
	Median Component Total				$178,644.41

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.11	CY	$1,858.71	$3,921.88
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	96.00	LF	$114.93	$11,033.28
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$145.93	$2,334.88
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00	EA	$1,745.67	$8,728.35
570-1-2	PERFORMANCE TURF, SOD	82.37	SY	$4.92	$405.26

Retention Basin 1

Description	Value
Size	2.5 AC

Multiplier	1
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$32,838.22	$82,095.55
120-1	REGULAR EXCAVATION	24,200.00	CY	$18.41	$445,522.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,858.71	$33,456.78
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$5,621.85	$5,621.85
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$9,648.41	$9,648.41
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$345.27	$69,054.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$21.32	$28,462.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$3,762.92	$3,762.92
570-1-2	PERFORMANCE TURF, SOD	12,100.00	SY	$4.92	$59,532.00
	Drainage Component Total				$801,033.84

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$30.99	$92.97
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56
	Signing Component Total				$10,482.28

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$46,800.00	$46,800.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$46,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	8

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00	LF	$9.75	$15,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	$743.31	$5,946.48
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,800.00	LF	$2.17	$10,416.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	8.00	EA	$7,049.17	$56,393.36
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	8.00	EA	$600.24	$4,801.92
	Subcomponent Total				$93,157.76
	Lighting Component Total				$93,157.76

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	560.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,600.00	SF	$38.25	$214,200.00

Retaining Wall 2

Description	Value
Length	618.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	6,180.00	SF	$38.25	$236,385.00
	Retaining Walls Component Total				$450,585.00

Sequence 8 Total $2,913,189.97

Sequence: 9 NDR - New Construction, Divided, Rural **Net Length:** 0.318 MI / 1,681 LF

Description: FROM STA. 831+00.00 TO STA. 847+80.58

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	121.00 / 105.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.318
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	8.71	AC	$32,838.22	$286,020.90

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	9,896.75	CY	$18.41	$182,199.17
120-6	EMBANKMENT	31,931.02	CY	$20.93	$668,316.25
	Earthwork Component Total				$1,136,536.32

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Roadway Pavement Width L/R	48.00 / 48.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	27,645.61	SY	$11.20	$309,630.83
285-709	OPTIONAL BASE,BASE GROUP 09	18,178.86	SY	$25.30	$459,925.16
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	6,903.93	TN	$119.42	$824,467.32
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	717.29	TN	$148.28	$106,359.76

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	301.00	EA	$7.32	$2,203.32
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.27	GM	$1,039.31	$1,319.92
710-11-131	PAINTED PAVT	1.91	GM	$388.03	$741.14

	MARK,STD,WHITE,SKIP, 6"			
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	1.27 GM	$4,983.20	$6,328.66
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	1.91 GM	$1,492.26	$2,850.22
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	1.27 GM	$4,937.59	$6,270.74

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	560.00	LF	$315.35	$176,596.00

Roadway Component Total $1,896,693.07

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	4,606.36	SY	$25.30	$116,540.91
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	739.71	TN	$153.46	$113,515.90
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	9.86	TN	$148.28	$1,462.04
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.64	GM	$2,004.05	$1,282.59
570-1-2	PERFORMANCE TURF, SOD	747.18	SY	$4.92	$3,676.13

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	16,810.00	SY	$4.92	$82,705.20
	Comment: 60' TURF WIDTH LT 30' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,371.00	LF	$2.08	$9,091.68
104-11	FLOATING TURBIDITY BARRIER	79.60	LF	$14.51	$1,155.00
104-12	STAKED TURBIDITY BARRIER-	79.60	LF	$10.38	$826.25

	NYL REINF PVC				
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	2.00	EA	$115.32	$230.64
107-1	LITTER REMOVAL	324.24	AC	$34.31	$11,124.67
107-2	MOWING	324.24	AC	$50.48	$16,367.64
	Shoulder Component Total				$361,061.65

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	4,606.36	SY	$25.30	$116,540.91
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	739.71	TN	$153.46	$113,515.90
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	9.86	TN	$148.28	$1,462.04
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	1,681.00	LF	$151.41	$254,520.21
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.00	GM	$2,004.05	$2,004.05
	Median Component Total				$488,043.11

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.73	CY	$1,858.71	$10,650.41
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00	EA	$5,081.01	$10,162.02
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	256.00	LF	$114.93	$29,422.08
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	112.00	LF	$126.09	$14,122.08
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	96.00	LF	$145.93	$14,009.28
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	13.00	EA	$1,745.67	$22,693.71
524-1-1	CONCRETE DITCH PAVT, NR, 3"	636.80	SY	$71.56	$45,569.41
570-1-2	PERFORMANCE TURF, SOD	224.15	SY	$4.92	$1,102.82

Box Culvert 1

Description	Value
Size	8 x 8
Length	52.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	75.54	CY	$1,248.27	$94,294.32
415-1-1	REINF STEEL- ROADWAY	7,922.40	LB	$1.93	$15,290.23

Retention Basin 1

Description	Value
Size	2 AC
Multiplier	2
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.00	AC	$32,838.22	$131,352.88
120-1	REGULAR EXCAVATION	38,720.00	CY	$18.41	$712,835.20
400-2-2	CONC CLASS II, ENDWALLS	36.00	CY	$1,858.71	$66,913.56
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$668.83	$74,908.96
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,360.00	LF	$21.32	$50,315.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$3,762.92	$7,525.84
570-1-2	PERFORMANCE TURF, SOD	19,360.00	SY	$4.92	$95,251.20
	Drainage Component Total				$1,563,861.70

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00	AS	$1,399.59	$11,196.72
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	2.00	AS	$6,638.71	$13,277.42
	Signing Component Total				$29,541.71

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$127,200.00	$127,200.00
	Comment: Assume cost per mile when express lane not present to be $400,000				

Intelligent Traffic System (ITS) Component Total $127,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	18

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	3,600.00	LF	$9.75	$35,100.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	18.00	EA	$743.31	$13,379.58
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	10,800.00	LF	$2.17	$23,436.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	18.00	EA	$7,049.17	$126,885.06
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	18.00	EA	$600.24	$10,804.32
	Subcomponent Total				$209,604.96

Lighting Component Total $209,604.96

Sequence 9 Total $5,812,542.52

Sequence: 10 WDR - Widen/Resurface, Divided, Rural **Net Length:** 11.853 MI 62,582 LF

Description: FROM STA. 847+80.58 TO STA. 1481+20.42

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	121.00 / 39.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	11.853
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	229.88	AC	$32,838.22	$7,548,850.01

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

120-1	REGULAR EXCAVATION	368,535.62 CY	$18.41	$6,784,740.76
120-6	EMBANKMENT	1,189,048.88 CY	$20.93	$24,886,793.06
	Earthwork Component Total			$39,220,383.83

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Existing Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	770
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	48.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 24.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	862,244.42	SY	$11.20	$9,657,137.50
285-709	OPTIONAL BASE,BASE GROUP 09	505,247.41	SY	$25.30	$12,782,759.47
327-70-17	MILLING EXIST ASPH PAVT,3 1/4" AVG DEPTH	166,886.02	SY	$4.09	$682,563.82
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	64,251.12	TN	$119.42	$7,672,868.75
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	192,753.35	TN	$119.42	$23,018,605.06
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6,675.44	TN	$148.28	$989,834.24
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	20,026.32	TN	$148.28	$2,969,502.73

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	11,201.00	EA	$7.32	$81,991.32
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	47.41	GM	$1,039.31	$49,273.69
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	71.12	GM	$388.03	$27,596.69
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	47.41	GM	$4,983.20	$236,253.51
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	71.12	GM	$1,492.26	$106,129.53
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	47.41	GM	$4,937.59	$234,091.14

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	60.00	TN	$280.64	$16,838.40
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	3,364.00	LF	$315.35	$1,060,837.40
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,800.00	LF	$19.44	$34,992.00
	Roadway Component Total				$59,621,275.25

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 14.00
New Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Existing Paved Outside Shoulder Width L/R	0.00 / 12.00
New Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	171,475.38	SY	$25.30	$4,338,327.11
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	83,443.01	SY	$4.71	$393,016.58
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	27,536.19	TN	$153.46	$4,225,703.72
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	367.15	TN	$148.28	$54,441.00
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	23.71	GM	$2,004.05	$47,516.03
570-1-2	PERFORMANCE TURF, SOD	27,814.34	SY	$4.92	$136,846.55

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	472,842.00	SY	$4.92	$2,326,382.64
	Comment: 48' TURF WIDTH LT 20' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	143,939.19	LF	$2.08	$299,393.52

104-11	FLOATING TURBIDITY BARRIER	1,185.27 LF	$14.51	$17,198.27
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	1,185.27 LF	$10.38	$12,303.10
104-15	SOIL TRACKING PREVENTION DEVICE	12.00 EA	$3,083.00	$36,996.00
107-1	LITTER REMOVAL	3,619.14 AC	$34.31	$124,172.69
107-2	MOWING	3,619.14 AC	$50.48	$182,694.19
	Shoulder Component Total			$12,194,991.40

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	12.00 / 12.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	171,475.38	SY	$25.30	$4,338,327.11
334-1-52	SUPERPAVE ASPH CONC, TRAF B, PG76-22	27,536.19	TN	$142.02	$3,910,689.70
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	367.15	TN	$148.28	$54,441.00
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	62,582.00	LF	$151.41	$9,475,540.62
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	24.00	GM	$2,004.05	$48,097.20
	Median Component Total				$17,827,095.63

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	213.35	CY	$1,858.71	$396,555.78
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	9,488.00	LF	$114.93	$1,090,455.84
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	952.00	LF	$145.93	$138,925.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	475.00	EA	$1,745.67	$829,193.25
570-1-1	PERFORMANCE TURF	8,344.30	SY	$2.19	$18,274.02

Box Culvert 1

Description	Value
Size	8 x 8
Length	22.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	46.44	CY	$1,248.27	$57,969.66
415-1-1	REINF STEEL- ROADWAY	4,181.40	LB	$1.93	$8,070.10

Box Culvert 2

Description	Value
Size	8 x 8
Length	42.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	65.84	CY	$1,248.27	$82,186.10
415-1-1	REINF STEEL- ROADWAY	6,675.40	LB	$1.93	$12,883.52

Box Culvert 3

Description	Value
Size	10 x 10
Length	22.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	70.10	CY	$1,248.27	$87,503.73
415-1-1	REINF STEEL- ROADWAY	6,543.40	LB	$1.93	$12,628.76

Box Culvert 4

Description	Value
Size	10 x 10
Length	24.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	73.00	CY	$1,248.27	$91,123.71
415-1-1	REINF STEEL- ROADWAY	6,880.80	LB	$1.93	$13,279.94

Box Culvert 5

Description	Value
Size	Dbl. 10 x 8
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	434.24	CY	$1,248.27	$542,048.76
415-1-1	REINF STEEL- ROADWAY	69,885.20	LB	$1.93	$134,878.44

Box Culvert 6

Description	Value
Size	Dbl. 10 x 10
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	520.88	CY	$1,248.27	$650,198.88
415-1-1	REINF STEEL- ROADWAY	76,547.60	LB	$1.93	$147,736.87

Retention Basin 1

Description	Value
Size	5 AC
Multiplier	12
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	60.00	AC	$32,838.22	$1,970,293.20
120-1	REGULAR EXCAVATION	580,800.00	CY	$18.41	$10,692,528.00
400-2-2	CONC CLASS II, ENDWALLS	360.00	CY	$1,858.71	$669,135.60
425-1-541	INLETS, DT BOT, TYPE D, <10'	12.00	EA	$5,018.84	$60,226.08
425-2-71	MANHOLES, J-7, <10'	24.00	EA	$9,648.41	$231,561.84
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	672.00	LF	$668.83	$449,453.76
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	4,800.00	LF	$345.27	$1,657,296.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	22,320.00	LF	$21.32	$475,862.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	24.00	EA	$3,762.92	$90,310.08
570-1-1	PERFORMANCE TURF	290,400.00	SY	$2.19	$635,976.00

Retention Basin 2

Description	Value
Size	5 AC
Multiplier	6
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	30.00	AC	$32,838.22	$985,146.60
120-1	REGULAR EXCAVATION	290,400.00	CY	$18.41	$5,346,264.00
400-2-2	CONC CLASS II, ENDWALLS	180.00	CY	$1,858.71	$334,567.80
425-1-541	INLETS, DT BOT, TYPE D, <10'	6.00	EA	$5,018.84	$30,113.04
425-2-71	MANHOLES, J-7, <10'	12.00	EA	$9,648.41	$115,780.92
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	336.00	LF	$668.83	$224,726.88
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	2,400.00	LF	$345.27	$828,648.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	11,160.00	LF	$21.32	$237,931.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	12.00	EA	$3,762.92	$45,155.04
570-1-2	PERFORMANCE TURF, SOD	145,200.00	SY	$4.92	$714,384.00

Retention Basin 3

Description	Value
Size	5 AC

Multiplier	7
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	35.00	AC	$32,838.22	$1,149,337.70
120-1	REGULAR EXCAVATION	338,800.00	CY	$18.41	$6,237,308.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	7.00	EA	$5,018.84	$35,131.88
425-2-71	MANHOLES, J-7, <10'	14.00	EA	$9,648.41	$135,077.74
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	392.00	LF	$668.83	$262,181.36
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	2,800.00	LF	$345.27	$966,756.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	13,020.00	LF	$21.32	$277,586.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	14.00	EA	$3,762.92	$52,680.88
570-1-2	PERFORMANCE TURF, SOD	169,400.00	SY	$4.92	$833,448.00
	Drainage Component Total				$40,058,781.12

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	24.00	AS	$402.31	$9,655.44
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	285.00	AS	$1,399.59	$398,883.15
700-1-50	SINGLE POST SIGN, RELOCATE	24.00	AS	$297.41	$7,137.84
700-1-60	SINGLE POST SIGN, REMOVE	285.00	AS	$30.99	$8,832.15
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	24.00	AS	$4,665.26	$111,966.24
700-2-60	MULTI- POST SIGN, REMOVE	24.00	AS	$825.56	$19,813.44
	Signing Component Total				$556,288.26

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$4,741,200.00	$4,741,200.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$4,741,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	626

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	125,200.00	LF	$9.75	$1,220,700.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	626.00	EA	$743.31	$465,312.06
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	375,600.00	LF	$2.17	$815,052.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	626.00	EA	$7,049.17	$4,412,780.42
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	626.00	EA	$600.24	$375,750.24
	Subcomponent Total				$7,289,594.72
	Lighting Component Total				$7,289,594.72

BRIDGES COMPONENT

Bridge 10-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	177.00
Width (LF)	149.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	890085
Removal of Existing Structures area	15,015.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$102.54**
Basic Bridge Cost	**$2,472,468.75**
Description	BESSEY CREEK BRIDGE

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	15,015.00	SF	$68.85	$1,033,782.75
400-2-10	CONC CLASS II, APPROACH SLABS	331.11	CY	$485.22	$160,661.19
415-1-9	REINF STEEL- APPROACH SLABS	57,944.25	LB	$1.23	$71,271.43
	Bridge 10-1 Total				$3,738,184.12

Bridge 10.2

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	305.00
Width (LF)	161.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	940049
Removal of Existing Structures area	27,140.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$98.85**
Basic Bridge Cost	**$4,603,593.75**
Description	RIM DITCH CANAL C-24

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	27,140.00	SF	$68.85	$1,868,589.00
400-2-10	CONC CLASS II, APPROACH SLABS	357.78	CY	$485.22	$173,602.01
415-1-9	REINF STEEL- APPROACH SLABS	62,611.50	LB	$1.23	$77,012.14
	Bridge 10.2 Total				$6,722,796.91

Bridge 890070

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		890070
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	3,537.00	SF	$68.85	$243,522.45
	Bridge 890070 Total				$243,522.45

Bridge 940061

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		940061
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	3,930.00	SF	$68.85	$270,580.50
	Bridge 940061 Total				$270,580.50
	Bridges Component Total				$10,975,083.98

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	441.00
Begin height	18.00
End Height	18.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,938.00 SF	$38.25	$303,628.50
	Retaining Walls Component Total			$303,628.50

Sequence 10 Total $192,788,322.69

Sequence: 11 NDR - New Construction, Divided, Rural **Net Length:** 0.508 MI 2,683 LF

Description: FROM STA. 1481+20.42 TO STA. 1508+03.17

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	121.00 / 105.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.508
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	13.92	AC	$32,838.22	$457,108.02

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	15,798.42	CY	$18.41	$290,848.91
120-6	EMBANKMENT	50,972.25	CY	$20.93	$1,066,849.19
	Earthwork Component Total				$1,814,806.12

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Roadway Pavement Width L/R	48.00 / 48.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	44,116.63	SY	$11.20	$494,106.26
285-709	OPTIONAL BASE,BASE GROUP 09	29,009.66	SY	$25.30	$733,944.40
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	11,017.23	TN	$119.42	$1,315,677.61

337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	1,144.65 TN	$148.28	$169,728.70

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	480.00 EA	$7.32	$3,513.60
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.03 GM	$1,039.31	$2,109.80
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	3.05 GM	$388.03	$1,183.49
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	2.03 GM	$4,983.20	$10,115.90
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	3.05 GM	$1,492.26	$4,551.39
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	2.03 GM	$4,937.59	$10,023.31

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	20.00 TN	$280.64	$5,612.80
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	600.00 LF	$19.44	$11,664.00
	Roadway Component Total			$2,762,231.26

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	7,350.78	SY	$25.30	$185,974.73
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,180.42	TN	$153.46	$181,147.25
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	15.74	TN	$148.28	$2,333.93
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.02	GM	$2,004.05	$2,044.13
570-1-2	PERFORMANCE TURF, SOD	1,192.34	SY	$4.92	$5,866.31

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	26,830.00	SY	$4.92	$132,003.60
	Comment: 60' TURF WIDTH LT 30' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,975.20	LF	$2.08	$14,508.42
104-11	FLOATING TURBIDITY BARRIER	127.02	LF	$14.51	$1,843.06
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	127.02	LF	$10.38	$1,318.47
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	4.00	EA	$115.32	$461.28
107-1	LITTER REMOVAL	517.44	AC	$34.31	$17,753.37
107-2	MOWING	517.44	AC	$50.48	$26,120.37
	Shoulder Component Total				$574,457.92

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	7,350.78	SY	$25.30	$185,974.73
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,180.42	TN	$153.46	$181,147.25
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	15.74	TN	$148.28	$2,333.93
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	2,683.00	LF	$151.41	$406,233.03
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.00	GM	$2,004.05	$2,004.05
	Median Component Total				$777,692.99

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	9.15	CY	$1,858.71	$17,007.20
425-1-551	INLETS, DT BOT, TYPE E, <10'	4.00	EA	$5,081.01	$20,324.04
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	408.00	LF	$114.93	$46,891.44
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	176.00	LF	$126.09	$22,191.84
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	152.00	LF	$145.93	$22,181.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	21.00	EA	$1,745.67	$36,659.07
524-1-1	CONCRETE DITCH PAVT, NR, 3"	1,016.20	SY	$71.56	$72,719.27
570-1-2	PERFORMANCE TURF, SOD	357.70	SY	$4.92	$1,759.88

Retention Basin 1

Description	Value
Size	2.5 AC
Multiplier	3
Depth	6.00
Description	7 Ac. Pond

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	7.50	AC	$32,838.22	$246,286.65
120-1	REGULAR EXCAVATION	72,600.00	CY	$18.41	$1,336,566.00
425-1-361	INLETS, CURB, TYPE P-6, <10'	3.00	EA	$5,621.85	$16,865.55
425-2-71	MANHOLES, J-7, <10'	3.00	EA	$9,648.41	$28,945.23
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	168.00	LF	$668.83	$112,363.44
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	600.00	LF	$345.27	$207,162.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	4,005.00	LF	$21.32	$85,386.60
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00	EA	$3,762.92	$11,288.76
570-1-2	PERFORMANCE TURF, SOD	36,300.00	SY	$4.92	$178,596.00
	Drainage Component Total				$2,463,194.33

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$402.31	$804.62
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	13.00	AS	$1,399.59	$18,194.67
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,665.26	$9,330.52
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	4.00	AS	$6,638.71	$26,554.84
	Signing Component Total				$54,884.65

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$203,200.00	$203,200.00
	Comment: Assume cost per mile when express lane not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$203,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	28

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	5,600.00	LF	$9.75	$54,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	28.00	EA	$743.31	$20,812.68
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	16,800.00	LF	$2.17	$36,456.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	28.00	EA	$7,049.17	$197,376.76
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	28.00	EA	$600.24	$16,806.72
	Subcomponent Total				$326,052.16
	Lighting Component Total				$326,052.16

Sequence 11 Total $8,976,519.43

Sequence: 12 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 1.456 MI 7,689 LF

Description: FROM STA. 1508+03.17 TO STA. 1584+70.05 SB ONLY

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	100.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.456
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

110-1-1	CLEARING & GRUBBING	17.65	AC	$32,838.22	$579,594.58

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	22,639.48	CY	$18.41	$416,792.83
120-6	EMBANKMENT	73,044.36	CY	$20.93	$1,528,818.45
	Earthwork Component Total				$2,525,205.86

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Existing Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	24.00 / 0.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	44,426.86	SY	$11.20	$497,580.83
285-709	OPTIONAL BASE,BASE GROUP 09	20,786.64	SY	$25.30	$525,901.99
327-70-17	MILLING EXIST ASPH PAVT,3 1/4" AVG DEPTH	20,504.70	SY	$4.09	$83,864.22
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	7,894.31	TN	$119.42	$942,738.50
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	7,894.31	TN	$119.42	$942,738.50
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	820.19	TN	$148.28	$121,617.77
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	820.19	TN	$148.28	$121,617.77

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	983.00	EA	$7.32	$7,195.56
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.91	GM	$1,039.31	$3,024.39
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	4.37	GM	$377.66	$1,650.37
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.91	GM	$4,689.87	$13,647.52
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	2.91	GM	$4,825.72	$14,042.85

711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	4.37	GM	$1,273.07	$5,563.32

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	20.00	TN	$280.64	$5,612.80
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	453.00	LF	$315.35	$142,853.55
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	600.00	LF	$19.44	$11,664.00
	Roadway Component Total				$3,441,313.94

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 14.00
New Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Existing Paved Outside Shoulder Width L/R	0.00 / 12.00
New Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	21,068.58	SY	$25.30	$533,035.07
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	10,252.35	SY	$4.71	$48,288.57
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	3,383.28	TN	$119.42	$404,031.30
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	45.11	TN	$148.28	$6,688.91
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	2.91	GM	$2,004.05	$5,831.79
570-1-2	PERFORMANCE TURF, SOD	3,417.45	SY	$4.92	$16,813.85

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	68,347.00	SY	$4.92	$336,267.24
	Comment: 60' TURF WIDTH LT 20' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	17,685.31	LF	$2.08	$36,785.44
104-11	FLOATING TURBIDITY BARRIER	145.63	LF	$14.51	$2,113.09
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	145.63	LF	$10.38	$1,511.64
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	$3,083.00	$6,166.00
104-18	INLET PROTECTION SYSTEM	3.00	EA	$115.32	$345.96
107-1	LITTER REMOVAL	147.84	AC	$34.31	$5,072.39
107-2	MOWING	147.84	AC	$50.48	$7,462.96
	Shoulder Component Total				$1,410,414.21

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	26.21	CY	$1,858.71	$48,716.79
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	224.00	LF	$114.93	$25,744.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	96.00	LF	$145.93	$14,009.28
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	15.00	EA	$1,745.67	$26,185.05
570-1-2	PERFORMANCE TURF, SOD	588.35	SY	$4.92	$2,894.68

Retention Basin 1

Description	Value
Size	20 AC
Multiplier	1
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	20.00	AC	$32,838.22	$656,764.40
120-1	REGULAR EXCAVATION	193,600.00	CY	$18.41	$3,564,176.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	3.00	EA	$5,018.84	$15,056.52
425-2-71	MANHOLES, J-7, <10'	3.00	EA	$9,648.41	$28,945.23
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	152.00	LF	$668.83	$101,662.16
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	600.00	LF	$345.27	$207,162.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	4,420.00	LF	$21.32	$94,234.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	6.00	EA	$3,762.92	$22,577.52
570-1-2	PERFORMANCE TURF, SOD	96,800.00	SY	$4.92	$476,256.00

Retention Basin 2

Description	Value
Size	10 AC
Multiplier	2
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	20.00	AC	$32,838.22	$656,764.40
120-1	REGULAR EXCAVATION	193,600.00	CY	$18.41	$3,564,176.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	4.00	EA	$5,018.84	$20,075.36
425-2-71	MANHOLES, J-7, <10'	4.00	EA	$9,648.41	$38,593.64
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	208.00	LF	$668.83	$139,116.64
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00	LF	$345.27	$276,216.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	5,560.00	LF	$21.32	$118,539.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	6.00	EA	$3,762.92	$22,577.52
570-1-2	PERFORMANCE TURF, SOD	96,800.00	SY	$4.92	$476,256.00
	Drainage Component Total				$10,596,699.11

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	30.00	AS	$1,399.59	$41,987.70
700-1-50	SINGLE POST SIGN, RELOCATE	3.00	AS	$297.41	$892.23
700-1-60	SINGLE POST SIGN, REMOVE	30.00	AS	$30.99	$929.70
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	3.00	AS	$3,870.66	$11,611.98
700-2-60	MULTI- POST SIGN, REMOVE	3.00	AS	$825.56	$2,476.68
	Signing Component Total				$59,105.22

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$582,400.00	$582,400.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$582,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	39

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,800.00	LF	$9.75	$76,050.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	39.00	EA	$743.31	$28,989.09
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	23,400.00	LF	$2.17	$50,778.00

715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	39.00 EA	$7,049.17	$274,917.63
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	39.00 EA	$600.24	$23,409.36
	Subcomponent Total			$454,144.08
	Lighting Component Total			$454,144.08

Sequence 12 Total $19,069,282.42

Sequence: 13 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 1.456 MI 7,689 LF

Description: FROM STA. 1508+03.17 TO STA. 1584+70.05 NB ONLY

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	100.00 / 40.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.456
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	24.71	AC	$32,838.22	$811,432.42

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	22,639.48	CY	$18.41	$416,792.83
120-6	EMBANKMENT	73,044.36	CY	$20.93	$1,528,818.45
	Earthwork Component Total				$2,757,043.70

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	5
Existing Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	770
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	0.00 / 36.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	42,718.13	SY	$11.20	$478,443.06
285-709	OPTIONAL BASE,BASE GROUP 09	31,039.00	SY	$25.30	$785,286.70
327-70-17	MILLING EXIST ASPH PAVT,3 1/4" AVG DEPTH	20,504.70	SY	$4.09	$83,864.22
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	7,894.31	TN	$119.42	$942,738.50
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	11,841.47	TN	$119.42	$1,414,108.35
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	820.19	TN	$148.28	$121,617.77
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	1,230.28	TN	$148.28	$182,425.92

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	1,180.00	EA	$7.32	$8,637.60
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.91	GM	$1,039.31	$3,024.39
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	5.83	GM	$377.66	$2,201.76
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.91	GM	$4,689.87	$13,647.52
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	2.91	GM	$4,825.72	$14,042.85
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	5.83	GM	$1,273.07	$7,422.00

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	20.00	TN	$280.64	$5,612.80
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	969.00	LF	$315.35	$305,574.15
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	600.00	LF	$19.44	$11,664.00

Roadway Component Total $4,380,311.59

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	14.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Existing Paved Outside Shoulder Width L/R	12.00 / 0.00
New Paved Outside Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	10,534.29	SY	$25.30	$266,517.54
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	10,252.35	SY	$4.71	$48,288.57
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,691.64	TN	$153.46	$259,599.07
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	22.56	TN	$148.28	$3,345.20
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	2.91	GM	$2,004.05	$5,831.79
570-1-2	PERFORMANCE TURF, SOD	1,708.73	SY	$4.92	$8,406.95

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	76,890.00	SY	$4.92	$378,298.80
	Comment: 60' TURF WIDTH LT 30' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	17,685.31	LF	$2.08	$36,785.44
104-11	FLOATING TURBIDITY BARRIER	145.63	LF	$14.51	$2,113.09
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	145.63	LF	$10.38	$1,511.64
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	$3,083.00	$6,166.00
104-18	INLET PROTECTION SYSTEM	3.00	EA	$115.32	$345.96
107-1	LITTER REMOVAL	147.84	AC	$34.31	$5,072.39
107-2	MOWING	147.84	AC	$50.48	$7,462.96

Shoulder Component Total $1,029,745.40

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	26.21	CY	$1,858.71	$48,716.79
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	224.00	LF	$114.93	$25,744.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	96.00	LF	$145.93	$14,009.28
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	15.00	EA	$1,745.67	$26,185.05

570-1-2	PERFORMANCE TURF, SOD	588.35	SY	$4.92	$2,894.68
	Drainage Component Total				$117,550.12

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	30.00	AS	$1,399.59	$41,987.70
700-1-50	SINGLE POST SIGN, RELOCATE	3.00	AS	$297.41	$892.23
700-1-60	SINGLE POST SIGN, REMOVE	30.00	AS	$30.99	$929.70
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	3.00	AS	$3,870.66	$11,611.98
700-2-60	MULTI- POST SIGN, REMOVE	3.00	AS	$825.56	$2,476.68
	Signing Component Total				$59,105.22

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$582,400.00	$582,400.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$582,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	39

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,800.00	LF	$9.75	$76,050.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	39.00	EA	$743.31	$28,989.09
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	23,400.00	LF	$2.17	$50,778.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	39.00	EA	$7,049.17	$274,917.63
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	39.00	EA	$600.24	$23,409.36
	Subcomponent Total				$454,144.08
	Lighting Component Total				$454,144.08

Sequence 13 Total $9,380,300.11

Sequence: 14 NDR - New Construction, Divided, Rural **Net Length:** 0.790 MI 4,169 LF

Description: FROM STA. 1584+70.05 TO STA. 1626+38.92

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	121.00 / 100.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.790
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	21.16	AC	$32,838.22	$694,856.74

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	24,550.01	CY	$18.41	$451,965.68
120-6	EMBANKMENT	79,208.53	CY	$20.93	$1,657,834.53
	Earthwork Component Total				$2,804,656.95

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Roadway Pavement Width L/R	48.00 / 48.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	68,558.34	SY	$11.20	$767,853.41
285-709	OPTIONAL BASE,BASE GROUP 09	45,081.74	SY	$25.30	$1,140,568.02
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	17,121.05	TN	$119.42	$2,044,595.79
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	1,778.81	TN	$148.28	$263,761.95

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1

Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	746.00	EA	$7.32	$5,460.72
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	3.16	GM	$1,039.31	$3,284.22
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	4.74	GM	$388.03	$1,839.26
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	3.16	GM	$4,983.20	$15,746.91
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	4.74	GM	$1,492.26	$7,073.31
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	3.16	GM	$4,937.59	$15,602.78

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	21.67	TN	$280.64	$6,081.47
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	650.00	LF	$19.44	$12,636.00
	Roadway Component Total				$4,284,503.84

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	11,423.30	SY	$25.30	$289,009.49
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,834.40	TN	$153.46	$281,507.02
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	24.46	TN	$148.28	$3,626.93
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.58	GM	$2,004.05	$3,166.40
570-1-2	PERFORMANCE TURF, SOD	1,852.93	SY	$4.92	$9,116.42

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	10,839.63	LF	$2.08	$22,546.43
104-11	FLOATING TURBIDITY BARRIER	197.40	LF	$14.51	$2,864.27
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	197.40	LF	$10.38	$2,049.01
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$115.32	$576.60
107-1	LITTER REMOVAL	803.88	AC	$34.31	$27,581.12
107-2	MOWING	803.88	AC	$50.48	$40,579.86
	Shoulder Component Total				$685,706.55

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	11,423.30	SY	$25.30	$289,009.49
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,834.40	TN	$153.46	$281,507.02
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	24.46	TN	$148.28	$3,626.93
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	4,169.00	LF	$151.41	$631,228.29
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	2.00	GM	$2,004.05	$4,008.10
	Median Component Total				$1,209,379.83

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	14.21	CY	$1,858.71	$26,412.27
425-1-551	INLETS, DT BOT, TYPE E, <10'	5.00	EA	$5,081.01	$25,405.05
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	632.00	LF	$114.93	$72,635.76
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	272.00	LF	$126.09	$34,296.48
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	240.00	LF	$145.93	$35,023.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	32.00	EA	$1,745.67	$55,861.44
524-1-1	CONCRETE DITCH PAVT, NR, 3"	1,579.20	SY	$71.56	$113,007.55

570-1-2	PERFORMANCE TURF, SOD	555.88	SY	$4.92	$2,734.93

Retention Basin 1

Description	Value
Size	5 AC
Multiplier	2
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00	AC	$32,838.22	$328,382.20
120-1	REGULAR EXCAVATION	96,800.00	CY	$18.41	$1,782,088.00
400-2-2	CONC CLASS II, ENDWALLS	60.00	CY	$1,858.71	$111,522.60
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	4.00	EA	$9,648.41	$38,593.64
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$668.83	$74,908.96
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00	LF	$345.27	$276,216.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	3,720.00	LF	$21.32	$79,310.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	4.00	EA	$3,762.92	$15,051.68
570-1-2	PERFORMANCE TURF, SOD	39,200.00	SY	$4.92	$192,864.00

Retention Basin 2

Description	Value
Size	2.5 AC
Multiplier	5
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	12.50	AC	$32,838.22	$410,477.75
120-1	REGULAR EXCAVATION	121,000.00	CY	$18.41	$2,227,610.00
425-1-361	INLETS, CURB, TYPE P-6, <10'	5.00	EA	$5,621.85	$28,109.25
425-2-71	MANHOLES, J-7, <10'	5.00	EA	$9,648.41	$48,242.05
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	280.00	LF	$668.83	$187,272.40
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	1,000.00	LF	$345.27	$345,270.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	6,675.00	LF	$21.32	$142,311.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	5.00	EA	$3,762.92	$18,814.60
570-1-2	PERFORMANCE TURF, SOD	60,500.00	SY	$4.92	$297,660.00

Retention Basin 3

Description	Value
Size	2.5 AC
Multiplier	5
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	12.50	AC	$32,838.22	$410,477.75
120-1	REGULAR EXCAVATION	121,000.00	CY	$18.41	$2,227,610.00
425-1-361	INLETS, CURB, TYPE P-6, <10'	5.00	EA	$5,621.85	$28,109.25
425-2-71	MANHOLES, J-7, <10'	5.00	EA	$9,648.41	$48,242.05
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	280.00	LF	$668.83	$187,272.40
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	1,000.00	LF	$345.27	$345,270.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	6,675.00	LF	$21.32	$142,311.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	5.00	EA	$3,762.92	$18,814.60
570-1-2	PERFORMANCE TURF, SOD	60,500.00	SY	$4.92	$297,660.00
	Drainage Component Total				$10,685,885.94

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$402.31	$804.62
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	19.00	AS	$1,399.59	$26,592.21
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,665.26	$9,330.52
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	5.00	AS	$6,638.71	$33,193.55
	Signing Component Total				$69,920.90

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$316,000.00	$316,000.00
	Comment: Assume cost per mile when express lane not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$316,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	42

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	8,400.00	LF	$9.75	$81,900.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	42.00	EA	$743.31	$31,219.02
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	25,200.00	LF	$2.17	$54,684.00
715-4-14	LIGHT POLE COMPLETE, F&I-	42.00	EA	$7,049.17	$296,065.14

	STD, 45'			
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	42.00 EA	$600.24	$25,210.08
	Subcomponent Total			$489,078.24
	Lighting Component Total			$489,078.24

BRIDGES COMPONENT

Bridge 14.1

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Length (LF)		309.00
Width (LF)		125.08
Type		Overpass Bridge
Cost Factor		1.25
Structure No.		
Removal of Existing Structures area		0.00
Default Cost per SF		$75.00
Factored Cost per SF		$93.75
Final Cost per SF		**$98.79**
Basic Bridge Cost		**$3,623,411.25**
Description	ST LUCIE BLVD BRIDGE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	277.96	CY	$485.22	$134,871.75
415-1-9	REINF STEEL- APPROACH SLABS	48,643.00	LB	$1.23	$59,830.89
	Bridge 14.1 Total				$3,818,113.89

Bridge 949902

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		949902
Description	ST LUCIE BLVD BRDIGE REMOVAL	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	11,284.00	SF	$68.85	$776,903.40
	Bridge 949902 Total				$776,903.40

Bridge 949901

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		949901
Description	ST LUCIE BLVD BRIDGE REMOVAL	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	11,232.00	SF	$68.85	$773,323.20
	Bridge 949901 Total				$773,323.20
	Bridges Component Total				$5,368,340.49

Sequence 14 Total $25,913,472.74

Sequence: 15 WDR - Widen/Resurface, Divided, Rural **Net Length:** 4.707 MI 24,851 LF

Description: FROM STA. 1626+38.92 TO STA. 1878+00.31

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	121.00 / 39.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	4.707
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	91.29	AC	$32,838.22	$2,997,801.10

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	146,346.31	CY	$18.41	$2,694,235.57
120-6	EMBANKMENT	544,526.60	CY	$20.93	$11,396,941.74
	Earthwork Component Total				$17,088,978.41

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Existing Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Widened Outside Pavement Width L/R	48.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 24.00
Widened Structural Spread Rate	660
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	303,732.59	SY	$11.20	$3,401,805.01
285-709	OPTIONAL BASE,BASE GROUP 09	200,629.18	SY	$25.30	$5,075,918.25
327-70-17	MILLING EXIST ASPH PAVT,3 1/4" AVG DEPTH	66,268.93	SY	$4.09	$271,039.92
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	25,513.54	TN	$119.42	$3,046,826.95
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	65,606.24	TN	$119.42	$7,834,697.18
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2,650.76	TN	$148.28	$393,054.69
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7,952.27	TN	$148.28	$1,179,162.60

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	4,448.00	EA	$7.32	$32,559.36
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	18.83	GM	$1,039.31	$19,570.21
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	28.24	GM	$388.03	$10,957.97
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	18.83	GM	$4,983.20	$93,833.66
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	28.24	GM	$1,492.26	$42,141.42
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	18.83	GM	$4,937.59	$92,974.82

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	40.00	TN	$280.64	$11,225.60

521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	2,017.00	LF	$315.35	$636,060.95
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,200.00	LF	$19.44	$23,328.00
	Roadway Component Total				$22,165,156.59

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 14.00
New Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Existing Paved Outside Shoulder Width L/R	0.00 / 12.00
New Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	34,045.66	SY	$25.30	$861,355.20
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	33,134.46	SY	$4.71	$156,063.31
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	5,467.19	TN	$153.46	$838,994.98
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	72.90	TN	$148.28	$10,809.61
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	9.41	GM	$2,004.05	$18,858.11
570-1-2	PERFORMANCE TURF, SOD	5,522.41	SY	$4.92	$27,170.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	248,510.00	SY	$4.92	$1,222,669.20
	Comment: 60' TURF WIDTH LT 30' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	57,156.95	LF	$2.08	$118,886.46
104-11	FLOATING TURBIDITY BARRIER	470.66	LF	$14.51	$6,829.28
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	470.66	LF	$10.38	$4,885.45
104-15	SOIL TRACKING PREVENTION DEVICE	5.00	EA	$3,083.00	$15,415.00
107-1	LITTER REMOVAL	1,437.24	AC	$34.31	$49,311.70
107-2	MOWING	1,437.24	AC	$50.48	$72,551.88
	Shoulder Component Total				$3,403,800.44

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	12.00 / 12.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	68,091.32	SY	$25.30	$1,722,710.40
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	10,934.37	TN	$153.46	$1,677,988.42
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	145.79	TN	$148.28	$21,617.74
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	24,851.00	LF	$151.41	$3,762,689.91
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	9.00	GM	$2,004.05	$18,036.45
	Median Component Total				$7,203,042.92

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	84.72	CY	$1,858.71	$157,469.91
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	3,768.00	LF	$114.93	$433,056.24
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	376.00	LF	$145.93	$54,869.68
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	189.00	EA	$1,745.67	$329,931.63
570-1-2	PERFORMANCE TURF, SOD	3,313.45	SY	$4.92	$16,302.17

Box Culvert 1

Description	Value
Size	10 x 5
Length	27.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	49.07	CY	$1,248.27	$61,252.61
415-1-1	REINF STEEL- ROADWAY	5,294.70	LB	$1.93	$10,218.77

Box Culvert 2

Description	Value
Size	10 x 5
Length	26.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	48.06	CY	$1,248.27	$59,991.86
415-1-1	REINF STEEL- ROADWAY	5,168.60	LB	$1.93	$9,975.40

Box Culvert 3

Description	Value
Size	10 x 5
Length	13.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	34.93	CY	$1,248.27	$43,602.07
415-1-1	REINF STEEL- ROADWAY	3,529.30	LB	$1.93	$6,811.55

Box Culvert 4

Description	Value
Size	10 x 5
Length	48.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	70.28	CY	$1,248.27	$87,728.42
415-1-1	REINF STEEL- ROADWAY	7,942.80	LB	$1.93	$15,329.60

Box Culvert 5

Description	Value
Size	8 x 5
Length	25.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	40.30	CY	$1,248.27	$50,305.28
415-1-1	REINF STEEL- ROADWAY	4,228.50	LB	$1.93	$8,161.00

Box Culvert 6

Description	Value
Size	10 x 6
Length	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	33.25	CY	$1,248.27	$41,504.98
415-1-1	REINF STEEL- ROADWAY	3,196.50	LB	$1.93	$6,169.24

Box Culvert 7

Description	Value
Size	Dbl. 10 x 10
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	520.88	CY	$1,248.27	$650,198.88
415-1-1	REINF STEEL- ROADWAY	76,547.60	LB	$1.93	$147,736.87

Box Culvert 8

Description	Value
Size	Dbl. 12 x 10
Length	192.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	629.80	CY	$1,248.27	$786,160.45
415-1-1	REINF STEEL- ROADWAY	92,760.20	LB	$1.93	$179,027.19

Retention Basin 1

Description	Value
Size	10 AC
Multiplier	9
Depth	6.00
Description	15.3, 22.1, 25.7, 15.2, 9.5 AC PONDS

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	90.00	AC	$32,838.22	$2,955,439.80
120-1	REGULAR EXCAVATION	871,200.00	CY	$18.41	$16,038,792.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	18.00	EA	$5,018.84	$90,339.12
425-2-71	MANHOLES, J-7, <10'	18.00	EA	$9,648.41	$173,671.38
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	936.00	LF	$668.83	$626,024.88
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	3,600.00	LF	$345.27	$1,242,972.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	25,020.00	LF	$21.32	$533,426.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	27.00	EA	$3,762.92	$101,598.84
570-1-2	PERFORMANCE TURF, SOD	435,600.00	SY	$4.92	$2,143,152.00

Retention Basin 2

Description	Value
Size	10 AC
Multiplier	4
Depth	6.00
Description	4.6, 11.7, 9.1, 4.8, 9.8 AC POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	40.00	AC	$32,838.22	$1,313,528.80
120-1	REGULAR EXCAVATION	387,200.00	CY	$18.41	$7,128,352.00
400-2-2	CONC CLASS II, ENDWALLS	144.00	CY	$1,858.71	$267,654.24
425-1-541	INLETS, DT BOT, TYPE D, <10'	8.00	EA	$5,018.84	$40,150.72
425-2-71	MANHOLES, J-7, <10'	8.00	EA	$9,648.41	$77,187.28
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	416.00	LF	$668.83	$278,233.28

430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	1,600.00	LF	$345.27	$552,432.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	11,120.00	LF	$21.32	$237,078.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	12.00	EA	$3,762.92	$45,155.04
570-1-2	PERFORMANCE TURF, SOD	193,600.00	SY	$4.92	$952,512.00
	Drainage Component Total				$37,953,504.00

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	10.00	AS	$402.31	$4,023.10
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	113.00	AS	$1,399.59	$158,153.67
700-1-50	SINGLE POST SIGN, RELOCATE	10.00	AS	$297.41	$2,974.10
700-1-60	SINGLE POST SIGN, REMOVE	113.00	AS	$30.99	$3,501.87
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	10.00	AS	$4,665.26	$46,652.60
700-2-60	MULTI- POST SIGN, REMOVE	10.00	AS	$825.56	$8,255.60
	Signing Component Total				$223,560.94

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$1,882,800.00	$1,882,800.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$1,882,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	250

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	50,000.00	LF	$9.75	$487,500.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	250.00	EA	$743.31	$185,827.50
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	150,000.00	LF	$2.17	$325,500.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	250.00	EA	$7,049.17	$1,762,292.50
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	250.00	EA	$600.24	$150,060.00
	Subcomponent Total				$2,911,180.00
	Lighting Component Total				$2,911,180.00

BRIDGES COMPONENT

Bridge 15.1

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Length (LF)		172.00
Width (LF)		190.00
Type		Overpass Bridge
Cost Factor		1.25
Structure No.		
Removal of Existing Structures area		0.00
Default Cost per SF		$75.00
Factored Cost per SF		$93.75
Final Cost per SF		**$102.80**
Basic Bridge Cost		**$3,063,750.00**
Description	RR AND GLADES CUTOFF RD	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	422.22	CY	$485.22	$204,869.59
415-1-9	REINF STEEL- APPROACH SLABS	73,888.50	LB	$1.23	$90,882.86
	Bridge 15.1 Total				$3,359,502.45

Bridge 940951

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		940951
Description	RR AND GLADES CUTOFF RD	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	11,656.00	SF	$68.85	$802,515.60
	Bridge 940951 Total				$802,515.60

Bridge 940076

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		940076
Description	RR AND GLADES CUTOFF RD	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	11,178.00	SF	$68.85	$769,605.30
	Bridge 940076 Total				$769,605.30

Bridge 940106

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		940106
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	3,013.00	SF	$68.85	$207,445.05
	Bridge 940106 Total				$207,445.05

Bridge 941000

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		941000
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	2,300.00	SF	$68.85	$158,355.00
	Bridge 941000 Total				$158,355.00
	Bridges Component Total				$5,297,423.40

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	3,200.00
Begin height	12.50
End Height	20.00
Multiplier	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	104,000.00	SF	$38.25	$3,978,000.00
	Retaining Walls Component Total				$3,978,000.00

Sequence 15 Total $102,107,446.70

Sequence: 16 NDR - New Construction, Divided, Rural **Net Length:** 0.686 MI 3,624 LF

Description: FROM STA. 1878+00.31 TO STA. 1914+24.49

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	75.00 / 75.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.686
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	12.47	AC	$32,838.22	$409,492.60

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	14,094.03	CY	$18.41	$259,471.09
120-6	EMBANKMENT	77,315.84	CY	$20.93	$1,618,220.53
	Earthwork Component Total				$2,287,184.22

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Roadway Pavement Width L/R	48.00 / 48.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	59,597.82	SY	$11.20	$667,495.58
285-709	OPTIONAL BASE,BASE GROUP 09	39,189.60	SY	$25.30	$991,496.88
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	14,883.35	TN	$119.42	$1,777,369.66
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	1,546.32	TN	$148.28	$229,288.33

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	649.00	EA	$7.32	$4,750.68
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.75	GM	$1,039.31	$2,858.10
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	4.12	GM	$388.03	$1,598.68
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	2.75	GM	$4,983.20	$13,703.80
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	4.12	GM	$1,492.26	$6,148.11
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	2.75	GM	$4,937.59	$13,578.37

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	15.00	TN	$280.64	$4,209.60
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	2,934.00	LF	$315.35	$925,236.90
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	450.00	LF	$19.44	$8,748.00
	Roadway Component Total				$4,646,482.69

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	9,930.29	SY	$25.30	$251,236.34
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,594.64	TN	$153.46	$244,713.45
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	21.26	TN	$148.28	$3,152.43
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.37	GM	$2,004.05	$2,745.55
570-1-2	PERFORMANCE TURF, SOD	1,610.75	SY	$4.92	$7,924.89

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	9,422.90	LF	$2.08	$19,599.63
104-11	FLOATING TURBIDITY BARRIER	171.60	LF	$14.51	$2,489.92
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	171.60	LF	$10.38	$1,781.21
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$115.32	$576.60
107-1	LITTER REMOVAL	698.88	AC	$34.31	$23,978.57
107-2	MOWING	698.88	AC	$50.48	$35,279.46
	Shoulder Component Total				$596,561.05

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	9,930.29	SY	$25.30	$251,236.34
334-1-52	SUPERPAVE ASPH CONC, TRAF B, PG76-22	1,594.64	TN	$142.02	$226,470.77
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	21.26	TN	$148.28	$3,152.43
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	3,624.00	LF	$151.41	$548,709.84
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	1.00	GM	$2,004.05	$2,004.05
	Median Component Total				$1,031,573.43

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	12.36	CY	$1,858.71	$22,973.66
425-1-551	INLETS, DT BOT, TYPE E, <10'	5.00	EA	$5,081.01	$25,405.05
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	552.00	LF	$114.93	$63,441.36
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	240.00	LF	$126.09	$30,261.60
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	208.00	LF	$145.93	$30,353.44
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	28.00	EA	$1,745.67	$48,878.76

524-1-1	CONCRETE DITCH PAVT, NR, 3"	1,372.80 SY	$71.56	$98,237.57
570-1-2	PERFORMANCE TURF, SOD	483.23 SY	$4.92	$2,377.49
	Drainage Component Total			$321,928.93

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$402.31	$804.62
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	17.00	AS	$1,399.59	$23,793.03
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,665.26	$9,330.52
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	5.00	AS	$6,638.71	$33,193.55
	Signing Component Total				$67,121.72

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$274,400.00	$274,400.00
	Comment: Assume cost per mile when express lane not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$274,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	38

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,600.00	LF	$9.75	$74,100.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	38.00	EA	$743.31	$28,245.78
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	22,800.00	LF	$2.17	$49,476.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	38.00	EA	$7,049.17	$267,868.46
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	38.00	EA	$600.24	$22,809.12
	Subcomponent Total				$442,499.36
	Lighting Component Total				$442,499.36

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value

Length	1,361.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	13,610.00	SF	$38.25	$520,582.50

Retaining Wall 2

Description	Value
Length	1,573.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	15,730.00	SF	$38.25	$601,672.50

Retaining Walls Component Total $1,122,255.00

Sequence 16 Total $10,790,006.40

Sequence: 17 WDR - Widen/Resurface, Divided, Rural **Net Length:** 1.621 MI 8,560 LF

Description: FROM STA. 1914+24.49 TO STA. 2005+00.00

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	121.00 / 60.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.621
Top of Structural Course For Begin Section	125.00
Top of Structural Course For End Section	125.00
Horizontal Elevation For Begin Section	120.00
Horizontal Elevation For End Section	120.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	35.56	AC	$32,838.22	$1,167,727.10

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	50,406.89	CY	$18.41	$927,990.84
120-6	EMBANKMENT	162,633.54	CY	$20.93	$3,403,919.99
	Earthwork Component Total				$5,499,637.93

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Existing Roadway Pavement Width L/R	0.00 / 24.00
Structural Spread Rate	770
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	48.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 24.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	104,621.44	SY	$11.20	$1,171,760.13
285-709	OPTIONAL BASE,BASE GROUP 09	69,107.22	SY	$25.30	$1,748,412.67
327-70-17	MILLING EXIST ASPH PAVT,3 1/4" AVG DEPTH	22,826.50	SY	$4.09	$93,360.38
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	8,788.20	TN	$119.42	$1,049,486.84
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	26,364.60	TN	$119.42	$3,148,460.53
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	913.06	TN	$148.28	$135,388.54
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2,739.18	TN	$148.28	$406,165.61

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	1,532.00	EA	$7.32	$11,214.24
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	6.48	GM	$1,039.31	$6,734.73
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	9.73	GM	$388.03	$3,775.53
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	6.48	GM	$4,983.20	$32,291.14
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	9.73	GM	$1,492.26	$14,519.69
711-15-201	THERMOPLASTIC, STD-	6.48	GM	$4,937.59	$31,995.58

OP,YELLOW, SOLID, 6"

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	21.67	TN	$280.64	$6,081.47
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,406.00	LF	$315.35	$443,382.10
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	650.00	LF	$19.44	$12,636.00
	Roadway Component Total				$8,315,665.19

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 14.00
New Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Existing Paved Outside Shoulder Width L/R	0.00 / 12.00
New Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	11,727.11	SY	$25.30	$296,695.88
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	11,413.25	SY	$4.71	$53,756.41
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,883.19	TN	$153.46	$288,994.34
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	25.11	TN	$148.28	$3,723.31
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	3.24	GM	$2,004.05	$6,493.12
570-1-2	PERFORMANCE TURF, SOD	1,902.21	SY	$4.92	$9,358.87

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	76,089.00	SY	$4.92	$374,357.88
	Comment: 60' TURF WIDTH LT 20' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

104-10-3	SEDIMENT BARRIER	19,687.85 LF	$2.08	$40,950.73
104-11	FLOATING TURBIDITY BARRIER	162.12 LF	$14.51	$2,352.36
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	162.12 LF	$10.38	$1,682.81
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	$3,083.00	$6,166.00
107-1	LITTER REMOVAL	495.18 AC	$34.31	$16,989.63
107-2	MOWING	495.18 AC	$50.48	$24,996.69
	Shoulder Component Total			$1,126,518.03

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	26.00
Performance Turf Width	0.00
New Total Median Shoulder Width L/R	12.00 / 12.00
New Paved Median Shoulder Width L/R	12.00 / 12.00
Existing Total Median Shoulder Width L/R	0.00 / 0.00
Existing Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	23,454.22	SY	$25.30	$593,391.77
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	3,766.37	TN	$153.46	$577,987.14
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	50.22	TN	$148.28	$7,446.62
521-1-11	MEDIAN CONC BARRIER, 38" HEIGHT	8,560.00	LF	$151.41	$1,296,069.60
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	3.00	GM	$2,004.05	$6,012.15
	Median Component Total				$2,480,907.28

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	29.18	CY	$1,858.71	$54,237.16
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	1,296.00	LF	$114.93	$148,949.28
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	136.00	LF	$145.93	$19,846.48
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	65.00	EA	$1,745.67	$113,468.55
570-1-2	PERFORMANCE TURF, SOD	1,141.32	SY	$4.92	$5,615.29

Box Culvert 1

Description	Value
Size	Dbl. 10 x 8
Length	252.00

Multiplier 1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	561.44	CY	$1,248.27	$700,828.71
415-1-1	REINF STEEL- ROADWAY	91,161.20	LB	$1.93	$175,941.12
	Drainage Component Total				$1,218,886.59

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$402.31	$1,609.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	39.00	AS	$1,399.59	$54,584.01
700-1-50	SINGLE POST SIGN, RELOCATE	4.00	AS	$297.41	$1,189.64
700-1-60	SINGLE POST SIGN, REMOVE	39.00	AS	$30.99	$1,208.61
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	4.00	AS	$4,665.26	$18,661.04
700-2-60	MULTI- POST SIGN, REMOVE	4.00	AS	$825.56	$3,302.24
	Signing Component Total				$80,554.78

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$648,400.00	$648,400.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$648,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	86

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	17,200.00	LF	$9.75	$167,700.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	86.00	EA	$743.31	$63,924.66
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	51,600.00	LF	$2.17	$111,972.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	86.00	EA	$7,049.17	$606,228.62
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	86.00	EA	$600.24	$51,620.64
	Subcomponent Total				$1,001,445.92
	Lighting Component Total				$1,001,445.92

BRIDGES COMPONENT

Bridge 17.1

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Length (LF)		187.00
Width (LF)		149.00
Type		Overpass Bridge
Cost Factor		1.25
Structure No.		940072
Removal of Existing Structures area		15,030.00
Default Cost per SF		$75.00
Factored Cost per SF		$93.75
Final Cost per SF		**$102.07**
Basic Bridge Cost		**$2,612,156.25**
Description	10 MILE CREEK BRIDGE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	15,030.00	SF	$68.85	$1,034,815.50
400-2-10	CONC CLASS II, APPROACH SLABS	331.11	CY	$485.22	$160,661.19
415-1-9	REINF STEEL- APPROACH SLABS	57,944.25	LB	$1.23	$71,271.43
	Bridge 17.1 Total				$3,878,904.37

Bridge 940064

Description		Value
Estimate Type		SF Estimate
Primary Estimate		YES
Type		Misc/Rehab
Structure No.		940064
Description	REMOVE	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	4,278.40	SF	$68.85	$294,567.84
	Bridge 940064 Total				$294,567.84
	Bridges Component Total				$4,173,472.21

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	359.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,590.00	SF	$38.25	$137,317.50

Retaining Wall 2

Description	Value
Length	402.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,020.00	SF	$38.25	$153,765.00

Retaining Wall 3

Description	Value
Length	454.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,540.00	SF	$38.25	$173,655.00

Retaining Wall 4

Description	Value
Length	553.00
Begin height	10.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,530.00	SF	$38.25	$211,522.50

Retaining Wall 5

Description	Value
Length	167.00
Begin height	19.00
End Height	19.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,173.00	SF	$38.25	$121,367.25

Retaining Walls Component Total $797,627.25

Sequence 17 Total $25,343,115.18

Sequence: 18 MIS - Miscellaneous Construction **Net Length:** 0.000 MI 0 LF

Description: Project Noise Walls

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
0534 72101	SOUND BARRIERS/NOISE WALLS- INCLUDING FOUNDATION	73,480.00	SF	$32.46	$2,385,160.80
	Comment: SB Direction - 22' Height 1) Sta. 742+00 to Sta. 774+40 - Place Noise Wall at ROW. 2) 100 feet along SW Kanner Highway - Place Noise Wall at ROW.				
0534 72101 2	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	68,200.00	SF	$32.46	$2,213,772.00
	Comment: NB Direction - 22' Height 1) Sta. 994+20 to Sta. 1025+20 - Place Noise Wall at ROW				
0534 72101 3	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	17,080.00	SF	$32.46	$554,416.80
	Comment: NB Direction - 14' Height 2) Sta. 1023+00 to Sta. 1035+20 - Place Noise Wall on top of the shoulder barrier, allowing for an overlap between the separated Noise Walls.				
0534 72101 4	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	143,440.00	SF	$32.46	$4,656,062.40
	Comment: SB Direction - 22' 1) Sta. 1184+00 to Sta. 1249+40 - Place Noise Wall at ROW				
0534 72101 7	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	52,800.00	SF	$32.46	$1,713,888.00
	Comment: SB Direction - 22' Height 4) Sta. 1251+60 to Sta. 1275+60 - Place Noise Wall at ROW				
0534 72101 9	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	201,520.00	SF	$32.46	$6,541,339.20
	Comment: SB Direction - 22' Height 6) Sta. 1290+60 to Sta. 1382+20 - Place Noise Wall at ROW				
0534 7210110	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	7,200.00	SF	$32.46	$233,712.00
	Comment: SB Direction - 8' Height 1) Sta. 1378+90 to Sta. 1387+90 - Place Noise Wall on bridge barrier.				
0534 7210113	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	70,000.00	SF	$32.46	$2,272,200.00
	Comment: NB Direction - 14' Height 1) Sta. 1285+00 to Sta. 1335+00 - Place Noise Wall on top of shoulder barrier.				
0534 7210114	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	16,800.00	SF	$32.46	$545,328.00
	Comment: NB Direction - 14' Height 1) Sta. 1369+20 to Sta. 1381+80 - Place Noise Wall on top of shoulder barrier				
0534 7210115	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	2,400.00	SF	$32.46	$77,904.00
	Comment: NB Direction - 8' Height 2) Sta. 1382+20 to Sta. 1385+20 - Place Noise Wall on top of bridge barrier				
0534 7210116	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	16,800.00	SF	$32.46	$545,328.00
	Comment: NB Direction - 14' Height 3) Sta. 1370+00 to Sta. 1382+00 - Place Noise Wall on top of shoulder barrier.				
0534 7210117	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	39,480.00	SF	$32.46	$1,281,520.80
	Comment: NB Direction - 14' Height 1) Sta. 1385+20 to Sta. 1413+40 - Place Noise Wall on top of the shoulder barrier				
0534 7210118	SOUND/NOISE BARRIER-INC	16,280.00	SF	$32.46	$528,448.80

	FOUNDATION, PERMANENT			
	Comment: NB Direction - 22' Height 2) Sta. 1412+40 to Sta. 1419+80 - Place Noise Wall at ROW			
0534 7210119	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	79,200.00 SF	$32.46	$2,570,832.00
	Comment: SB Direction - 22' Height 1) Sta. 1386+30 to 1422+30 - Place Noise Wall on top of the shoulder barrier. Continue the Noise Wall along the western ROW.			
0534 7210121	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	152,900.00 SF	$32.46	$4,963,134.00
	Comment: SB Direction - 22' Height 3) Sta. 1447+00 to Sta. 1516+50 - Place Noise Wall at ROW.			
0534 7210122	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	117,040.00 SF	$32.46	$3,799,118.40
	Comment: SB Direction - 22' Height 1) Sta. 1542+00 to Sta. 1595+20 - Place Noise Wall at ROW			
0534 7210123	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	153,720.00 SF	$32.46	$4,989,751.20
	Comment: NB Direction - 14' Height 1) Sta. 1603+70 to Sta. 1713+50 - Place Noise Wall on top of the shoulder barrier (unless it may be placed along west side of North Macedo Blvd. in City/County ROW)			
0534 7210124	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	191,840.00 SF	$32.46	$6,227,126.40
	Comment: SB DIRECTION - 22' HEIGHT 1) Sta. 1617+70 to Sta. 1704+90 - Place Noise Wall at ROW			
0534 7210129	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	107,520.00 SF	$32.46	$3,490,099.20
	Comment: NB DIRECTION - 14' HEIGHT 1) Sta. 1719+20 to Sta. 1796+00 - Place Noise Wall on top of shoulder barrier			
0534 7210131	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	126,000.00 SF	$32.46	$4,089,960.00
	Comment: NB DIRECTION - 14' HEIGHT 1) Sta. 841+80 to Sta. 931+80 - Place Noise Wall on shoulder barrier			
0534 7210132	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	138,820.00 SF	$32.46	$4,506,097.20
	Comment: SB DIRECTION - 22' HEIGHT 1) Sta. 1726+60 to 1789+70 - Place Noise Wall at ROW			
0534 7210136	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	40,600.00 SF	$32.46	$1,317,876.00
	Comment: NB DIRECTION - 14' HEIGHT 1) Sta. 1109+80 to Sta. 1138+80 - Place Noise Wall on top of shoulder barrier			
05347210137	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	21,560.00 SF	$32.46	$699,837.60
	Comment: SB DIRECTION - STA. 1277+60 TO STA. 1287+40, 22' TALL AT ROW			
05347210138	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	4,480.00 SF	$32.46	$145,420.80
	Comment: SB DIRECTION - STA. 1286+10 TO STA. 1291+70, 8' TALL ON BRIDGE BARRIER			
05347210139	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	3,840.00 SF	$32.46	$124,646.40
	Comment: SB DIRECTION - STA. 1248+10 TO STA. 1252+90, 8' TALL ON BRIDGE BARRIER			
05347210140	SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT	3,600.00 SF	$32.46	$116,856.00
	Comment: SB DIRECTION - STA. 1274+40 TO STA. 1278+90, 8' TALL ON BRIDGE BARRIER			

Miscellaneous Component Total	$60,589,836.00
Sequence 18 Total	$60,589,836.00

Date: 4/8/2022 9:15:44 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 34 Project Grand Total **$1,161,995,226.48**

Description: 20220210 - Consultant Update 20210527 - Consultant Update 20210513 Copied from FPID 423374-1-52-01 Version 12 [Mainline SR 91 PD&E Widening]

Project Sequences Subtotal			**$768,162,133.21**
102-1	Maintenance of Traffic	10.00 %	$76,816,213.32
101-1	Mobilization	10.00 %	$84,497,834.65
Project Sequences Total			**$929,476,181.18**
Project Unknowns		25.00 %	$232,369,045.30
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$150,000.00**
Version 34 Project Grand Total					**$1,161,995,226.48**

Date: 4/8/2022 9:17:23 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 35 Project Grand Total **$87,082,906.59**

Description: 20220209 - Consultant Update. 20210527 - Consultant Update. 20210513 Copied from FPID 423374-1-52-01 Version 13 [2B. SW Martin Hwy (Alt 8) [Seq. 10B](MP 135.0)]

Sequence: 1 NDR - New Construction, Divided, Rural **Net Length:** 0.095 MI 500 LF

Description: 10B-1A From Sta. 970+64.14 to Sta. 975+13.70

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	165.00 / 0.00
Incidental Clearing and Grubbing Area	0.18
Alignment Number	1
Distance	0.095
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 6 to 1
Median Slope L/R	0 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.90	AC	$30,623.87	$58,185.35
110-1-1	CLEARING & GRUBBING	0.18	AC	$30,623.87	$5,512.30
120-6	EMBANKMENT	4,775.79	CY	$28.48	$136,014.50
	Earthwork Component Total				$199,712.15

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	9
Roadway Pavement Width L/R	24.00 / 84.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,333.54	SY	$11.20	$70,935.65
285-709	OPTIONAL BASE,BASE GROUP 09	6,073.53	SY	$29.47	$178,986.93
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	990.03	TN	$138.21	$136,832.05
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	240.01	TN	$148.28	$35,588.68

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	102.00	EA	$7.32	$746.64
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.19	GM	$1,039.31	$197.47
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.66	GM	$388.03	$256.10
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.19	GM	$4,983.20	$946.81
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.66	GM	$1,492.26	$984.89
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.19	GM	$4,937.59	$938.14
	Roadway Component Total				$426,413.36

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Paved Outside Shoulder Width L/R	0.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	240.56	SY	$10.59	$2,547.53
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	18.33	TN	$138.21	$2,533.39
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	1.47	TN	$148.28	$217.97
570-1-2	PERFORMANCE TURF, SOD	111.11	SY	$4.92	$546.66

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,278.00	SY	$4.92	$6,287.76

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,300.04	LF	$1.72	$2,236.07
104-11	FLOATING TURBIDITY BARRIER	23.68	LF	$13.62	$322.52
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	23.68	LF	$10.38	$245.80
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	1.00	EA	$114.05	$114.05
107-1	LITTER REMOVAL	96.60	AC	$33.53	$3,239.00
107-2	MOWING	96.60	AC	$48.82	$4,716.01
	Shoulder Component Total				$26,089.76

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.70	CY	$1,858.71	$3,159.81
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	$5,081.01	$5,081.01
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	80.00	LF	$220.00	$17,600.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	32.00	LF	$126.09	$4,034.88
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	$1,722.92	$6,891.68
524-1-1	CONCRETE DITCH PAVT, NR, 3"	189.40	SY	$141.05	$26,714.87
570-1-2	PERFORMANCE TURF, SOD	66.67	SY	$4.92	$328.02

Box Culvert 1

Description	Value
Size	Trip. 10 x 10
Length	217.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	770.55	CY	$1,248.27	$961,854.45
415-1-1	REINF STEEL- ROADWAY	114,497.90	LB	$1.93	$220,980.95

Retention Basin 1

Description		Value
Size		2 AC
Multiplier		1
Depth		6.00
Description	1.68	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

110-1-1	CLEARING & GRUBBING	2.00	AC	$30,623.87	$61,247.74
120-1	REGULAR EXCAVATION	19,360.00	CY	$19.92	$385,651.20
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,858.71	$33,456.78
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$5,018.84	$5,018.84
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$9,648.41	$9,648.41
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$352.15	$70,430.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,180.00	LF	$20.83	$24,579.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,154.81	$2,154.81
570-1-1	PERFORMANCE TURF	9,680.00	SY	$2.47	$23,909.60

Retention Basin 2

Description		Value
Size		5 AC
Multiplier		1
Depth		6.00
Description	4.84	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$30,623.87	$153,119.35
120-1	REGULAR EXCAVATION	48,400.00	CY	$19.92	$964,128.00
400-2-2	CONC CLASS II, ENDWALLS	30.00	CY	$1,858.71	$55,761.30
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$5,018.84	$5,018.84
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$352.15	$140,860.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00	LF	$20.83	$38,743.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$2,154.81	$4,309.62
570-1-1	PERFORMANCE TURF	24,200.00	SY	$2.47	$59,774.00

Retention Basin 3

Description		Value
Size		2 AC
Multiplier		1
Depth		6.00
Description	1.7	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.00	AC	$30,623.87	$61,247.74
120-1	REGULAR EXCAVATION	19,360.00	CY	$19.92	$385,651.20
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,858.71	$33,456.78
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$5,018.84	$5,018.84
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$9,648.41	$9,648.41
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$352.15	$70,430.00

550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,180.00	LF	$20.83	$24,579.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,154.81	$2,154.81
570-1-1	PERFORMANCE TURF	9,680.00	SY	$2.47	$23,909.60

Retention Basin 4

Description		Value
Size		2.5 AC
Multiplier		1
Depth		6.00
Description	3.17	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$30,623.87	$76,559.68
120-1	REGULAR EXCAVATION	24,200.00	CY	$19.92	$482,064.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,858.71	$33,456.78
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$6,069.54	$6,069.54
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$9,648.41	$9,648.41
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$352.15	$70,430.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$20.83	$27,808.05
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,154.81	$2,154.81
570-1-1	PERFORMANCE TURF	12,100.00	SY	$2.47	$29,887.00

Retention Basin 5

Description		Value
Size		2.5 AC
Multiplier		1
Depth		6.00
Description	2.5	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$30,623.87	$76,559.68
120-1	REGULAR EXCAVATION	24,200.00	CY	$19.92	$482,064.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,858.71	$33,456.78
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$6,069.54	$6,069.54
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$9,648.41	$9,648.41
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$352.15	$70,430.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$20.83	$27,808.05
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,154.81	$2,154.81
570-1-1	PERFORMANCE TURF	12,100.00	SY	$2.47	$29,887.00

Drainage Component Total $5,587,949.66

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-126	OH STATIC SIGN STR, F&I, S 101-150 FT	1.00	EA	$142,786.12	$142,786.12

Signing Component Total $158,691.17

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$9.75	$6,825.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$4,895.59	$4,895.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$744.91	$16,388.02
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,172.93	$1,172.93
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$80,286.38	$481,718.28
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,078.93	$21,578.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,030.75	$20,615.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalizations Component Total $615,273.74

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$38,000.00	$38,000.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$38,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	600.00	LF	$9.75	$5,850.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,800.00	LF	$2.17	$3,906.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	3.00	EA	$7,049.17	$21,147.51
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	$601.42	$1,804.26
	Subcomponent Total				$34,942.50
	Lighting Component Total				$34,942.50

BRIDGES COMPONENT

Bridge 10B-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	448.46
Width (LF)	123.08
Type	Overpass Bridge
Cost Factor	0.70
Structure No.	
Removal of Existing Structures area	13,266.00
Default Cost per SF	$135.00
Factored Cost per SF	$94.50
Final Cost per SF	**$98.27**
Basic Bridge Cost	**$5,216,065.17**
Description MARTIN HWY	

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	13,266.00	SF	$55.17	$731,885.22
400-2-10	CONC CLASS II, APPROACH SLABS	273.51	CY	$544.95	$149,049.27
415-1-9	REINF STEEL- APPROACH	47,864.25	LB	$1.23	$58,873.03

	SLABS				
	Bridge 10B-1 Total				$6,155,872.69

Bridge 10B-2

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	327.00
Width (LF)	43.00
Type	Overpass Bridge
Cost Factor	0.83
Structure No.	
Removal of Existing Structures area	6,888.00
Default Cost per SF	$135.00
Factored Cost per SF	$112.05
Final Cost per SF	**$117.22**
Basic Bridge Cost	**$1,575,535.05**
Description	MARTIN HWY. SB OFF RAMP 2-LANE OVER SR 91

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	6,888.00	SF	$55.17	$380,010.96
400-2-10	CONC CLASS II, APPROACH SLABS	95.56	CY	$544.95	$52,075.42
415-1-9	REINF STEEL- APPROACH SLABS	16,723.00	LB	$1.23	$20,569.29
	Bridge 10B-2 Total				$2,028,190.72

Bridge 890067

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Type	Misc/Rehab
Structure No.	890067
Description	REMOVE BRIDGE OVER DANFORTH CREEK

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	4,230.00	SF	$55.17	$233,369.10
	Bridge 890067 Total				$233,369.10

Bridge 10B-3

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	326.00
Width (LF)	29.67
Type	Overpass Bridge
Cost Factor	0.83
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$135.00
Factored Cost per SF	$112.05

Final Cost per SF	**$117.23**
Basic Bridge Cost	**$1,083,794.66**
Description	MARTIN HWY. SB ON-RAMP 1 LANE OVER SR 91

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	65.93 CY	$544.95	$35,928.55
415-1-9	REINF STEEL- APPROACH SLABS	11,537.75 LB	$1.23	$14,191.43
	Bridge 10B-3 Total			$1,133,914.64

Bridge 10B-4

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	128.00
Width (LF)	43.00
Type	Overpass Bridge
Cost Factor	0.86
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$135.00
Factored Cost per SF	$116.10
Final Cost per SF	**$129.30**
Basic Bridge Cost	**$639,014.40**
Description	MARTIN HWY - RAMP OVER NB SR 91

Bridge Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	95.56 CY	$544.95	$52,075.42
415-1-9	REINF STEEL- APPROACH SLABS	16,723.00 LB	$1.23	$20,569.29
	Bridge 10B-4 Total			$711,659.11
	Bridges Component Total			$10,263,006.26

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	179.00
Begin height	22.00
End Height	22.00
Multiplier	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,938.00 SF	$27.00	$106,326.00
	Retaining Walls Component Total			$106,326.00

Sequence 1 Total $17,456,404.60

Sequence: 2 NDR - New Construction, Divided, Rural **Net Length:** 0.130 MI 685 LF

Description: 10B-1B From Sta. 966+47.48 to Sta. 970+64.14

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	85.00 / 0.00
Incidental Clearing and Grubbing Area	0.55
Alignment Number	1
Distance	0.130
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.34	AC	$30,623.87	$41,035.99
110-1-1	CLEARING & GRUBBING	0.55	AC	$30,623.87	$16,843.13
120-6	EMBANKMENT	13,845.20	CY	$28.48	$394,311.30
	Earthwork Component Total				$452,190.42

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	0.00 / 41.50
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,070.85	SY	$11.20	$45,593.52
285-709	OPTIONAL BASE,BASE GROUP 09	3,207.98	SY	$29.47	$94,539.17
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	521.03	TN	$138.21	$72,011.56
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	126.31	TN	$148.28	$18,729.25

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1

Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	35.00	EA	$7.32	$256.20
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.13	GM	$1,039.31	$135.11
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.13	GM	$388.03	$50.44
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.13	GM	$4,983.20	$647.82
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.13	GM	$1,492.26	$193.99
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.13	GM	$4,937.59	$641.89
	Roadway Component Total				$232,798.95

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	963.31	SY	$10.59	$10,201.45
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	75.33	TN	$153.46	$11,560.14
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.02	TN	$148.28	$596.09

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,780.52	LF	$1.72	$3,062.49
104-11	FLOATING TURBIDITY BARRIER	32.43	LF	$13.62	$441.70
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	32.43	LF	$10.38	$336.62
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	1.00	EA	$114.05	$114.05
107-1	LITTER REMOVAL	131.88	AC	$33.53	$4,421.94
107-2	MOWING	131.88	AC	$48.82	$6,438.38
	Shoulder Component Total				$40,255.86

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.33	CY	$1,858.71	$4,330.79
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	$5,081.01	$5,081.01
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	104.00	LF	$220.00	$22,880.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	48.00	LF	$126.09	$6,052.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$145.93	$5,837.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	6.00	EA	$1,722.92	$10,337.52
524-1-1	CONCRETE DITCH PAVT, NR, 3"	259.40	SY	$141.05	$36,588.37
570-1-2	PERFORMANCE TURF, SOD	91.31	SY	$4.92	$449.25
	Drainage Component Total				$91,556.46

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
	Signing Component Total				$17,304.64

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$52,000.00	$52,000.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$52,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	$2.17	$5,208.00
715-4-14	LIGHT POLE COMPLETE, F&I-	4.00	EA	$7,049.17	$28,196.68

	STD, 45'			
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00 EA	$601.42	$2,405.68
	Subcomponent Total			$46,590.00
	Lighting Component Total			$46,590.00

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	285.00
Begin height	7.50
End Height	7.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	2,137.50	SF	$27.00	$57,712.50

Retaining Wall 2

Description	Value
Length	380.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,180.00	SF	$27.00	$112,860.00
	Retaining Walls Component Total				$170,572.50

Sequence 2 Total $1,103,268.83

Sequence: 3 NUR - New Construction, Undivided, Rural **Net Length:** 0.253 MI 1,337 LF

Description: 10B-1C From Sta. 966+00.00 to Sta. 972+52.37

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	180.00 / 0.00
Incidental Clearing and Grubbing Area	0.20
Alignment Number	1
Distance	0.189
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 2 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %

Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.52	AC	$30,623.87	$169,043.76
110-1-1	CLEARING & GRUBBING	0.20	AC	$30,623.87	$6,124.77
120-6	EMBANKMENT	9,169.41	CY	$28.48	$261,144.80
	Earthwork Component Total				$436,313.33

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,010.69	SY	$11.20	$44,919.73
285-709	OPTIONAL BASE,BASE GROUP 09	2,277.18	SY	$29.47	$67,108.49
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	367.65	TN	$138.21	$50,812.91
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	89.13	TN	$148.28	$13,216.20

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,039.31	$259.83
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.25	GM	$4,937.59	$1,234.40
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,277.51	$1,069.38

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

339-1	MISCELLANEOUS ASPHALT PAVEMENT	31.17	TN	$280.64	$8,747.55
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	935.00	LF	$19.44	$18,176.40
	Roadway Component Total				$205,544.89

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 4.00
Paved Outside Shoulder Width L/R	6.00 / 2.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,286.39	SY	$10.59	$13,622.87
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	98.04	TN	$138.21	$13,550.11
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7.84	TN	$148.28	$1,162.52
570-1-2	PERFORMANCE TURF, SOD	594.18	SY	$4.92	$2,923.37

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,889.00	SY	$4.92	$24,053.88

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,475.93	LF	$1.72	$5,978.60
104-11	FLOATING TURBIDITY BARRIER	63.30	LF	$13.62	$862.15
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	63.30	LF	$10.38	$657.05
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	3.07	AC	$33.53	$102.94
107-2	MOWING	3.07	AC	$48.82	$149.88
	Shoulder Component Total				$66,146.37

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	208.00	LF	$220.00	$45,760.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	11.00	EA	$1,722.92	$18,952.12
570-1-1	PERFORMANCE TURF	178.25	SY	$2.47	$440.28

	Drainage Component Total	$72,157.04

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$13,465.11

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$75,600.00	$75,600.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$75,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$2.17	$6,510.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	$7,049.17	$35,245.85
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$601.42	$3,007.10
	Subcomponent Total				$58,237.50
	Lighting Component Total				$58,237.50

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,010.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	11,110.00	SF	$27.00	$299,970.00
	Retaining Walls Component Total				$299,970.00

Sequence 3 Total $1,227,434.24

Sequence: 4 NDR - New Construction, Divided, Rural **Net Length:** 0.295 MI 1,555 LF

Description: 10B-1D From Sta. 972+52.37 to Sta. 987+34.13

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.295
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.78	AC	$30,623.87	$54,510.49
120-6	EMBANKMENT	6,061.95	CY	$28.48	$172,644.34
	Earthwork Component Total				$227,154.83

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,664.88	SY	$11.20	$52,246.66
285-709	OPTIONAL BASE,BASE GROUP 09	2,705.63	SY	$29.47	$79,734.92
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	427.61	TN	$138.21	$59,099.98
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	103.66	TN	$148.28	$15,370.70

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.29	GM	$1,039.31	$301.40
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.29	GM	$4,983.20	$1,445.13
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.29	GM	$4,937.59	$1,431.90

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,185.00	LF	$315.35	$373,689.75
	Roadway Component Total				$583,320.44

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	4.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	748.11	SY	$10.59	$7,922.48
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	57.02	TN	$138.21	$7,880.73
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.56	TN	$148.28	$676.16
570-1-2	PERFORMANCE TURF, SOD	345.55	SY	$4.92	$1,700.11

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

570-1-2	PERFORMANCE TURF, SOD	3,974.00	SY	$4.92	$19,552.08

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,042.90	LF	$1.72	$6,953.79
104-11	FLOATING TURBIDITY BARRIER	73.62	LF	$13.62	$1,002.70
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	73.62	LF	$10.38	$764.18
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	2.00	EA	$114.05	$228.10
107-1	LITTER REMOVAL	299.88	AC	$33.53	$10,054.98
107-2	MOWING	299.88	AC	$48.82	$14,640.14
	Shoulder Component Total				$74,458.45

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	6.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 6.00
Paved Median Shoulder Width L/R	0.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,093.66	SY	$10.59	$11,581.86
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	85.52	TN	$138.21	$11,819.72
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.56	TN	$148.28	$676.16
	Median Component Total				$24,077.74

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.30	CY	$1,858.71	$9,851.16
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00	EA	$5,081.01	$10,162.02
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	240.00	LF	$220.00	$52,800.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	104.00	LF	$126.09	$13,113.36
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	88.00	LF	$145.93	$12,841.84
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	12.00	EA	$1,722.92	$20,675.04
524-1-1	CONCRETE DITCH PAVT, NR, 3"	589.00	SY	$141.05	$83,078.45
570-1-2	PERFORMANCE TURF, SOD	207.33	SY	$4.92	$1,020.06

Drainage Component Total $203,541.93

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00	AS	$1,399.59	$11,196.72
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	2.00	AS	$6,638.71	$13,277.42

Signing Component Total $29,541.71

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$118,000.00	$118,000.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				

Intelligent Traffic System (ITS) Component Total $118,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	8

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00	LF	$9.75	$15,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	$744.91	$5,959.28
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,800.00	LF	$2.17	$10,416.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	8.00	EA	$7,049.17	$56,393.36
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	8.00	EA	$601.42	$4,811.36
	Subcomponent Total				$93,180.00

Lighting Component Total $93,180.00

Sequence 4 Total $1,353,275.10

Sequence: 5 NUR - New Construction, Undivided, Rural **Net Length:** 0.250 MI 1,322 LF

Description: 10B-1E From Sta. 987+34.13 to Sta. 1000+55.84

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.250
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.91	AC	$30,623.87	$27,867.72
120-6	EMBANKMENT	4,570.62	CY	$28.48	$130,171.26
	Earthwork Component Total				$158,038.98

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,819.43	SY	$11.20	$42,777.62
285-709	OPTIONAL BASE,BASE GROUP 09	1,811.29	SY	$29.47	$53,378.72
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	678.68	TN	$119.42	$81,047.97
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	70.51	TN	$148.28	$10,455.22

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,039.31	$259.83
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.25	GM	$4,937.59	$1,234.40
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,277.51	$1,069.38

Roadway Component Total $190,223.14

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,811.29	SY	$29.47	$53,378.72
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	290.86	TN	$153.46	$44,635.38
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.88	TN	$148.28	$575.33
570-1-2	PERFORMANCE TURF, SOD	293.80	SY	$4.92	$1,445.50

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	3,673.00	SY	$4.92	$18,071.16

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,437.49	LF	$1.72	$5,912.48
104-11	FLOATING TURBIDITY BARRIER	62.60	LF	$13.62	$852.61
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	62.60	LF	$10.38	$649.79
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	127.26	AC	$33.53	$4,267.03
107-2	MOWING	127.26	AC	$48.82	$6,212.83

Shoulder Component Total $139,083.83

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.51	CY	$1,858.71	$8,382.78
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	208.00	LF	$220.00	$45,760.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	11.00	EA	$1,722.92	$18,952.12
570-1-2	PERFORMANCE TURF, SOD	176.28	SY	$4.92	$867.30

Drainage Component Total $80,966.84

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$189,111.33	$567,333.99

Signing Component Total $580,799.10

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$100,160.00	$100,160.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				

Intelligent Traffic System (ITS) Component Total $100,160.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$744.91	$5,214.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00	EA	$7,049.17	$49,344.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$601.42	$4,209.94
	Subcomponent Total				$81,532.50

Lighting Component Total $81,532.50

Sequence 5 Total $1,330,804.39

Sequence: 6 NUR - New Construction, Undivided, Rural **Net Length:** 0.175 MI 925 LF

Description: 10B-2A From Sta. 973+72.30 to Sta. 982+95.55

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	130.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.175
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 2 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.76	AC	$30,623.87	$84,521.88
120-6	EMBANKMENT	21,928.92	CY	$28.48	$624,535.64
	Earthwork Component Total				$709,057.52

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,522.50	SY	$11.20	$50,652.00
285-709	OPTIONAL BASE,BASE GROUP 09	2,500.73	SY	$29.47	$73,696.51
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	407.02	TN	$138.21	$56,254.23
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	98.67	TN	$148.28	$14,630.79

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	24.00	EA	$7.32	$175.68
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.18	GM	$1,039.31	$187.08
710-11-231	PAINTED PAVT	0.18	GM	$377.66	$67.98

	MARK,STD,YELLOW,SKIP,6"				
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.18	GM	$4,937.59	$888.77
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.18	GM	$4,277.51	$769.95
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.18	GM	$1,228.02	$221.04

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	61.67	TN	$280.64	$17,307.07
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,850.00	LF	$19.44	$35,964.00
	Roadway Component Total				$250,815.10

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 8.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	10.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,506.81	SY	$10.59	$15,957.12
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	118.72	TN	$153.46	$18,218.77
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	5.43	TN	$148.28	$805.16
570-1-2	PERFORMANCE TURF, SOD	616.70	SY	$4.92	$3,034.16

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	9,045.00	SY	$4.92	$44,501.40

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,405.15	LF	$1.72	$4,136.86
104-11	FLOATING TURBIDITY BARRIER	43.80	LF	$13.62	$596.56
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	43.80	LF	$10.38	$454.64

104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	89.04	AC	$33.53	$2,985.51
107-2	MOWING	89.04	AC	$48.82	$4,346.93
	Shoulder Component Total				$98,120.11

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.15	CY	$1,858.71	$5,854.94
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	144.00	LF	$220.00	$31,680.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00	EA	$1,722.92	$13,783.36
570-1-2	PERFORMANCE TURF, SOD	123.34	SY	$4.92	$606.83
	Drainage Component Total				$56,594.89

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$70,080.00	$70,080.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$70,080.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x	5.00	EA	$744.91	$3,724.55

	24"			
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00 LF	$2.17	$6,510.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00 EA	$7,049.17	$35,245.85
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00 EA	$601.42	$3,007.10
	Subcomponent Total			$58,237.50
	Lighting Component Total			$58,237.50

Sequence 6 Total $1,253,571.05

Sequence: 7 NUR - New Construction, Undivided, Rural **Net Length:** 0.284 MI 1,500 LF

Description: 10B-2B From Sta. 957+00.11 to Sta. 973+72.30

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	80.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.350
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.75	AC	$30,623.87	$84,215.64
120-6	EMBANKMENT	6,398.87	CY	$28.48	$182,239.82
	Earthwork Component Total				$266,455.46

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,500.14	SY	$11.20	$50,401.57
285-709	OPTIONAL BASE,BASE GROUP 09	2,555.08	SY	$29.47	$75,298.21
334-1-53	SUPERPAVE ASPH CONC, TRAF	412.51	TN	$138.21	$57,013.01

	C, PG76-22				
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	100.00	TN	$148.28	$14,828.00

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.28	GM	$1,039.31	$291.01
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.28	GM	$4,937.59	$1,382.53
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.28	GM	$4,277.51	$1,197.70
	Roadway Component Total				$200,412.03

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	4.00 / 2.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,110.04	SY	$10.59	$11,755.32
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	82.50	TN	$138.21	$11,402.32
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	8.80	TN	$148.28	$1,304.86
570-1-1	PERFORMANCE TURF	1,000.03	SY	$2.47	$2,470.07

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	8,428.00	SY	$4.92	$41,465.76

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,900.12	LF	$1.72	$6,708.21
104-11	FLOATING TURBIDITY BARRIER	71.03	LF	$13.62	$967.43

104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	71.03	LF	$10.38	$737.29
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	3.44	AC	$33.53	$115.34
107-2	MOWING	3.44	AC	$48.82	$167.94
	Shoulder Component Total				$80,177.55

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	232.00	LF	$220.00	$51,040.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	12.00	EA	$1,722.92	$20,675.04
570-1-1	PERFORMANCE TURF	200.01	SY	$2.47	$494.02
	Drainage Component Total				$79,213.70

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$13,465.11

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$140,160.00	$140,160.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$140,160.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	10

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,000.00	LF	$9.75	$19,500.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	10.00	EA	$744.91	$7,449.10
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,000.00	LF	$2.17	$13,020.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	10.00	EA	$7,049.17	$70,491.70
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	10.00	EA	$601.42	$6,014.20
	Subcomponent Total				$116,475.00
	Lighting Component Total				$116,475.00

Sequence 7 Total $896,358.85

Sequence: 8 NUR - New Construction, Undivided, Rural **Net Length:** 0.305 MI 1,608 LF

Description: 10B-2C From Sta. 969+00.00 to Sta. 957+00.11

Special Conditions: NB-Off inside Ramp Lane

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	80.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.350
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.95	AC	$30,623.87	$90,340.42
120-6	EMBANKMENT	6,398.87	CY	$28.48	$182,239.82
	Earthwork Component Total				$272,580.24

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended

				Amount
160-4	TYPE B STABILIZATION	4,823.28 SY	$11.20	$54,020.74
285-709	OPTIONAL BASE,BASE GROUP 09	2,738.55 SY	$29.47	$80,705.07
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	442.13 TN	$138.21	$61,106.79
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	107.18 TN	$148.28	$15,892.65

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.30	GM	$1,039.31	$311.79
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.30	GM	$4,937.59	$1,481.28
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.30	GM	$4,277.51	$1,283.25
	Roadway Component Total				$214,801.57

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	4.00 / 2.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,189.74	SY	$10.59	$12,599.35
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	88.43	TN	$138.21	$12,221.91
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	9.43	TN	$148.28	$1,398.28
570-1-1	PERFORMANCE TURF	1,071.84	SY	$2.47	$2,647.44

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	8,428.00	SY	$4.92	$41,465.76

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,180.18	LF	$1.72	$7,189.91
104-11	FLOATING TURBIDITY BARRIER	76.12	LF	$13.62	$1,036.75
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	76.12	LF	$10.38	$790.13
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	3.69	AC	$33.53	$123.73
107-2	MOWING	3.69	AC	$48.82	$180.15
	Shoulder Component Total				$82,736.41

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	248.00	LF	$220.00	$54,560.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00	LF	$145.93	$8,172.08
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	13.00	EA	$1,722.92	$22,397.96
570-1-1	PERFORMANCE TURF	214.37	SY	$2.47	$529.49
	Drainage Component Total				$85,659.53

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	7.00	AS	$1,399.59	$9,797.13
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$14,864.70

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$140,160.00	$140,160.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$140,160.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	10

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,000.00	LF	$9.75	$19,500.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	10.00	EA	$744.91	$7,449.10
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,000.00	LF	$2.17	$13,020.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	10.00	EA	$7,049.17	$70,491.70
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	10.00	EA	$601.42	$6,014.20
	Subcomponent Total				$116,475.00
	Lighting Component Total				$116,475.00

Sequence 8 Total $927,277.45

Sequence: 9 NUR - New Construction, Undivided, Rural **Net Length:** 0.246 MI 1,300 LF

Description: 10B-2D From Sta. 944+00.11 to Sta. 957+00.11

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	28.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.246
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.83	AC	$30,623.87	$25,417.81
120-6	EMBANKMENT	4,497.49	CY	$28.48	$128,088.52
	Earthwork Component Total				$153,506.33

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,755.37	SY	$11.20	$42,060.14
285-709	OPTIONAL BASE,BASE GROUP 09	1,780.91	SY	$29.47	$52,483.42
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	667.30	TN	$119.42	$79,688.97
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	69.33	TN	$148.28	$10,280.25

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,039.31	$259.83
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.25	GM	$4,937.59	$1,234.40
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,277.51	$1,069.38
	Roadway Component Total				$187,076.39

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,780.91	SY	$29.47	$52,483.42
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	285.99	TN	$153.46	$43,888.03
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.81	TN	$148.28	$564.95
570-1-2	PERFORMANCE TURF, SOD	288.87	SY	$4.92	$1,421.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,167.00	SY	$4.92	$10,661.64

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

104-10-3	SEDIMENT BARRIER	3,379.83 LF	$1.72	$5,813.31
104-11	FLOATING TURBIDITY BARRIER	61.55 LF	$13.62	$838.31
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	61.55 LF	$10.38	$638.89
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	125.16 AC	$33.53	$4,196.61
107-2	MOWING	125.16 AC	$48.82	$6,110.31
	Shoulder Component Total			$129,699.71

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.43	CY	$1,858.71	$8,234.09
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	200.00	LF	$220.00	$44,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	10.00	EA	$1,722.92	$17,229.20
570-1-1	PERFORMANCE TURF	173.32	SY	$2.47	$428.10
	Drainage Component Total				$76,896.03

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$98,400.00	$98,400.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$98,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$744.91	$5,214.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00	EA	$7,049.17	$49,344.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$601.42	$4,209.94
	Subcomponent Total				$81,532.50
	Lighting Component Total				$81,532.50

Sequence 9 Total $739,176.48

Sequence: 10 NUR - New Construction, Undivided, Rural **Net Length:** 0.249 MI 1,315 LF

Description: 10B-3A From Sta. 945+59.62 to Sta. 958+76.16

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 20.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.249
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.60	AC	$30,623.87	$18,374.32
120-6	EMBANKMENT	1,454.47	CY	$28.48	$41,423.31
	Earthwork Component Total				$59,797.63

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,799.61	SY	$11.20	$42,555.63

285-709	OPTIONAL BASE,BASE GROUP 09	1,801.89	SY	$29.47	$53,101.70
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	675.16	TN	$119.42	$80,627.61
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	70.15	TN	$148.28	$10,401.84

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,039.31	$259.83
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.25	GM	$4,937.59	$1,234.40
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,277.51	$1,069.38
	Roadway Component Total				$189,250.39

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Paved Outside Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,801.89	SY	$29.47	$53,101.70
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	289.35	TN	$153.46	$44,403.65
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.86	TN	$148.28	$572.36
570-1-2	PERFORMANCE TURF, SOD	292.28	SY	$4.92	$1,438.02

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,192.00	SY	$4.92	$10,784.64

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,419.64	LF	$1.72	$5,881.78
104-11	FLOATING TURBIDITY BARRIER	62.28	LF	$13.62	$848.25
104-12	STAKED TURBIDITY BARRIER-	62.28	LF	$10.38	$646.47

	NYL REINF PVC			
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	126.84 AC	$33.53	$4,252.95
107-2	MOWING	126.84 AC	$48.82	$6,192.33
	Shoulder Component Total			$131,205.15

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.48	CY	$1,858.71	$8,327.02
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	200.00	LF	$220.00	$44,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	10.00	EA	$1,722.92	$17,229.20
570-1-2	PERFORMANCE TURF, SOD	175.37	SY	$4.92	$862.82
	Drainage Component Total				$77,423.68

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$189,111.33	$567,333.99
	Signing Component Total				$579,399.51

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$99,640.00	$99,640.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$99,640.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$744.91	$5,214.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00	EA	$7,049.17	$49,344.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$601.42	$4,209.94
	Subcomponent Total				$81,532.50
	Lighting Component Total				$81,532.50

Sequence 10 Total $1,218,248.86

Sequence: 11 NUR - New Construction, Undivided, Rural **Net Length:** 0.504 MI 2,663 LF

Description: 10B-3B From Sta. 958+76.16 to Sta. 966+47.48

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	70.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.104
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.28	AC	$30,623.87	$131,070.16
120-6	EMBANKMENT	1,346.36	CY	$28.48	$38,344.33
	Earthwork Component Total				$169,414.49

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,989.70	SY	$11.20	$89,484.64
285-709	OPTIONAL BASE,BASE GROUP 09	4,536.37	SY	$29.47	$133,686.82
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	732.39	TN	$138.21	$101,223.62
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	177.55	TN	$148.28	$26,327.11

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.50	GM	$1,039.31	$519.66
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.50	GM	$4,937.59	$2,468.80
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.50	GM	$4,277.51	$2,138.76

Roadway Component Total $355,849.41

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	2.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,970.79	SY	$10.59	$20,870.67
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	146.48	TN	$138.21	$20,245.00
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	15.62	TN	$148.28	$2,316.13
570-1-2	PERFORMANCE TURF, SOD	1,775.49	SY	$4.92	$8,735.41

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,445.00	SY	$4.92	$12,029.40

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,924.40	LF	$1.72	$11,909.97

104-11	FLOATING TURBIDITY BARRIER	126.10 LF	$13.62	$1,717.48
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	126.10 LF	$10.38	$1,308.92
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	6.11 AC	$33.53	$204.87
107-2	MOWING	6.11 AC	$48.82	$298.29
	Shoulder Component Total			$82,719.14

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	408.00	LF	$220.00	$89,760.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	88.00	LF	$145.93	$12,841.84
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	21.00	EA	$1,722.92	$36,181.32
570-1-1	PERFORMANCE TURF	355.10	SY	$2.47	$877.10
	Drainage Component Total				$139,660.26

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$402.31	$804.62
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	11.00	AS	$1,399.59	$15,395.49
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,665.26	$9,330.52
	Signing Component Total				$25,530.63

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$41,680.00	$41,680.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$41,680.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

630-2-11	CONDUIT, F& I, OPEN TRENCH	600.00 LF	$9.75	$5,850.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00 EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,800.00 LF	$2.17	$3,906.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	3.00 EA	$7,049.17	$21,147.51
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00 EA	$601.42	$1,804.26
	Subcomponent Total			$34,942.50
	Lighting Component Total			$34,942.50

Sequence 11 Total $849,796.43

Sequence: 12 NUR - New Construction, Undivided, Rural **Net Length:** 0.085 MI 450 LF

Description: 10B-4A From Sta. 966+06.22 to Sta. 972+07.47

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	70.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.164
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.72	AC	$30,623.87	$22,049.19
120-6	EMBANKMENT	4,242.05	CY	$28.48	$120,813.58
	Earthwork Component Total				$142,862.77

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,799.42	SY	$11.20	$20,153.50
285-709	OPTIONAL BASE,BASE GROUP 09	1,216.11	SY	$29.47	$35,838.76
334-1-53	SUPERPAVE ASPH CONC, TRAF C,	197.94	TN	$138.21	$27,357.29

	PG76-22			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	47.98 TN	$148.28	$7,114.47

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	12.00	EA	$7.32	$87.84
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.09	GM	$1,039.31	$93.54
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.09	GM	$377.66	$33.99
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.09	GM	$4,937.59	$444.38
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.09	GM	$4,277.51	$384.98
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.09	GM	$1,228.02	$110.52
	Roadway Component Total				$91,619.27

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	2.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	332.89	SY	$10.59	$3,525.31
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	24.74	TN	$138.21	$3,419.32
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.64	TN	$148.28	$391.46
570-1-2	PERFORMANCE TURF, SOD	299.90	SY	$4.92	$1,475.51

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	3,845.00	SY	$4.92	$18,917.40

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,169.63	LF	$1.72	$2,011.76
104-11	FLOATING TURBIDITY BARRIER	21.30	LF	$13.62	$290.11
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	21.30	LF	$10.38	$221.09
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	1.03	AC	$33.53	$34.54
107-2	MOWING	1.03	AC	$48.82	$50.28
	Shoulder Component Total				$33,419.78

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	72.00	LF	$220.00	$15,840.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$145.93	$2,334.88
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	$1,722.92	$6,891.68
570-1-1	PERFORMANCE TURF	59.98	SY	$2.47	$148.15
	Drainage Component Total				$25,214.71

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$7,866.75

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$65,520.00	$65,520.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$65,520.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$2.17	$6,510.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	$7,049.17	$35,245.85
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$601.42	$3,007.10
	Subcomponent Total				$58,237.50
	Lighting Component Total				$58,237.50

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	200.00
Begin height	11.00
End Height	11.00
Multiplier	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,400.00	SF	$27.00	$118,800.00
	Retaining Walls Component Total				$118,800.00

Sequence 12 Total $543,540.78

Sequence: 13 NUR - New Construction, Undivided, Rural **Net Length:** 0.253 MI 1,337 LF

Description: 10B-4B From Sta. 966+06.22 to Sta. 972+07.47

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.102
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

110-1-1	CLEARING & GRUBBING	1.07 AC	$30,623.87	$32,767.54
120-6	EMBANKMENT	5,032.34 CY	$28.48	$143,321.04
	Earthwork Component Total			$176,088.58

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,010.69	SY	$11.20	$44,919.73
285-709	OPTIONAL BASE,BASE GROUP 09	2,277.18	SY	$29.47	$67,108.49
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	367.65	TN	$138.21	$50,812.91
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	89.13	TN	$148.28	$13,216.20

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,039.31	$259.83
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.25	GM	$4,937.59	$1,234.40
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,277.51	$1,069.38
	Roadway Component Total				$178,620.94

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

285-702	OPTIONAL BASE,BASE GROUP 02	1,880.57	SY	$10.59	$19,915.24
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	147.06	TN	$138.21	$20,325.16
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7.84	TN	$148.28	$1,162.52

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,475.93	LF	$1.72	$5,978.60
104-11	FLOATING TURBIDITY BARRIER	63.30	LF	$13.62	$862.15
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	63.30	LF	$10.38	$657.05
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	3.07	AC	$33.53	$102.94
107-2	MOWING	3.07	AC	$48.82	$149.88
	Shoulder Component Total				$52,236.54

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	208.00	LF	$220.00	$45,760.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	11.00	EA	$1,722.92	$18,952.12
570-1-1	PERFORMANCE TURF	178.25	SY	$2.47	$440.28
	Drainage Component Total				$72,157.04

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$13,465.11

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$40,920.00	$40,920.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				

Intelligent Traffic System (ITS) Component Total $40,920.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	600.00	LF	$9.75	$5,850.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,800.00	LF	$2.17	$3,906.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	3.00	EA	$7,049.17	$21,147.51
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	$601.42	$1,804.26
	Subcomponent Total				$34,942.50

Lighting Component Total $34,942.50

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	595.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	6,545.00	SF	$27.00	$176,715.00

Retaining Wall 2

Description	Value
Length	650.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,150.00	SF	$27.00	$193,050.00

Retaining Walls Component Total $369,765.00

Sequence 13 Total $938,195.71

Sequence: 14 NUR - New Construction, Undivided, Rural **Net Length:** 0.152 MI 800 LF

Description: 10B-4C From Sta. 972+07.47 to Sta. 979+62.82

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 90.00
Incidental Clearing and Grubbing Area	0.20
Alignment Number	1
Distance	0.152
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.66	AC	$30,623.87	$50,835.62
110-1-1	CLEARING & GRUBBING	0.20	AC	$30,623.87	$6,124.77
120-6	EMBANKMENT	11,839.25	CY	$28.48	$337,181.84
	Earthwork Component Total				$394,142.23

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,266.24	SY	$11.20	$47,781.89
285-709	OPTIONAL BASE,BASE GROUP 09	2,162.45	SY	$29.47	$63,727.40
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	351.96	TN	$138.21	$48,644.39
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	85.32	TN	$148.28	$12,651.25

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	20.00	EA	$7.32	$146.40

710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15	GM	$1,039.31	$155.90
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.15	GM	$377.66	$56.65
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.15	GM	$4,937.59	$740.64
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.15	GM	$4,277.51	$641.63
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.15	GM	$1,228.02	$184.20
	Roadway Component Total				$174,730.35

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	8.00 / 12.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,836.26	SY	$10.59	$19,445.99
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	146.65	TN	$153.46	$22,504.91
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.69	TN	$148.28	$695.43
570-1-2	PERFORMANCE TURF, SOD	355.52	SY	$4.92	$1,749.16

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,079.79	LF	$1.72	$3,577.24
104-11	FLOATING TURBIDITY BARRIER	37.88	LF	$13.62	$515.93
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	37.88	LF	$10.38	$393.19
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	77.28	AC	$33.53	$2,591.20
107-2	MOWING	77.28	AC	$48.82	$3,772.81
	Shoulder Component Total				$58,328.86

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.73	CY	$1,858.71	$5,074.28
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	128.00	LF	$220.00	$28,160.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76

430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	7.00	EA	$1,722.92	$12,060.44
570-1-2	PERFORMANCE TURF, SOD	106.66	SY	$4.92	$524.77
	Drainage Component Total				$50,489.25

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$60,600.00	$60,600.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$60,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	$2.17	$5,208.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	4.00	EA	$7,049.17	$28,196.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$601.42	$2,405.68
	Subcomponent Total				$46,590.00
	Lighting Component Total				$46,590.00

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	800.00

Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,800.00	SF	$27.00	$237,600.00

Retaining Wall 2

Description	Value
Length	780.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,580.00	SF	$27.00	$231,660.00
	Retaining Walls Component Total				$469,260.00

Sequence 14 Total $1,264,806.62

Sequence: 15 NUR - New Construction, Undivided, Rural **Net Length:** 0.097 MI 510 LF

Description: 10B-5A From Sta. 981+94.99 to Sta. 986+86.89

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	2.34
Alignment Number	1
Distance	0.097
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.34	AC	$30,623.87	$71,659.86
120-6	EMBANKMENT	2,588.12	CY	$28.48	$73,709.66
	Earthwork Component Total				$145,369.52

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,493.57	SY	$11.20	$27,927.98
285-709	OPTIONAL BASE,BASE GROUP 09	1,378.83	SY	$29.47	$40,634.12
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	224.42	TN	$138.21	$31,017.09
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	54.41	TN	$148.28	$8,067.91

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	13.00	EA	$7.32	$95.16
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.10	GM	$1,039.31	$103.93
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.10	GM	$377.66	$37.77
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.10	GM	$4,937.59	$493.76
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.10	GM	$4,277.51	$427.75
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.10	GM	$1,228.02	$122.80
	Roadway Component Total				$108,928.27

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 10.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	830.81	SY	$10.59	$8,798.28
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	65.46	TN	$138.21	$9,047.23

337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.99	TN	$148.28	$443.36
570-1-2	PERFORMANCE TURF, SOD	340.03	SY	$4.92	$1,672.95

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	10,086.70	SY	$4.92	$49,626.56

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,326.12	LF	$1.72	$2,280.93
104-11	FLOATING TURBIDITY BARRIER	24.15	LF	$13.62	$328.92
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	24.15	LF	$10.38	$250.68
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	49.14	AC	$33.53	$1,647.66
107-2	MOWING	49.14	AC	$48.82	$2,399.01
	Shoulder Component Total				$79,578.58

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.74	CY	$1,858.71	$3,234.16
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	80.00	LF	$220.00	$17,600.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$145.93	$3,502.32
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	$1,722.92	$6,891.68
570-1-2	PERFORMANCE TURF, SOD	68.01	SY	$4.92	$334.61
	Drainage Component Total				$31,562.77

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$7,866.75

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

777777	ITS	1.00	LS	$38,640.00	$38,640.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$38,640.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	600.00	LF	$9.75	$5,850.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,800.00	LF	$2.17	$3,906.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	3.00	EA	$7,049.17	$21,147.51
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	$601.42	$1,804.26
	Subcomponent Total				$34,942.50
	Lighting Component Total				$34,942.50

Sequence 15 Total $446,888.39

Sequence: 16 NUR - New Construction, Undivided, Rural **Net Length:** 0.195 MI 1,030 LF

Description: 10B-5B From Sta. 986+86.89 to Sta. 996+94.91

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 70.00
Incidental Clearing and Grubbing Area	0.75
Alignment Number	1
Distance	0.195
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.65	AC	$30,623.87	$50,529.39
110-1-1	CLEARING & GRUBBING	0.75	AC	$30,623.87	$22,967.90
120-6	EMBANKMENT	4,210.30	CY	$28.48	$119,909.34
	Earthwork Component Total				$193,406.63

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,319.30	SY	$11.20	$37,176.16
285-709	OPTIONAL BASE,BASE GROUP 09	1,754.65	SY	$29.47	$51,709.54
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	283.29	TN	$138.21	$39,153.51
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	68.68	TN	$148.28	$10,183.87

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.20	GM	$1,039.31	$207.86
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.20	GM	$4,937.59	$987.52
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.20	GM	$4,277.51	$855.50
	Roadway Component Total				$140,273.96

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	991.21	SY	$10.59	$10,496.91
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	75.54	TN	$138.21	$10,440.38
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.04	TN	$148.28	$895.61

570-1-2	PERFORMANCE TURF, SOD	686.75	SY	$4.92	$3,378.81

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	3,891.00	SY	$4.92	$19,143.72

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,678.33	LF	$1.72	$4,606.73
104-11	FLOATING TURBIDITY BARRIER	48.78	LF	$13.62	$664.38
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	48.78	LF	$10.38	$506.34
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	99.12	AC	$33.53	$3,323.49
107-2	MOWING	99.12	AC	$48.82	$4,839.04
	Shoulder Component Total				$61,378.41

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.51	CY	$1,858.71	$6,524.07
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	160.00	LF	$220.00	$35,200.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00	EA	$1,722.92	$13,783.36
570-1-2	PERFORMANCE TURF, SOD	137.35	SY	$4.92	$675.76
	Drainage Component Total				$60,852.95

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$78,040.00	$78,040.00
	Comment: Assume cost per mile when express lanes not				

present to be $400,000

Intelligent Traffic System (ITS) Component Total $78,040.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$2.17	$6,510.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	$7,049.17	$35,245.85
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$601.42	$3,007.10
	Subcomponent Total				$58,237.50

Lighting Component Total $58,237.50

Sequence 16 Total $602,855.38

Sequence: 17 NUR - New Construction, Undivided, Rural **Net Length:** 0.246 MI 1,300 LF

Description: 10B-5C From Sta. 996+94.91 to Sta. 1004+95.76

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 20.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.246
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.60	AC	$30,623.87	$18,374.32
120-6	EMBANKMENT	1,436.95	CY	$28.48	$40,924.34

Earthwork Component Total $59,298.66

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,755.37	SY	$11.20	$42,060.14
285-709	OPTIONAL BASE,BASE GROUP 09	1,780.91	SY	$29.47	$52,483.42
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	667.30	TN	$119.42	$79,688.97
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	69.33	TN	$148.28	$10,280.25

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,039.31	$259.83
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.25	GM	$4,937.59	$1,234.40
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,277.51	$1,069.38
	Roadway Component Total				$187,076.39

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Paved Outside Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,780.91	SY	$29.47	$52,483.42
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	285.99	TN	$153.46	$43,888.03
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.81	TN	$148.28	$564.95
570-1-2	PERFORMANCE TURF, SOD	288.87	SY	$4.92	$1,421.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,167.00	SY	$4.92	$10,661.64

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,379.83	LF	$1.72	$5,813.31
104-11	FLOATING TURBIDITY BARRIER	61.55	LF	$13.62	$838.31
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	61.55	LF	$10.38	$638.89
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	125.16	AC	$33.53	$4,196.61
107-2	MOWING	125.16	AC	$48.82	$6,110.31
	Shoulder Component Total				$129,699.71

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.43	CY	$1,858.71	$8,234.09
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	200.00	LF	$220.00	$44,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	10.00	EA	$1,722.92	$17,229.20
570-1-2	PERFORMANCE TURF, SOD	173.32	SY	$4.92	$852.73
	Drainage Component Total				$77,320.66

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$98,480.00	$98,480.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$98,480.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$744.91	$5,214.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00	EA	$7,049.17	$49,344.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$601.42	$4,209.94
	Subcomponent Total				$81,532.50
	Lighting Component Total				$81,532.50

Sequence 17 Total $645,473.44

Sequence: 18 NDU - New Construction, Divided, Urban **Net Length:** 0.133 MI 700 LF

Description: 10B-6A From SR 91 To 700' LT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	190.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.189
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.06	AC	$30,623.87	$93,709.04
120-6	EMBANKMENT	56,463.79	CY	$28.48	$1,608,088.74
	Earthwork Component Total				$1,701,797.78

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	8
Roadway Pavement Width L/R	51.00 / 52.00

Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	8,815.39	SY	$11.20	$98,732.37
285-709	OPTIONAL BASE,BASE GROUP 09	8,012.58	SY	$29.47	$236,130.73
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,322.08	TN	$138.21	$182,724.68
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	661.04	TN	$188.19	$124,401.12

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	125.00	EA	$7.32	$915.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.27	GM	$1,039.31	$280.61
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.80	GM	$388.03	$310.42
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.27	GM	$4,937.59	$1,333.15
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.27	GM	$4,277.51	$1,154.93
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.80	GM	$1,246.43	$997.14
	Roadway Component Total				$646,980.15

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,400.26	LF	$1.72	$2,408.45
104-11	FLOATING TURBIDITY BARRIER	33.15	LF	$13.62	$451.50
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	33.15	LF	$10.38	$344.10
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	7.00	EA	$114.05	$798.35
107-1	LITTER REMOVAL	141.54	AC	$33.53	$4,745.84

107-2	MOWING	141.54	AC	$48.82	$6,909.98
	Shoulder Component Total				$18,741.22

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	27.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,400.26	LF	$26.14	$36,602.80
	Median Component Total				$36,602.80

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.39	CY	$1,858.71	$4,442.32
425-1-351	INLETS, CURB, TYPE P-5, <10'	5.00	EA	$5,555.55	$27,777.75
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,591.91	$15,183.82
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$3,236.62	$3,236.62
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,414.69	$4,414.69
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	352.00	LF	$126.09	$44,383.68
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	664.00	LF	$525.29	$348,792.56
570-1-2	PERFORMANCE TURF, SOD	40.31	SY	$4.92	$198.33
	Drainage Component Total				$453,099.53

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$402.31	$1,609.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70
	Signing Component Total				$20,559.24

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value

Type	6 Lane Mast Arm
Multiplier	1
Description	5 lane

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$9.75	$6,825.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$4,895.59	$4,895.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$744.91	$16,388.02
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,172.93	$1,172.93
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$80,286.38	$481,718.28
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,078.93	$21,578.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,030.75	$20,615.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 2

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	4 lane

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00	LF	$9.75	$7,312.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00	LF	$23.35	$5,837.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$4,895.59	$4,895.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00	EA	$744.91	$11,918.56
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	4.00	EA	$56,601.03	$226,404.12
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00	AS	$1,078.93	$12,947.16
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00	EA	$366.45	$4,397.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00	AS	$1,030.75	$12,369.00

665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28
	Signalizations Component Total				$949,101.89

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$53,040.00	$53,040.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$53,040.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.13	LF	$9.75	$6,826.27
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	138.96	LF	$23.35	$3,244.72
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,557.06	LF	$2.17	$5,548.82
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	5.00	EA	$5,333.82	$26,669.10
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$601.42	$3,007.10
	Subcomponent Total				$49,020.55
	Lighting Component Total				$49,020.56

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	525.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,775.00	SF	$27.00	$155,925.00

Retaining Walls Component Total $155,925.00

Sequence 18 Total $4,084,868.17

Sequence: 19 NDU - New Construction, Divided, Urban **Net Length:** 0.189 MI 1,000 LF

Description: 10B-6B From 700' LT Of SR 91 To 1000' LT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	130.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.133
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.98	AC	$30,623.87	$91,259.13
120-6	EMBANKMENT	8,377.98	CY	$28.48	$238,604.87

Earthwork Component Total $329,864.00

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	40.00 / 40.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,035.88	SY	$11.20	$112,401.86
285-709	OPTIONAL BASE,BASE GROUP 09	8,889.17	SY	$29.47	$261,963.84
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,466.71	TN	$138.21	$202,713.99
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	733.36	TN	$188.19	$138,011.02

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2

Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	128.00	EA	$7.32	$936.96
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.38	GM	$1,039.31	$394.94
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.76	GM	$388.03	$294.90
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.38	GM	$4,937.59	$1,876.28
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.38	GM	$4,277.51	$1,625.45
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.76	GM	$1,246.43	$947.29
	Roadway Component Total				$721,166.53

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,000.06	LF	$1.72	$3,440.10
104-11	FLOATING TURBIDITY BARRIER	47.35	LF	$13.62	$644.91
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	47.35	LF	$10.38	$491.49
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	10.00	EA	$114.05	$1,140.50
107-1	LITTER REMOVAL	202.44	AC	$33.53	$6,787.81
107-2	MOWING	202.44	AC	$48.82	$9,883.12
	Shoulder Component Total				$25,470.93

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	11.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	2,000.06	LF	$26.14	$52,281.57
	Median Component Total				$52,281.57

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.41	CY	$1,858.71	$6,338.20
425-1-351	INLETS, CURB, TYPE P-5, <10'	7.00	EA	$5,555.55	$38,888.85
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,591.91	$15,183.82
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$3,236.62	$3,236.62
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,414.69	$4,414.69
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	504.00	LF	$126.09	$63,549.36
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	952.00	LF	$525.29	$500,076.08
570-1-2	PERFORMANCE TURF, SOD	57.58	SY	$4.92	$283.29
	Drainage Component Total				$638,975.55

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	5.00	AS	$402.31	$2,011.55
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70
	Signing Component Total				$20,961.55

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	2
Description	4 lane

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,500.00	LF	$9.75	$14,625.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	500.00	LF	$23.35	$11,675.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00	PI	$4,895.59	$9,791.18
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	32.00	EA	$744.91	$23,837.12
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$2,508.17	$5,016.34
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00	LF	$5.76	$691.20
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	8.00	EA	$56,601.03	$452,808.24
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	24.00	AS	$1,078.93	$25,894.32

653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	16.00	AS	$675.59	$10,809.44
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	24.00	EA	$366.45	$8,794.80
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	24.00	AS	$1,030.75	$24,738.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	16.00	EA	$244.78	$3,916.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00	AS	$35,970.31	$71,940.62
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	8.00	EA	$389.82	$3,118.56

Signalization 2

Description	Value
Type	2 Lane Mast Arm
Multiplier	2
Description	2 lane

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00	LF	$9.75	$15,600.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	400.00	LF	$23.35	$9,340.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00	PI	$4,895.59	$9,791.18
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	24.00	EA	$744.91	$17,877.84
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$2,508.17	$5,016.34
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00	LF	$5.76	$691.20
649-21-4	STEEL MAST ARM ASSEMBLY, F&I, 40'- 30'	8.00	EA	$42,475.14	$339,801.12
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	16.00	AS	$1,078.93	$17,262.88
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	16.00	AS	$675.59	$10,809.44
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	16.00	EA	$366.45	$5,863.20
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	16.00	AS	$1,030.75	$16,492.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	16.00	EA	$244.78	$3,916.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00	AS	$35,970.31	$71,940.62
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	8.00	EA	$389.82	$3,118.56
	Signalizations Component Total				$1,195,177.16

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$75,760.00	$75,760.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$75,760.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.03	LF	$9.75	$9,750.29
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	198.49	LF	$23.35	$4,634.74
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$744.91	$5,214.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,652.39	LF	$2.17	$7,925.69
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	7.00	EA	$5,333.82	$37,336.74
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$601.42	$4,209.94
	Subcomponent Total				$69,071.77
	Lighting Component Total				$69,071.77

Sequence 19 Total $3,128,729.06

Sequence: 20 NDU - New Construction, Divided, Urban **Net Length:** 0.093 MI 490 LF

Description: 10B-6C From SR 91 To 490' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	170.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.093
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.92	AC	$30,623.87	$58,797.83
120-6	EMBANKMENT	46,268.15	CY	$28.48	$1,317,716.91
	Earthwork Component Total				$1,376,514.74

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	10

Roadway Pavement Width L/R	62.00 / 62.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,312.74	SY	$11.20	$81,902.69
285-709	OPTIONAL BASE,BASE GROUP 09	6,750.89	SY	$29.47	$198,948.73
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,113.90	TN	$138.21	$153,952.12
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	556.95	TN	$188.19	$104,812.42

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	8

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	113.00	EA	$7.32	$827.16
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.19	GM	$1,039.31	$197.47
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.74	GM	$388.03	$287.14
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.19	GM	$4,937.59	$938.14
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.19	GM	$4,277.51	$812.73
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.74	GM	$1,246.43	$922.36
	Roadway Component Total				$543,600.96

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	979.97	LF	$1.72	$1,685.55
104-11	FLOATING TURBIDITY BARRIER	23.20	LF	$13.62	$315.98
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	23.20	LF	$10.38	$240.82
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$114.05	$570.25

107-1	LITTER REMOVAL	99.12 AC	$33.53	$3,323.49
107-2	MOWING	99.12 AC	$48.82	$4,839.04
	Shoulder Component Total			$14,058.13

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	17.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	979.97	LF	$26.14	$25,616.42
	Median Component Total				$25,616.42

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.67	CY	$1,858.71	$3,104.05
425-1-351	INLETS, CURB, TYPE P-5, <10'	4.00	EA	$5,555.55	$22,222.20
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	$7,591.91	$7,591.91
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$3,236.62	$3,236.62
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,414.69	$4,414.69
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	248.00	LF	$126.09	$31,270.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$145.93	$3,502.32
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	464.00	LF	$525.29	$243,734.56
570-1-2	PERFORMANCE TURF, SOD	28.21	SY	$4.92	$138.79
	Drainage Component Total				$319,215.46

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	2.00	EA	$189,111.33	$378,222.66
	Signing Component Total				$378,222.66

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	2
Description	5 lane

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	600.00	LF	$23.35	$14,010.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00	PI	$4,895.59	$9,791.18
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	44.00	EA	$744.91	$32,776.04
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$2,508.17	$5,016.34
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00	LF	$5.76	$691.20
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	2.00	EA	$1,172.93	$2,345.86
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	12.00	EA	$80,286.38	$963,436.56
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	40.00	AS	$1,078.93	$43,157.20
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	16.00	AS	$675.59	$10,809.44
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	40.00	EA	$366.45	$14,658.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	40.00	AS	$1,030.75	$41,230.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	16.00	EA	$244.78	$3,916.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00	AS	$35,970.31	$71,940.62
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	8.00	EA	$389.82	$3,118.56

Signalization 2

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	2 lane

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	$23.35	$4,670.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$4,895.59	$4,895.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	$744.91	$8,938.92
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
649-21-4	STEEL MAST ARM ASSEMBLY, F&I, 40'- 30'	4.00	EA	$42,475.14	$169,900.56
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	8.00	AS	$1,078.93	$8,631.44
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	8.00	EA	$366.45	$2,931.60
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	8.00	AS	$1,030.75	$8,246.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12	4.00	EA	$389.82	$1,559.28

SF

Signalizations Component Total $1,494,307.91

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$37,120.00	$37,120.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$37,120.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	489.98	LF	$9.75	$4,777.30
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	97.25	LF	$23.35	$2,270.79
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,789.56	LF	$2.17	$3,883.35
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	4.00	EA	$5,333.82	$21,335.28
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$601.42	$2,405.68
	Subcomponent Total				$37,652.04
	Lighting Component Total				$37,652.05

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	400.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,400.00	SF	$27.00	$118,800.00
	Retaining Walls Component Total				$118,800.00

Sequence 20 Total $4,345,108.33

Sequence: 21 NDU - New Construction, Divided, Urban **Net Length:** 0.089 MI 470 LF

Description: 10B-6D From 490' RT Of SR 91 To 470' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	180.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.089
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.94	AC	$30,623.87	$59,410.31
120-6	EMBANKMENT	8,473.01	CY	$28.48	$241,311.32
	Earthwork Component Total				$300,721.63

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	12
Roadway Pavement Width L/R	84.00 / 62.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	8,161.99	SY	$11.20	$91,414.29
285-709	OPTIONAL BASE,BASE GROUP 09	7,623.15	SY	$29.47	$224,654.23
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,257.82	TN	$138.21	$173,843.30
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	628.91	TN	$188.19	$118,354.57

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	10

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	132.00	EA	$7.32	$966.24
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.18	GM	$1,039.31	$187.08
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.89	GM	$388.03	$345.35
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.18	GM	$4,937.59	$888.77
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.18	GM	$4,277.51	$769.95
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.89	GM	$1,246.43	$1,109.32
	Roadway Component Total				$612,533.10

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	939.84	LF	$1.72	$1,616.52
104-11	FLOATING TURBIDITY BARRIER	22.25	LF	$13.62	$303.04
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	22.25	LF	$10.38	$230.96
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$114.05	$570.25
107-1	LITTER REMOVAL	95.34	AC	$33.53	$3,196.75
107-2	MOWING	95.34	AC	$48.82	$4,654.50
	Shoulder Component Total				$13,655.03

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	28.00
Performance Turf Width	24.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	939.84	LF	$26.14	$24,567.42
520-5-12	TRAF SEP CONC-TYPE I, 6' WIDE	280.00	LF	$77.00	$21,560.00
570-1-2	PERFORMANCE TURF, SOD	1,253.12	SY	$4.92	$6,165.35
	Median Component Total				$52,292.77

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.60	CY	$1,858.71	$2,973.94
425-1-351	INLETS, CURB, TYPE P-5, <10'	4.00	EA	$5,555.55	$22,222.20
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	$7,591.91	$7,591.91
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$3,236.62	$3,236.62
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,414.69	$4,414.69
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	240.00	LF	$126.09	$30,261.60
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$145.93	$3,502.32
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	448.00	LF	$525.29	$235,329.92
570-1-2	PERFORMANCE TURF, SOD	27.06	SY	$4.92	$133.14
	Drainage Component Total				$309,666.34

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70
	Signing Component Total				$20,156.93

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	2
Description	7 lane

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	600.00	LF	$23.35	$14,010.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00	PI	$4,895.59	$9,791.18
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	44.00	EA	$744.91	$32,776.04
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$2,508.17	$5,016.34
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00	LF	$5.76	$691.20
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	2.00	EA	$1,172.93	$2,345.86
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	12.00	EA	$80,286.38	$963,436.56
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	40.00	AS	$1,078.93	$43,157.20

653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	16.00	AS	$675.59	$10,809.44
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	40.00	EA	$366.45	$14,658.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	40.00	AS	$1,030.75	$41,230.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	16.00	EA	$244.78	$3,916.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00	AS	$35,970.31	$71,940.62
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	8.00	EA	$389.82	$3,118.56
	Signalizations Component Total				$1,230,547.48

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$35,600.00	$35,600.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$35,600.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	469.92	LF	$9.75	$4,581.72
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	93.27	LF	$23.35	$2,177.85
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,716.28	LF	$2.17	$3,724.33
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	4.00	EA	$5,333.82	$21,335.28
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$601.42	$2,405.68
	Subcomponent Total				$37,204.50
	Lighting Component Total				$37,204.50

Sequence 21 Total $2,612,377.78

Sequence: 22 NDU - New Construction, Divided, Urban **Net Length:** 0.074 MI 390 LF

Description: 10B-6E From Martin Downs Blvd. East

EARTHWORK COMPONENT

User Input Data

Description	Value

Standard Clearing and Grubbing Limits L/R	185.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.074
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.66	AC	$30,623.87	$50,835.62
120-6	EMBANKMENT	6,187.70	CY	$28.48	$176,225.70
	Earthwork Component Total				$227,061.32

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	10
Roadway Pavement Width L/R	40.00 / 84.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,823.40	SY	$11.20	$65,222.08
285-709	OPTIONAL BASE,BASE GROUP 09	5,375.98	SY	$29.47	$158,430.13
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	887.04	TN	$138.21	$122,597.80
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	443.52	TN	$188.19	$83,466.03

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	8

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	90.00	EA	$7.32	$658.80
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15	GM	$1,039.31	$155.90
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.59	GM	$388.03	$228.94
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.15	GM	$4,937.59	$740.64

711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.15	GM	$4,277.51	$641.63
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.59	GM	$1,246.43	$735.39
	Roadway Component Total				$432,877.34

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	780.38	LF	$1.72	$1,342.25
104-11	FLOATING TURBIDITY BARRIER	18.47	LF	$13.62	$251.56
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	18.47	LF	$10.38	$191.72
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	4.00	EA	$114.05	$456.20
107-1	LITTER REMOVAL	78.96	AC	$33.53	$2,647.53
107-2	MOWING	78.96	AC	$48.82	$3,854.83
	Shoulder Component Total				$11,827.09

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	780.38	LF	$26.14	$20,399.13
	Median Component Total				$20,399.13

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.33	CY	$1,858.71	$2,472.08
425-1-351	INLETS, CURB, TYPE P-5, <10'	3.00	EA	$5,555.55	$16,666.65
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	$7,591.91	$7,591.91
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$3,236.62	$3,236.62
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,414.69	$4,414.69
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00	LF	$126.09	$25,218.00
430-175-136	PIPE CULV, OPT MATL, ROUND,	24.00	LF	$145.93	$3,502.32

	36"S/CD			
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	376.00 LF	$525.29	$197,509.04
570-1-2	PERFORMANCE TURF, SOD	22.47 SY	$4.92	$110.55
	Drainage Component Total			$260,721.86

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$402.31	$804.62
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-126	OH STATIC SIGN STR, F&I, S 101-150 FT	1.00	EA	$142,786.12	$142,786.12
	Signing Component Total				$162,540.74

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	2
Description	7 lane

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	600.00	LF	$23.35	$14,010.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00	PI	$4,895.59	$9,791.18
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	44.00	EA	$744.91	$32,776.04
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$2,508.17	$5,016.34
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00	LF	$5.76	$691.20
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	2.00	EA	$1,172.93	$2,345.86
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	12.00	EA	$80,286.38	$963,436.56
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	40.00	AS	$1,078.93	$43,157.20
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	16.00	AS	$675.59	$10,809.44
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	40.00	EA	$366.45	$14,658.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	40.00	AS	$1,030.75	$41,230.00
665-1-11	PEDESTRIAN DETECTOR, F&I,	16.00	EA	$244.78	$3,916.48

	STANDARD			
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00 AS	$35,970.31	$71,940.62
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	8.00 EA	$389.82	$3,118.56
	Signalizations Component Total			$1,230,547.48

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$29,560.00	$29,560.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$29,560.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	390.19	LF	$9.75	$3,804.35
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	77.45	LF	$23.35	$1,808.46
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,425.09	LF	$2.17	$3,092.45
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	3.00	EA	$5,333.82	$16,001.46
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	$601.42	$1,804.26
	Subcomponent Total				$28,745.71
	Lighting Component Total				$28,745.71

Sequence 22 Total $2,404,280.67

Sequence: 23 NDU - New Construction, Divided, Urban **Net Length:** 0.133 MI 700 LF

Description: 10B-6F From 390' East of Martin Downs Blvd. East

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	135.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.133

Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.18	AC	$30,623.87	$66,760.04
120-6	EMBANKMENT	9,312.74	CY	$28.48	$265,226.84
	Earthwork Component Total				$331,986.88

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,403.84	SY	$11.20	$71,723.01
285-709	OPTIONAL BASE,BASE GROUP 09	5,601.02	SY	$29.47	$165,062.06
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	924.17	TN	$138.21	$127,729.54
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	462.08	TN	$188.19	$86,958.84

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	90.00	EA	$7.32	$658.80
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.27	GM	$1,039.31	$280.61
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.53	GM	$388.03	$205.66
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.27	GM	$4,937.59	$1,333.15
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.27	GM	$4,277.51	$1,154.93
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.53	GM	$1,246.43	$660.61

	Roadway Component Total	$455,767.21

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,400.26	LF	$1.72	$2,408.45
104-11	FLOATING TURBIDITY BARRIER	33.15	LF	$13.62	$451.50
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	33.15	LF	$10.38	$344.10
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	7.00	EA	$114.05	$798.35
107-1	LITTER REMOVAL	141.54	AC	$33.53	$4,745.84
107-2	MOWING	141.54	AC	$48.82	$6,909.98
	Shoulder Component Total				$18,741.22

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	18.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,400.26	LF	$26.14	$36,602.80
570-1-2	PERFORMANCE TURF, SOD	1,400.26	SY	$4.92	$6,889.28
	Median Component Total				$43,492.08

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.39	CY	$1,858.71	$4,442.32
425-1-351	INLETS, CURB, TYPE P-5, <10'	5.00	EA	$5,555.55	$27,777.75
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,591.91	$15,183.82
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$3,236.62	$3,236.62
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,414.69	$4,414.69
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	352.00	LF	$126.09	$44,383.68
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	664.00	LF	$525.29	$348,792.56
570-1-2	PERFORMANCE TURF, SOD	40.31	SY	$4.92	$198.33

Drainage Component Total $453,099.53

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$402.31	$1,609.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

Signing Component Total $20,559.24

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$53,040.00	$53,040.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				

Intelligent Traffic System (ITS) Component Total $53,040.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.13	LF	$9.75	$6,826.27
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	138.96	LF	$23.35	$3,244.72
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,557.06	LF	$2.17	$5,548.82
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	5.00	EA	$5,333.82	$26,669.10
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$601.42	$3,007.10
	Subcomponent Total				$49,020.55

Lighting Component Total $49,020.56

Sequence 23 Total $1,425,706.72

Sequence: 24 NDU - New Construction, Divided, Urban **Net Length:** 0.156 MI 825 LF

Description: 10B-7A From North of Martin Martin Hwy.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	130.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.156
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.46	AC	$30,623.87	$75,334.72
120-6	EMBANKMENT	12,336.90	CY	$28.48	$351,354.91
	Earthwork Component Total				$426,689.63

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	9
Roadway Pavement Width L/R	68.00 / 36.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,482.69	SY	$11.20	$117,406.13
285-709	OPTIONAL BASE,BASE GROUP 09	9,536.38	SY	$29.47	$281,037.12
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,573.50	TN	$138.21	$217,473.44
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	786.75	TN	$188.19	$148,058.48

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	169.00	EA	$7.32	$1,237.08

710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.31	GM	$1,039.31	$322.19
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.09	GM	$388.03	$422.95
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.31	GM	$4,937.59	$1,530.65
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.31	GM	$4,277.51	$1,326.03
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	1.09	GM	$1,246.43	$1,358.61
	Roadway Component Total				$770,172.68

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,650.53	LF	$1.72	$2,838.91
104-11	FLOATING TURBIDITY BARRIER	39.07	LF	$13.62	$532.13
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	39.07	LF	$10.38	$405.55
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	8.00	EA	$114.05	$912.40
107-1	LITTER REMOVAL	167.16	AC	$33.53	$5,604.87
107-2	MOWING	167.16	AC	$48.82	$8,160.75
	Shoulder Component Total				$21,537.61

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	18.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,650.53	LF	$26.14	$43,144.85
520-5-12	TRAF SEP CONC-TYPE I, 6' WIDE	540.00	LF	$77.00	$41,580.00
570-1-2	PERFORMANCE TURF, SOD	1,650.53	SY	$4.92	$8,120.61
	Median Component Total				$92,845.46

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

400-2-2	CONC CLASS II, ENDWALLS	2.81	CY	$1,858.71	$5,222.98
425-1-351	INLETS, CURB, TYPE P-5, <10'	6.00	EA	$5,555.55	$33,333.30
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,591.91	$15,183.82
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$3,236.62	$3,236.62
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,414.69	$4,414.69
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	416.00	LF	$126.09	$52,453.44
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$145.93	$5,837.20
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	784.00	LF	$525.29	$411,827.36
570-1-2	PERFORMANCE TURF, SOD	47.52	SY	$4.92	$233.80
	Drainage Component Total				$531,743.21

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$402.31	$1,609.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33
	Signing Component Total				$209,670.57

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	6 LANE

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$9.75	$6,825.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$23.35	$7,005.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$4,895.59	$4,895.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$744.91	$16,388.02
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,172.93	$1,172.93
649-21-21	STEEL MAST ARM ASSEMBLY,	6.00	EA	$80,286.38	$481,718.28

	F&I, 78'				
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,078.93	$21,578.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,030.75	$20,615.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28
	Signalizations Component Total				$615,273.74

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$62,520.00	$62,520.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$62,520.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	825.26	LF	$9.75	$8,046.29
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	163.80	LF	$23.35	$3,824.73
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$744.91	$4,469.46
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,014.09	LF	$2.17	$6,540.58
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	6.00	EA	$5,333.82	$32,002.92
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$601.42	$3,608.52
	Subcomponent Total				$58,492.49
	Lighting Component Total				$58,492.50

Sequence 24 Total $2,788,945.40

Sequence: 25 NDU - New Construction, Divided, Urban **Net Length:** 0.156 MI 825 LF

Description: 10B-7B From 825' North of Martin Martin Hwy. North

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	120.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.156
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.27	AC	$30,623.87	$69,516.18
120-6	EMBANKMENT	10,923.22	CY	$28.48	$311,093.31
	Earthwork Component Total				$380,609.49

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,548.41	SY	$11.20	$84,542.19
285-709	OPTIONAL BASE,BASE GROUP 09	6,602.11	SY	$29.47	$194,564.18
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,089.35	TN	$138.21	$150,559.06
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	544.67	TN	$188.19	$102,501.45

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	106.00	EA	$7.32	$775.92
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.31	GM	$1,039.31	$322.19

710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.63	GM	$388.03	$244.46
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.31	GM	$4,937.59	$1,530.65
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.31	GM	$4,277.51	$1,326.03
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.63	GM	$1,246.43	$785.25
	Roadway Component Total				$537,151.38

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,650.53	LF	$1.72	$2,838.91
104-11	FLOATING TURBIDITY BARRIER	39.07	LF	$13.62	$532.13
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	39.07	LF	$10.38	$405.55
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	8.00	EA	$114.05	$912.40
107-1	LITTER REMOVAL	167.16	AC	$33.53	$5,604.87
107-2	MOWING	167.16	AC	$48.82	$8,160.75
	Shoulder Component Total				$21,537.61

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	18.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,650.53	LF	$26.14	$43,144.85
570-1-2	PERFORMANCE TURF, SOD	1,650.53	SY	$4.92	$8,120.61
	Median Component Total				$51,265.46

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.81	CY	$1,858.71	$5,222.98
425-1-351	INLETS, CURB, TYPE P-5, <10'	6.00	EA	$5,555.55	$33,333.30
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,591.91	$15,183.82

425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$3,236.62	$3,236.62
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,414.69	$4,414.69
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	416.00	LF	$126.09	$52,453.44
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$145.93	$5,837.20
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	784.00	LF	$525.29	$411,827.36
570-1-2	PERFORMANCE TURF, SOD	47.52	SY	$4.92	$233.80
	Drainage Component Total				$531,743.21

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$402.31	$1,609.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70
	Signing Component Total				$20,559.24

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$62,520.00	$62,520.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$62,520.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	825.26	LF	$9.75	$8,046.29
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	163.80	LF	$23.35	$3,824.73
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$744.91	$4,469.46
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,014.09	LF	$2.17	$6,540.58
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	6.00	EA	$5,333.82	$32,002.92
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$601.42	$3,608.52
	Subcomponent Total				$58,492.49

Lighting Component Total $58,492.50

Sequence 25 Total $1,663,878.89

Sequence: 26 NDR - New Construction, Divided, Rural **Net Length:** 0.054 MI 285 LF

Description: Roundabout 2-Lane Approach from West

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	$30,623.87	$15,311.94

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	350.00	CY	$19.92	$6,972.00
	Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY				
120-6	EMBANKMENT	350.00	CY	$28.48	$9,968.00
	Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY				

Earthwork Component Total $32,251.94

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	110

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,250.00	SY	$11.20	$14,000.00
	Comment: 2-Lane Leg: 11264 SF/9 = 1252 SY use 1250 SY				

285-709	OPTIONAL BASE,BASE GROUP 09	1,000.00	SY	$29.47	$29,470.00
	Comment: 2-Lane Leg: Measure approx. 1000 SY				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	110.00	TN	$198.24	$21,806.40
	Comment: 2" Superpave Traffic C (1000 X 110 X 2)/2000 = 110 TN				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	55.00	TN	$153.59	$8,447.45
	Comment: 1" FC-9.5 Traffic C PG 76-22 (1000 X 110)/2000=55 TN				
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15	GM	$1,039.31	$155.90
710-11-123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12"	60.00	LF	$0.92	$55.20
710-11-125	PAINTED PAVT MARK,STD,WHITE,SOLID,24"	90.00	LF	$1.25	$112.50
710-11-141	PAINTED PAVT MARK,STD,WH,DOT GUIDE, 6"	0.02	GM	$367.52	$7.35
710-11-144	PAINTED PAVEMENT MARKINGS, STANDARD, WHI	0.01	GM	$732.75	$7.33
710-11-160	PAINTED PAVT MARK,STD,WHITE, MESSAGE	1.00	EA	$45.59	$45.59
710-11-201	PAINTED PAVT MARK,STD,YELLOW,SOLID,6"	0.15	GM	$957.64	$143.65
710-11-224	PAINTED PAVT MARK,STD,YELLOW,SOLID,18"	50.00	LF	$0.91	$45.50

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total $74,296.87

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-701	OPTIONAL BASE,BASE GROUP 01	154.00	SY	$13.87	$2,135.98
	Comment: 2 Lane Leg: (130 ft X 5.33 ft wide x 2 sides)/9 = 154 SY				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	10.00	TN	$153.59	$1,535.90
	Comment: 1" thick FC: (154 SY X 110)/2000=8.47 use 10 TN				

520-1-10	CONCRETE CURB & GUTTER, TYPE F	375.00	LF	$30.30	$11,362.50
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	440.00	SY	$47.58	$20,935.20
527-2	DETECTABLE WARNINGS	104.00	SF	$35.95	$3,738.80
570-1-2	PERFORMANCE TURF, SOD	450.00	SY	$4.92	$2,214.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	600.00	LF	$1.72	$1,032.00
107-1	LITTER REMOVAL	0.25	AC	$33.53	$8.38
107-2	MOWING	0.25	AC	$48.82	$12.20

Shoulder Component Total $42,974.97

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	240.00	LF	$26.14	$6,273.60
527-2	DETECTABLE WARNINGS	40.00	SF	$35.95	$1,438.00
570-1-2	PERFORMANCE TURF, SOD	100.00	SY	$4.92	$492.00

Median Component Total $8,203.60

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00	LF	$126.09	$25,218.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$6,069.54	$12,139.08

Drainage Component Total $37,357.08

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12	8.00	AS	$402.31	$3,218.48

	SF			
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,665.26	$4,665.26
	Signing Component Total			$7,883.74

Sequence 26 Total $202,968.20

Sequence: 27 NDR - New Construction, Divided, Rural **Net Length:** 0.057 MI 301 LF

Description: Roundabout Central Island, includes landscaping and irrigation system

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	$30,623.87	$15,311.94

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	400.00	CY	$19.92	$7,968.00
	Comment: 22000 ft x 0.5 ft deep / 27 = 407 CY use 400 CY				
120-6	EMBANKMENT	400.00	CY	$28.48	$11,392.00
	Comment: 22000 ft x 0.5 ft deep / 27 = 407 CY use 400 CY				
	Earthwork Component Total				$34,671.94

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	220
Friction Course Spread Rate	110

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

160-4	TYPE B STABILIZATION	1,200.00 SY	$11.20	$13,440.00
	Comment: measure (15405-4799)SF /9 = 1178 SY use 1200 SY			
285-709	OPTIONAL BASE,BASE GROUP 09	850.00 SY	$29.47	$25,049.50
	Comment: measure (15405-7779)SF /9 = 848 SY use 850 SY			
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	94.00 TN	$198.24	$18,634.56
	Comment: 2" Superpave Traffic C (850 X 110 X 2)/2000			
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	47.00 TN	$153.59	$7,218.73
	Comment: 1" FC-9.5 Traffic C PG 76-22 (850 X 110)/2000			
710-11-201	PAINTED PAVT MARK,STD,YELLOW,SOLID,6"	0.07 GM	$957.64	$67.03

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total $64,409.82

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	0.25	AC	$33.53	$8.38
107-2	MOWING	0.25	AC	$48.82	$12.20

Shoulder Component Total $3,103.59

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110

Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
350-30-13	CONC PAVEMENT FOR ROUNDABOUT APRON, 12"	330.00	SY	$143.68	$47,414.40
	Comment: measure (7776-4799)/9=331 use 330 SY				
520-2-4	CONCRETE CURB, TYPE D	250.00	LF	$26.33	$6,582.50
520-2-8	CONCRETE CURB, TYPE RA	320.00	LF	$28.56	$9,139.20
570-1-2	PERFORMANCE TURF, SOD	530.00	SY	$4.92	$2,607.60
	Median Component Total				$65,743.70

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$402.31	$1,609.24
	Signing Component Total				$1,609.24

LANDSCAPING COMPONENT

User Input Data

Description	Value
Lump Sum	40,000.00
Cost %	0.00
Component Detail	N

Landscaping Component Total	$40,000.00

Sequence 27 Total	$209,538.29

Sequence: 28 NDR - New Construction, Divided, Rural **Net Length:** 0.054 MI 285 LF

Description: Roundabout 2-Lane Approach from the South

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %

Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	$30,623.87	$15,311.94

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	350.00	CY	$19.92	$6,972.00
	Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY				
120-6	EMBANKMENT	350.00	CY	$28.48	$9,968.00
	Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY				
	Earthwork Component Total				$32,251.94

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	110

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,250.00	SY	$11.20	$14,000.00
	Comment: 2-Lane Leg: 11264 SF/9 = 1252 SY use 1250 SY				
285-709	OPTIONAL BASE,BASE GROUP 09	1,000.00	SY	$29.47	$29,470.00
	Comment: 2-Lane Leg: Measure approx. 1000 SY				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	110.00	TN	$198.24	$21,806.40
	Comment: 2" Superpave Traffic C (1000 X 110 X 2)/2000 = 110 TN				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	55.00	TN	$153.59	$8,447.45
	Comment: 1" FC-9.5 Traffic C PG 76-22 (1000 X 110)/2000=55 TN				
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15	GM	$1,039.31	$155.90
710-11-123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12"	60.00	LF	$0.92	$55.20
710-11-125	PAINTED PAVT MARK,STD,WHITE,SOLID,24"	90.00	LF	$1.25	$112.50
710-11-141	PAINTED PAVT MARK,STD,WH,DOT GUIDE, 6"	0.02	GM	$367.52	$7.35
710-11-144	PAINTED PAVEMENT MARKINGS, STANDARD, WHI	0.01	GM	$732.75	$7.33
710-11-160	PAINTED PAVT MARK,STD,WHITE, MESSAGE	1.00	EA	$45.59	$45.59
710-11-201	PAINTED PAVT MARK,STD,YELLOW,SOLID,6"	0.15	GM	$957.64	$143.65
710-11-224	PAINTED PAVT MARK,STD,YELLOW,SOLID,18"	50.00	LF	$0.91	$45.50

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total $74,296.87

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-701	OPTIONAL BASE,BASE GROUP 01	154.00	SY	$13.87	$2,135.98
	Comment: 2 Lane Leg: (130 ft X 5.33 ft wide x 2 sides)/9 = 154 SY				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	10.00	TN	$153.59	$1,535.90
	Comment: 1" thick FC: (154 SY X 110)/2000=8.47 use 10 TN				
520-1-10	CONCRETE CURB & GUTTER, TYPE F	375.00	LF	$30.30	$11,362.50
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	440.00	SY	$47.58	$20,935.20
527-2	DETECTABLE WARNINGS	104.00	SF	$35.95	$3,738.80
570-1-2	PERFORMANCE TURF, SOD	450.00	SY	$4.92	$2,214.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	600.00	LF	$1.72	$1,032.00
107-1	LITTER REMOVAL	0.25	AC	$33.53	$8.38
107-2	MOWING	0.25	AC	$48.82	$12.20

Shoulder Component Total $42,974.97

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00

Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	240.00	LF	$26.14	$6,273.60
527-2	DETECTABLE WARNINGS	40.00	SF	$35.95	$1,438.00
570-1-2	PERFORMANCE TURF, SOD	100.00	SY	$4.92	$492.00
	Median Component Total				$8,203.60

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00	LF	$126.09	$25,218.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$6,069.54	$12,139.08
	Drainage Component Total				$37,357.08

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00	AS	$402.31	$3,218.48
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$7,883.74

Sequence 28 Total $202,968.20

Sequence: 29 NDR - New Construction, Divided, Rural **Net Length:** 0.054 MI 285 LF

Description: Roundabout 2-Lane Approach from the East

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1
Distance	0.057
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00

Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	$30,623.87	$15,311.94

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	350.00	CY	$19.92	$6,972.00
	Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY				
120-6	EMBANKMENT	350.00	CY	$28.48	$9,968.00
	Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY				
	Earthwork Component Total				$32,251.94

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	110

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,250.00	SY	$11.20	$14,000.00
	Comment: 2-Lane Leg: 11264 SF/9 = 1252 SY use 1250 SY				
285-709	OPTIONAL BASE,BASE GROUP 09	1,000.00	SY	$29.47	$29,470.00
	Comment: 2-Lane Leg: Measure approx. 1000 SY				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	110.00	TN	$198.24	$21,806.40
	Comment: 2" Superpave Traffic C (1000 X 110 X 2)/2000 = 110 TN				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	55.00	TN	$153.59	$8,447.45
	Comment: 1" FC-9.5 Traffic C PG 76-22 (1000 X 110)/2000=55 TN				
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15	GM	$1,039.31	$155.90
710-11-123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12"	60.00	LF	$0.92	$55.20
710-11-125	PAINTED PAVT MARK,STD,WHITE,SOLID,24"	90.00	LF	$1.25	$112.50
710-11-141	PAINTED PAVT MARK,STD,WH,DOT GUIDE, 6"	0.02	GM	$367.52	$7.35
710-11-144	PAINTED PAVEMENT MARKINGS, STANDARD, WHI	0.01	GM	$732.75	$7.33
710-11-160	PAINTED PAVT MARK,STD,WHITE, MESSAGE	1.00	EA	$45.59	$45.59

710-11-201	PAINTED PAVT MARK,STD,YELLOW,SOLID,6"	0.15 GM	$957.64	$143.65
710-11-224	PAINTED PAVT MARK,STD,YELLOW,SOLID,18"	50.00 LF	$0.91	$45.50

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total $74,296.87

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-701	OPTIONAL BASE,BASE GROUP 01	154.00	SY	$13.87	$2,135.98
	Comment: 2 Lane Leg: (130 ft X 5.33 ft wide x 2 sides)/9 = 154 SY				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	10.00	TN	$153.59	$1,535.90
	Comment: 1" thick FC: (154 SY X 110)/2000=8.47 use 10 TN				
520-1-10	CONCRETE CURB & GUTTER, TYPE F	375.00	LF	$30.30	$11,362.50
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	440.00	SY	$47.58	$20,935.20
527-2	DETECTABLE WARNINGS	104.00	SF	$35.95	$3,738.80
570-1-2	PERFORMANCE TURF, SOD	450.00	SY	$4.92	$2,214.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	600.00	LF	$1.72	$1,032.00
107-1	LITTER REMOVAL	0.25	AC	$33.53	$8.38
107-2	MOWING	0.25	AC	$48.82	$12.20

Shoulder Component Total $42,974.97

MEDIAN COMPONENT

User Input Data

Description	Value

Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	240.00	LF	$26.14	$6,273.60
527-2	DETECTABLE WARNINGS	40.00	SF	$35.95	$1,438.00
570-1-2	PERFORMANCE TURF, SOD	100.00	SY	$4.92	$492.00
	Median Component Total				$8,203.60

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00	LF	$126.09	$25,218.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$6,069.54	$12,139.08
	Drainage Component Total				$37,357.08

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00	AS	$402.31	$3,218.48
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$7,883.74

Sequence 29 Total $202,968.20

Sequence: 30 NDR - New Construction, Divided, Rural **Net Length:** 0.054 MI 285 LF

Description: Roundabout 2-Lane Approach from the North

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.50
Alignment Number	1

Distance	0.057
Top of Structural Course For Begin Section	100.00
Top of Structural Course For End Section	100.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.50	AC	$30,623.87	$15,311.94

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	350.00	CY	$19.92	$6,972.00
	Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY				
120-6	EMBANKMENT	350.00	CY	$28.48	$9,968.00
	Comment: 2-Lane Leg: 19200 ft X 0.5 ft / 27=356 CY use 350 CY				
	Earthwork Component Total				$32,251.94

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	110

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,250.00	SY	$11.20	$14,000.00
	Comment: 2-Lane Leg: 11264 SF/9 = 1252 SY use 1250 SY				
285-709	OPTIONAL BASE,BASE GROUP 09	1,000.00	SY	$29.47	$29,470.00
	Comment: 2-Lane Leg: Measure approx. 1000 SY				
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	110.00	TN	$198.24	$21,806.40
	Comment: 2" Superpave Traffic C (1000 X 110 X 2)/2000 = 110 TN				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	55.00	TN	$153.59	$8,447.45
	Comment: 1" FC-9.5 Traffic C PG 76-22 (1000 X 110)/2000=55 TN				
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15	GM	$1,039.31	$155.90
710-11-123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12"	60.00	LF	$0.92	$55.20
710-11-125	PAINTED PAVT MARK,STD,WHITE,SOLID,24"	90.00	LF	$1.25	$112.50
710-11-141	PAINTED PAVT MARK,STD,WH,DOT GUIDE, 6"	0.02	GM	$367.52	$7.35

710-11-144	PAINTED PAVEMENT MARKINGS, STANDARD, WHI	0.01 GM	$732.75	$7.33
710-11-160	PAINTED PAVT MARK,STD,WHITE, MESSAGE	1.00 EA	$45.59	$45.59
710-11-201	PAINTED PAVT MARK,STD,YELLOW,SOLID,6"	0.15 GM	$957.64	$143.65
710-11-224	PAINTED PAVT MARK,STD,YELLOW,SOLID,18"	50.00 LF	$0.91	$45.50

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

Roadway Component Total $74,296.87

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-701	OPTIONAL BASE,BASE GROUP 01	154.00	SY	$13.87	$2,135.98
	Comment: 2 Lane Leg: (130 ft X 5.33 ft wide x 2 sides)/9 = 154 SY				
337-7-82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	10.00	TN	$153.59	$1,535.90
	Comment: 1" thick FC: (154 SY X 110)/2000=8.47 use 10 TN				
520-1-10	CONCRETE CURB & GUTTER, TYPE F	375.00	LF	$30.30	$11,362.50
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	440.00	SY	$47.58	$20,935.20
527-2	DETECTABLE WARNINGS	104.00	SF	$35.95	$3,738.80
570-1-2	PERFORMANCE TURF, SOD	450.00	SY	$4.92	$2,214.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	600.00	LF	$1.72	$1,032.00
107-1	LITTER REMOVAL	0.25	AC	$33.53	$8.38
107-2	MOWING	0.25	AC	$48.82	$12.20

Shoulder Component Total $42,974.97

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	240.00	LF	$26.14	$6,273.60
527-2	DETECTABLE WARNINGS	40.00	SF	$35.95	$1,438.00
570-1-2	PERFORMANCE TURF, SOD	100.00	SY	$4.92	$492.00
	Median Component Total				$8,203.60

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	200.00	LF	$126.09	$25,218.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$6,069.54	$12,139.08
	Drainage Component Total				$37,357.08

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00	AS	$402.31	$3,218.48
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$7,883.74

Sequence 30 Total $202,968.20

Sequence: 31 NUR - New Construction, Undivided, Rural **Net Length:** 0.171 MI 900 LF

Description: SW Leighton Farms Avenue - 2 Lane Section

EARTHWORK COMPONENT

User Input Data

Description	Value

Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.170
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.06	AC	$30,623.87	$63,085.17
120-6	EMBANKMENT	9,297.14	CY	$28.48	$264,782.55
	Earthwork Component Total				$327,867.72

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	275
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,401.17	SY	$11.20	$49,293.10
285-709	OPTIONAL BASE,BASE GROUP 09	2,466.66	SY	$29.47	$72,692.47
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	330.09	TN	$198.24	$65,437.04
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	198.05	TN	$188.19	$37,271.03

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	23.00	EA	$4.04	$92.92
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.68	GM	$1,039.31	$706.73
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.34	GM	$377.66	$128.40
	Roadway Component Total				$225,621.69

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,066.28	SY	$65.59	$69,937.31
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	55.01	TN	$198.24	$10,905.18
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	82.52	TN	$188.19	$15,529.44
570-1-1	PERFORMANCE TURF	534.14	SY	$2.47	$1,319.33

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,340.62	LF	$1.72	$4,025.87
104-11	FLOATING TURBIDITY BARRIER	42.62	LF	$13.62	$580.48
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	42.62	LF	$10.38	$442.40
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	2.07	AC	$33.53	$69.41
107-2	MOWING	2.07	AC	$48.82	$101.06
	Shoulder Component Total				$105,993.48

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	144.00	LF	$220.00	$31,680.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	7.00	EA	$1,722.92	$12,060.44
570-1-1	PERFORMANCE TURF	120.03	SY	$2.47	$296.47
	Drainage Component Total				$48,706.67

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36

700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	$4,665.26	$4,665.26
	Signing Component Total			$10,665.93

Sequence 31 Total $718,855.49

Sequence: 32 NUR - New Construction, Undivided, Rural **Net Length:** 0.114 MI 600 LF

Description: SW Leighton Farms Avenue - 3 Lane Section w/ Signal

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.114
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.38	AC	$30,623.87	$42,260.94
120-6	EMBANKMENT	6,234.55	CY	$28.48	$177,559.98
	Earthwork Component Total				$219,820.92

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	275
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,932.39	SY	$11.20	$32,842.77
285-709	OPTIONAL BASE,BASE GROUP 09	1,643.47	SY	$29.47	$48,433.06
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	219.93	TN	$198.24	$43,598.92
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	131.96	TN	$188.19	$24,833.55

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N

Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	61.00	EA	$4.04	$246.44
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.45	GM	$1,039.31	$467.69
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.45	GM	$377.66	$169.95
	Roadway Component Total				$150,592.38

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	710.44	SY	$65.59	$46,597.76
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	36.65	TN	$198.24	$7,265.50
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	54.98	TN	$188.19	$10,346.69
570-1-1	PERFORMANCE TURF	355.89	SY	$2.47	$879.05

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,559.50	LF	$1.72	$2,682.34
104-11	FLOATING TURBIDITY BARRIER	28.40	LF	$13.62	$386.81
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	28.40	LF	$10.38	$294.79
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	1.38	AC	$33.53	$46.27
107-2	MOWING	1.38	AC	$48.82	$67.37
	Shoulder Component Total				$71,649.58

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	96.00	LF	$220.00	$21,120.00

430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00 LF	$145.93	$3,502.32
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00 EA	$1,722.92	$8,614.60
570-1-1	PERFORMANCE TURF	79.97 SY	$2.47	$197.53
	Drainage Component Total			$33,434.45

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$9,266.34

Sequence 32 Total $484,763.67

Date: 4/8/2022 9:17:31 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English

Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 35 Project Grand Total **$87,082,906.59**

Description: 20220209 - Consultant Update. 20210527 - Consultant Update. 20210513 Copied from FPID 423374-1-52-01 Version 13 [2B. SW Martin Hwy (Alt 8) [Seq. 10B](MP 135.0)]

Project Sequences Subtotal			**$57,476,301.87**
102-1	Maintenance of Traffic	10.00 %	$5,747,630.19
101-1	Mobilization	10.00 %	$6,322,393.21
Project Sequences Total			**$69,546,325.27**
Project Unknowns		25.00 %	$17,386,581.32
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00

Project Non-Bid Subtotal	**$150,000.00**
Version 35 Project Grand Total	**$87,082,906.59**

Date: 4/8/2022 9:22:31 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 36 Project Grand Total **$35,766,886.32**

Description: 20210527 - Consultant Update. 20210513 Copied from FPID 423374-1-52-01 Version 14 [3A.Becker Rd. (Alt. 1) [Seq. 10C] (MP 138.4)]

Sequence: 1 NUR - New Construction, Undivided, Rural **Net Length:** 0.099 MI 525 LF

Description: 10C-1A from Sta. 1183+98.32 to Sta. 1189+23.72

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	187.50 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.099
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	116.00
Horizontal Elevation For Begin Section	122.00
Horizontal Elevation For End Section	116.00
Front Slope L/R	2 to 1 / 2 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.25	AC	$30,623.87	$68,903.71
120-1	REGULAR EXCAVATION	3,267.00	CY	$18.41	$60,145.47
	Earthwork Component Total				$129,049.18

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	36.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,265.62	SY	$11.20	$36,574.94

285-709	OPTIONAL BASE,BASE GROUP 09	2,118.57	SY	$25.30	$53,599.82
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	346.39	TN	$138.21	$47,874.56
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	83.97	TN	$148.28	$12,451.07

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	54.00	EA	$7.32	$395.28
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.10	GM	$1,039.31	$103.93
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.20	GM	$388.03	$77.61
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.20	GM	$1,492.26	$298.45
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.10	GM	$4,937.59	$493.76
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.10	GM	$4,277.51	$427.75

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	23.33	TN	$280.64	$6,547.33
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	700.00	LF	$19.44	$13,608.00
	Roadway Component Total				$172,452.50

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 8.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	10.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O

Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	854.89	SY	$10.59	$9,053.29
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	67.35	TN	$138.21	$9,308.44
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.08	TN	$148.28	$456.70
570-1-2	PERFORMANCE TURF, SOD	349.89	SY	$4.92	$1,721.46

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	6,650.00	SY	$4.92	$32,718.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,364.56	LF	$1.72	$2,347.04
104-11	FLOATING TURBIDITY BARRIER	24.85	LF	$13.62	$338.46
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	24.85	LF	$10.38	$257.94
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	50.40	AC	$33.53	$1,689.91
107-2	MOWING	50.40	AC	$48.82	$2,460.53
	Shoulder Component Total				$63,434.77

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.79	CY	$1,858.71	$3,327.09
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	80.00	LF	$108.60	$8,688.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$160.45	$2,567.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	$1,444.17	$5,776.68
570-1-2	PERFORMANCE TURF, SOD	69.98	SY	$4.92	$344.30

Retention Basin 1

Description	Value
Size	2.5 AC
Multiplier	1
Depth	6.00
Description	2.33 ACRE POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	$30,623.87	$76,559.68
120-1	REGULAR EXCAVATION	24,200.00	CY	$18.41	$445,522.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,858.71	$33,456.78
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$5,621.85	$5,621.85
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$9,648.41	$9,648.41

430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$352.15	$70,430.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	$20.83	$27,808.05
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,154.81	$2,154.81
570-1-1	PERFORMANCE TURF	12,100.00	SY	$2.19	$26,499.00

Retention Basin 2

Description	Value
Size	1 AC
Multiplier	1
Depth	6.00
Description	1 ACRE POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.00	AC	$30,623.87	$30,623.87
120-1	REGULAR EXCAVATION	9,680.00	CY	$18.41	$178,208.80
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	$1,858.71	$33,456.78
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$4,186.09	$4,186.09
425-2-71	MANHOLES, J-7, <10'	1.00	EA	$9,648.41	$9,648.41
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	$352.15	$70,430.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	840.00	LF	$20.83	$17,497.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00	EA	$2,154.81	$2,154.81
570-1-1	PERFORMANCE TURF	4,840.00	SY	$2.19	$10,599.60
	Drainage Component Total				$1,150,118.37

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$7,866.75

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$39,600.00	$39,600.00

Intelligent Traffic System (ITS) Component Total $39,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	600.00	LF	$9.75	$5,850.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,800.00	LF	$2.17	$3,906.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	3.00	EA	$7,049.17	$21,147.51
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	$601.42	$1,804.26
	Subcomponent Total				$34,942.50
	Lighting Component Total				$34,942.50

BRIDGES COMPONENT

Bridge 10C-2

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	340.00
Width (LF)	161.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$98.12**
Basic Bridge Cost	**$5,131,875.00**
Description	SEQ1-C-2 BRIDGE OVER CANAL C-23/COUNTY

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	357.78	CY	$485.22	$173,602.01
415-1-9	REINF STEEL- APPROACH SLABS	62,611.50	LB	$1.05	$65,742.08
	Bridge 10C-2 Total				$5,371,219.09

Bridge 10C-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	336.67
Width (LF)	101.08
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00

Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$98.17**
Basic Bridge Cost	**$3,190,369.09**
Description	SEQ10C-1 BRIDGE BECKER RD OVER ML

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	224.62	CY	$485.22	$108,990.12
415-1-9	REINF STEEL- APPROACH SLABS	39,308.50	LB	$1.05	$41,273.93
	Bridge 10C-1 Total				$3,340,633.14

Bridge 890083

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Type	Misc/Rehab
Structure No.	890083
Description	REMOVE BRIDGE OVER CANAL C-23/COUNTY

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	33,681.00	SF	$55.17	$1,858,180.77
	Bridge 890083 Total				$1,858,180.77

Bridge 941001

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Type	Misc/Rehab
Structure No.	941001
Description	REMOVE BRIDGE BECKER RD. OVER ML

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	18,912.00	SF	$55.17	$1,043,375.04
	Bridge 941001 Total				$1,043,375.04
	Bridges Component Total				$11,613,408.04

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	137.00
Begin height	22.00
End Height	22.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,014.00	SF	$27.00	$81,378.00

Retaining Wall 2

Description	Value
Length	235.00
Begin height	17.00
End Height	17.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,995.00	SF	$27.00	$107,865.00

Retaining Wall 3

Description	Value
Length	90.00
Begin height	26.00
End Height	26.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	2,340.00	SF	$27.00	$63,180.00

Retaining Walls Component Total $252,423.00

Sequence 1 Total $13,463,295.11

Sequence: 2 NUR - New Construction, Undivided, Rural **Net Length:** 0.218 MI 1,150 LF

Description: 10C-1B from Sta. 1189+23.72 to Sta. 1200+80.03

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	88.50 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.218
Top of Structural Course For Begin Section	117.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	117.00
Horizontal Elevation For End Section	104.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.34	AC	$30,623.87	$71,659.86

120-1	REGULAR EXCAVATION	7,361.11 CY	$18.41	$135,518.04
	Earthwork Component Total			$207,177.90

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,449.95	SY	$11.20	$38,639.44
285-709	OPTIONAL BASE,BASE GROUP 09	1,958.81	SY	$25.30	$49,557.89
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	316.25	TN	$138.21	$43,708.91
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	76.67	TN	$148.28	$11,368.63

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.22	GM	$1,039.31	$228.65
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.22	GM	$4,937.59	$1,086.27
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.22	GM	$4,277.51	$941.05
	Roadway Component Total				$145,530.84

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	4.00 / 2.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	850.99	SY	$10.59	$9,011.98

334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	63.25	TN	$138.21	$8,741.78
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.75	TN	$148.28	$1,000.89
570-1-2	PERFORMANCE TURF, SOD	766.66	SY	$4.92	$3,771.97

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	8,817.00	SY	$4.92	$43,379.64

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,989.96	LF	$1.72	$5,142.73
104-11	FLOATING TURBIDITY BARRIER	54.45	LF	$13.62	$741.61
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	54.45	LF	$10.38	$565.19
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	110.88	AC	$33.53	$3,717.81
107-2	MOWING	110.88	AC	$48.82	$5,413.16
	Shoulder Component Total				$84,569.76

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.92	CY	$1,858.71	$7,286.14
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	176.00	LF	$108.60	$19,113.60
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$160.45	$6,418.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00	EA	$1,444.17	$12,997.53
570-1-2	PERFORMANCE TURF, SOD	153.33	SY	$4.92	$754.38
	Drainage Component Total				$46,569.65

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$87,200.00	$87,200.00

Intelligent Traffic System (ITS) Component Total $87,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00	LF	$9.75	$11,700.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$744.91	$4,469.46
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00	LF	$2.17	$7,812.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	6.00	EA	$7,049.17	$42,295.02
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$601.42	$3,608.52
	Subcomponent Total				$69,885.00

Lighting Component Total $69,885.00

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	103.00
Begin height	17.00
End Height	17.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	1,751.00	SF	$27.00	$47,277.00

Retaining Wall 2

Description	Value
Length	534.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	2,670.00	SF	$27.00	$72,090.00

Retaining Walls Component Total $119,367.00

Sequence 2 Total $772,365.67

Sequence: 3 NUR - New Construction, Undivided, Rural **Net Length:** 0.203 MI 1,070 LF

Description: 10C-1C from Sta. 1200+80.03 to Sta. 1211+47.57

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.203
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.74	AC	$30,623.87	$22,661.66
120-6	EMBANKMENT	3,905.07	CY	$15.73	$61,426.75
	Earthwork Component Total				$84,088.41

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,448.60	SY	$11.20	$38,624.32
285-709	OPTIONAL BASE,BASE GROUP 09	1,823.00	SY	$25.30	$46,121.90
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	686.75	TN	$119.42	$82,011.68
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	71.35	TN	$148.28	$10,579.78

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.20	GM	$1,039.31	$207.86
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.20	GM	$4,937.59	$987.52
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.20	GM	$4,277.51	$855.50
	Roadway Component Total				$179,388.57

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,466.25	SY	$25.30	$37,096.12
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	235.46	TN	$153.46	$36,133.69
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.14	TN	$148.28	$465.60
570-1-1	PERFORMANCE TURF	237.83	SY	$2.19	$520.85

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,140.00	SY	$4.92	$10,528.80

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,782.67	LF	$1.72	$4,786.19
104-11	FLOATING TURBIDITY BARRIER	50.68	LF	$13.62	$690.26
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	50.68	LF	$10.38	$526.06
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	103.32	AC	$33.53	$3,464.32
107-2	MOWING	103.32	AC	$48.82	$5,044.08
	Shoulder Component Total				$102,338.98

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.65	CY	$1,858.71	$6,784.29
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	168.00	LF	$108.60	$18,244.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$160.45	$6,418.00

430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00	EA	$1,444.17	$12,997.53
570-1-2	PERFORMANCE TURF, SOD	142.70	SY	$4.92	$702.08
	Drainage Component Total				$45,146.70

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$81,200.00	$81,200.00
	Intelligent Traffic System (ITS) Component Total				$81,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00	LF	$9.75	$11,700.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$744.91	$4,469.46
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00	LF	$2.17	$7,812.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	6.00	EA	$7,049.17	$42,295.02
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$601.42	$3,608.52
	Subcomponent Total				$69,885.00
	Lighting Component Total				$69,885.00

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,070.00
Begin height	5.00
End Height	5.00

Multiplier 1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,350.00	SF	$27.00	$144,450.00
	Retaining Walls Component Total				$144,450.00

Sequence 3 Total $718,563.18

Sequence: 4 NUR - New Construction, Undivided, Rural **Net Length:** 0.189 MI 1,000 LF

Description: 10C-1D from Sta. 1211+47.57 to Sta. 1221+47.57

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.189
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.69	AC	$30,623.87	$21,130.47
120-6	EMBANKMENT	3,455.39	CY	$15.73	$54,353.28
	Earthwork Component Total				$75,483.75

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,888.98	SY	$11.20	$32,356.58
285-709	OPTIONAL BASE,BASE GROUP 09	1,370.04	SY	$25.30	$34,662.01
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	513.35	TN	$119.42	$61,304.26
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	53.34	TN	$148.28	$7,909.26

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.19	GM	$1,039.31	$197.47
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.19	GM	$4,937.59	$938.14
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.19	GM	$4,277.51	$812.73
	Roadway Component Total				$138,180.45

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,370.04	SY	$25.30	$34,662.01
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	220.01	TN	$153.46	$33,762.73
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.93	TN	$148.28	$434.46
570-1-2	PERFORMANCE TURF, SOD	222.23	SY	$4.92	$1,093.37

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,222.00	SY	$4.92	$10,932.24

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,600.08	LF	$1.72	$4,472.14
104-11	FLOATING TURBIDITY BARRIER	47.35	LF	$13.62	$644.91
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	47.35	LF	$10.38	$491.49
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	96.60	AC	$33.53	$3,239.00
107-2	MOWING	96.60	AC	$48.82	$4,716.01

Shoulder Component Total $97,531.36

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.41	CY	$1,858.71	$6,338.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	152.00	LF	$108.60	$16,507.20
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$160.45	$5,134.40
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00	EA	$1,444.17	$11,553.36
570-1-2	PERFORMANCE TURF, SOD	133.34	SY	$4.92	$656.03

Drainage Component Total $40,189.19

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$189,111.33	$567,333.99

Signing Component Total $577,999.92

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$75,600.00	$75,600.00

Intelligent Traffic System (ITS) Component Total $75,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55

715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00 LF	$2.17	$6,510.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00 EA	$7,049.17	$35,245.85
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00 EA	$601.42	$3,007.10
	Subcomponent Total			$58,237.50
	Lighting Component Total			$58,237.50

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,000.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,000.00	SF	$27.00	$135,000.00
	Retaining Walls Component Total				$135,000.00

Sequence 4 Total $1,198,222.17

Sequence: 5 NUR - New Construction, Undivided, Rural **Net Length:** 0.163 MI 858 LF

Description: 10C-2A from Sta. 1173+18.30 to Sta. 1181+76.57

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	184.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.163
Top of Structural Course For Begin Section	116.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	116.00
Horizontal Elevation For End Section	122.00
Front Slope L/R	2 to 1 / 2 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.61	AC	$30,623.87	$110,552.17
120-1	REGULAR EXCAVATION	4,654.47	CY	$18.41	$85,688.79
	Earthwork Component Total				$196,240.96

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,194.67	SY	$11.20	$46,980.30
285-709	OPTIONAL BASE,BASE GROUP 09	2,319.46	SY	$25.30	$58,682.34
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	377.52	TN	$138.21	$52,177.04
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	91.52	TN	$148.28	$13,570.59

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	22.00	EA	$7.32	$161.04
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.16	GM	$1,039.31	$166.29
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.16	GM	$388.03	$62.08
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.16	GM	$1,492.26	$238.76
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.16	GM	$4,937.59	$790.01
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.16	GM	$4,277.51	$684.40

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	51.67	TN	$280.64	$14,500.67
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,550.00	LF	$19.44	$30,132.00

Roadway Component Total $218,145.52

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 8.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	10.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,397.59	SY	$10.59	$14,800.48
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	110.11	TN	$153.46	$16,897.48
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	5.03	TN	$148.28	$745.85
570-1-2	PERFORMANCE TURF, SOD	572.00	SY	$4.92	$2,814.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	11,631.00	SY	$4.92	$57,224.52

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,230.80	LF	$1.72	$3,836.98
104-11	FLOATING TURBIDITY BARRIER	40.62	LF	$13.62	$553.24
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	40.62	LF	$10.38	$421.64
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	82.74	AC	$33.53	$2,774.27
107-2	MOWING	82.74	AC	$48.82	$4,039.37
	Shoulder Component Total				$107,191.07

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.92	CY	$1,858.71	$5,427.43
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	136.00	LF	$108.60	$14,769.60
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$160.45	$5,134.40
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	7.00	EA	$1,444.17	$10,109.19
570-1-2	PERFORMANCE TURF, SOD	114.40	SY	$4.92	$562.85
	Drainage Component Total				$36,003.47

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$65,200.00	$65,200.00
	Intelligent Traffic System (ITS) Component Total				$65,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$2.17	$6,510.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	$7,049.17	$35,245.85
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$601.42	$3,007.10
	Subcomponent Total				$58,237.50
	Lighting Component Total				$58,237.50

Sequence 5 Total $691,684.45

Sequence: 6 NUR - New Construction, Undivided, Rural **Net Length:** 0.250 MI 1,320 LF

Description: 10C-2B from Sta. 1156+09.54 to Sta. 1173+18.30

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	40.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.250

Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	117.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	117.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.21	AC	$30,623.87	$37,054.88
120-1	REGULAR EXCAVATION	6,748.62	CY	$18.41	$124,242.09
	Earthwork Component Total				$161,296.97

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,813.33	SY	$11.20	$42,709.30
285-709	OPTIONAL BASE,BASE GROUP 09	1,808.40	SY	$25.30	$45,752.52
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	677.60	TN	$119.42	$80,918.99
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	70.40	TN	$148.28	$10,438.91

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,039.31	$259.83
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.25	GM	$4,937.59	$1,234.40
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,277.51	$1,069.38
	Roadway Component Total				$182,383.33

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,808.40	SY	$25.30	$45,752.52
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	290.40	TN	$138.21	$40,136.18
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.87	TN	$148.28	$573.84
570-1-1	PERFORMANCE TURF	293.33	SY	$2.19	$642.39

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	5,280.00	SY	$4.92	$25,977.60

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,432.00	LF	$1.72	$5,903.04
104-11	FLOATING TURBIDITY BARRIER	62.50	LF	$13.62	$851.25
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	62.50	LF	$10.38	$648.75
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	127.26	AC	$33.53	$4,267.03
107-2	MOWING	127.26	AC	$48.82	$6,212.83
	Shoulder Component Total				$134,048.43

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.50	CY	$1,858.71	$8,364.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	200.00	LF	$108.60	$21,720.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$160.45	$7,701.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	10.00	EA	$1,444.17	$14,441.70
570-1-2	PERFORMANCE TURF, SOD	176.00	SY	$4.92	$865.92
	Drainage Component Total				$53,093.42

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$100,000.00	$100,000.00
	Intelligent Traffic System (ITS) Component Total				$100,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$744.91	$5,214.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00	EA	$7,049.17	$49,344.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$601.42	$4,209.94
	Subcomponent Total				$81,532.50
	Lighting Component Total				$81,532.50

Sequence 6 Total $724,420.17

Sequence: 7 NDU - New Construction, Divided, Urban **Net Length:** 0.303 MI 1,600 LF

Description: 10C-3A from SR 91 to 1600' LT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	145.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.303
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	122.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.33	AC	$30,623.87	$163,225.23
120-6	EMBANKMENT	11,851.85	CY	$15.73	$186,429.60
	Earthwork Component Total				$349,654.83

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	5
Roadway Pavement Width L/R	43.00 / 31.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	14,988.72	SY	$11.20	$167,873.66
285-709	OPTIONAL BASE,BASE GROUP 09	13,154.24	SY	$25.30	$332,802.27
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	2,170.45	TN	$138.21	$299,977.89
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,085.22	TN	$144.49	$156,803.44

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	164.00	EA	$7.32	$1,200.48
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.61	GM	$1,039.31	$633.98
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.91	GM	$388.03	$353.11
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.61	GM	$4,937.59	$3,011.93
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.61	GM	$4,277.51	$2,609.28

711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.91	GM	$1,246.43	$1,134.25

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	21.67	TN	$280.64	$6,081.47
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	650.00	LF	$19.44	$12,636.00
	Roadway Component Total				$985,117.76

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	10,578.00	SY	$4.92	$52,043.76

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,199.68	LF	$1.72	$5,503.45
104-11	FLOATING TURBIDITY BARRIER	75.75	LF	$13.62	$1,031.72
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	75.75	LF	$10.38	$786.29
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	16.00	EA	$114.05	$1,824.80
107-1	LITTER REMOVAL	323.82	AC	$33.53	$10,857.68
107-2	MOWING	323.82	AC	$48.82	$15,808.89
	Shoulder Component Total				$90,939.59

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	18.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	3,199.68	LF	$26.14	$83,639.64
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	245.00	LF	$39.98	$9,795.10
570-1-2	PERFORMANCE TURF, SOD	3,199.68	SY	$4.92	$15,742.43
	Median Component Total				$109,177.17

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.45	CY	$1,858.71	$10,129.97
425-1-351	INLETS, CURB, TYPE P-5, <10'	11.00	EA	$5,211.96	$57,331.56
425-1-451	INLETS, CURB, TYPE J-5, <10'	4.00	EA	$4,637.83	$18,551.32
425-1-521	INLETS, DT BOT, TYPE C, <10'	2.00	EA	$4,153.74	$8,307.48
425-2-41	MANHOLES, P-7, <10'	2.00	EA	$4,932.16	$9,864.32
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	808.00	LF	$126.09	$101,880.72
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	72.00	LF	$160.45	$11,552.40
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	1,520.00	LF	$424.32	$644,966.40
570-1-2	PERFORMANCE TURF, SOD	92.11	SY	$4.92	$453.18
	Drainage Component Total				$863,037.35

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00	AS	$402.31	$3,218.48
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33
	Signing Component Total				$211,279.81

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	3
Description	3 LANES

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,250.00	LF	$9.75	$21,937.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	750.00	LF	$23.35	$17,512.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	3.00	PI	$4,895.59	$14,686.77
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	48.00	EA	$744.91	$35,755.68
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	3.00	AS	$2,508.17	$7,524.51
639-2-1	ELECTRICAL SERVICE WIRE, F&I	180.00	LF	$5.76	$1,036.80
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	12.00	EA	$56,601.03	$679,212.36
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	36.00	AS	$1,078.93	$38,841.48
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	24.00	AS	$675.59	$16,214.16
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	36.00	EA	$366.45	$13,192.20
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	36.00	AS	$1,030.75	$37,107.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	24.00	EA	$244.78	$5,874.72
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	3.00	AS	$35,970.31	$107,910.93
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	12.00	EA	$389.82	$4,677.84
	Signalizations Component Total				$1,001,484.45

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$121,200.00	$121,200.00
	Intelligent Traffic System (ITS) Component Total				$121,200.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,599.84	LF	$9.75	$15,598.44
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	317.54	LF	$23.35	$7,414.56
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	11.00	EA	$744.91	$8,194.01
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	5,843.05	LF	$2.17	$12,679.42
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	11.00	EA	$5,333.82	$58,672.02
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	11.00	EA	$601.42	$6,615.62
	Subcomponent Total				$109,174.07

Lighting Component Total $109,174.07

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	385.00
Begin height	13.50
End Height	13.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,197.50	SF	$27.00	$140,332.50

Retaining Walls Component Total $140,332.50

Sequence 7 Total $3,981,397.53

Sequence: 8 NDU - New Construction, Divided, Urban **Net Length:** 0.152 MI 800 LF

Description: 10C-3B from SR 91 to 800' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	160.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.152
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	122.00
Front Slope L/R	2 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.95	AC	$30,623.87	$90,340.42
120-1	REGULAR EXCAVATION	6,421.67	CY	$18.41	$118,222.94

Earthwork Component Total $208,563.36

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	7
Roadway Pavement Width L/R	51.00 / 43.00

Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	9,271.96	SY	$11.20	$103,845.95
285-709	OPTIONAL BASE,BASE GROUP 09	8,354.72	SY	$25.30	$211,374.42
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,378.53	TN	$138.21	$190,526.63
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	689.26	TN	$144.49	$99,591.18

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	123.00	EA	$7.32	$900.36
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.30	GM	$1,039.31	$311.79
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.76	GM	$388.03	$294.90
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.30	GM	$4,937.59	$1,481.28
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.30	GM	$4,277.51	$1,283.25
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.76	GM	$1,246.43	$947.29

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	20.67	TN	$280.64	$5,800.83
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	620.00	LF	$19.44	$12,052.80
	Roadway Component Total				$628,410.68

SHOULDER COMPONENT

User Input Data

Description	Value

Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	7,644.00	SY	$4.92	$37,608.48

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,599.84	LF	$1.72	$2,751.72
104-11	FLOATING TURBIDITY BARRIER	37.88	LF	$13.62	$515.93
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	37.88	LF	$10.38	$393.19
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	8.00	EA	$114.05	$912.40
107-1	LITTER REMOVAL	162.12	AC	$33.53	$5,435.88
107-2	MOWING	162.12	AC	$48.82	$7,914.70
	Shoulder Component Total				$58,615.30

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	10.00
Performance Turf Width	6.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,599.84	LF	$26.14	$41,819.82
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	285.00	LF	$39.98	$11,394.30
570-1-2	PERFORMANCE TURF, SOD	533.28	SY	$4.92	$2,623.74
	Median Component Total				$55,837.86

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.73	CY	$1,858.71	$5,074.28
425-1-351	INLETS, CURB, TYPE P-5, <10'	6.00	EA	$5,211.96	$31,271.76
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$4,637.83	$9,275.66
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$4,153.74	$4,153.74
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,932.16	$4,932.16
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	400.00	LF	$126.09	$50,436.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$160.45	$6,418.00
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	760.00	LF	$424.32	$322,483.20
570-1-2	PERFORMANCE TURF, SOD	46.06	SY	$4.92	$226.62

	Drainage Component Total	$434,271.42

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$402.31	$1,609.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33

	Signing Component Total	$209,670.57

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$60,800.00	$60,800.00

	Intelligent Traffic System (ITS) Component Total	$60,800.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	799.92	LF	$9.75	$7,799.22
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	158.77	LF	$23.35	$3,707.28
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$744.91	$4,469.46
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,921.53	LF	$2.17	$6,339.72
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	6.00	EA	$5,333.82	$32,002.92
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$601.42	$3,608.52
	Subcomponent Total				$57,927.12

	Lighting Component Total	$57,927.12

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	780.00
Begin height	13.50
End Height	13.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	10,530.00	SF	$27.00	$284,310.00
	Retaining Walls Component Total				$284,310.00

Sequence 8 Total $1,998,406.31

Date: 4/8/2022 9:22:34 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 36 Project Grand Total **$35,766,886.32**

Description: 20210527 - Consultant Update. 20210513 Copied from FPID 423374-1-52-01 Version 14 [3A.Becker Rd. (Alt. 1) [Seq. 10C] (MP 138.4)]

Project Sequences Subtotal					**$23,548,354.59**
102-1	Maintenance of Traffic	10.00	%		$2,354,835.46
101-1	Mobilization	10.00	%		$2,590,319.01
Project Sequences Total					**$28,493,509.06**
Project Unknowns		25.00	%		$7,123,377.26
Design/Build		0.00	%		$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$150,000.00**
Version 36 Project Grand Total					**$35,766,886.32**

Date: 4/8/2022 9:23:54 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 38 Project Grand Total **$59,781,621.41**

Description: 20210527 - CONSULTANT UPDATE. 20210513 Copied from FPID 423374-1-52-01 Version 16 [4A.Port St. Lucie Blvd. (Alt. 2) [Seq. 10E] (MP 143.1)]

Sequence: 1 NUR - New Construction, Undivided, Rural **Net Length:** 0.123 MI 650 LF

Description: 10E-1A from Sta. 1438+50.00 to Sta. 1438+50.00

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	315.00 / 0.00
Incidental Clearing and Grubbing Area	2.87
Alignment Number	1
Distance	0.123
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.70	AC	$30,623.87	$143,932.19
110-1-1	CLEARING & GRUBBING	2.87	AC	$30,623.87	$87,890.51
120-6	EMBANKMENT	28,793.76	CY	$21.02	$605,244.84
	Earthwork Component Total				$837,067.54

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	36.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

160-4	TYPE B STABILIZATION	4,044.25	SY	$11.20	$45,295.60
285-709	OPTIONAL BASE,BASE GROUP 09	2,623.70	SY	$25.30	$66,379.61
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	428.98	TN	$138.21	$59,289.33
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	103.99	TN	$148.28	$15,419.64

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	66.00	EA	$7.32	$483.12
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.12	GM	$1,039.31	$124.72
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.25	GM	$388.03	$97.01
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.25	GM	$1,492.26	$373.06
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.12	GM	$4,937.59	$592.51
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.12	GM	$4,277.51	$513.30

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	14.67	TN	$280.64	$4,116.99
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	440.00	LF	$19.44	$8,553.60
	Roadway Component Total				$201,238.50

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 8.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	10.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O

Rumble Strips ï¿½No. of Sides 0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,058.73	SY	$10.59	$11,211.95
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	83.41	TN	$138.21	$11,528.10
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.81	TN	$148.28	$564.95
570-1-2	PERFORMANCE TURF, SOD	433.31	SY	$4.92	$2,131.89

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	5,922.00	SY	$4.92	$29,136.24

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,689.92	LF	$1.85	$3,126.35
104-11	FLOATING TURBIDITY BARRIER	30.78	LF	$13.62	$419.22
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	30.78	LF	$10.38	$319.50
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	62.58	AC	$33.53	$2,098.31
107-2	MOWING	62.58	AC	$48.82	$3,055.16
	Shoulder Component Total				$66,674.67

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.22	CY	$1,858.71	$4,126.34
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	104.00	LF	$108.60	$11,294.40
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$288.14	$6,915.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00	EA	$1,724.19	$8,620.95
570-1-2	PERFORMANCE TURF, SOD	86.66	SY	$4.92	$426.37
	Drainage Component Total				$31,383.42

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$9,266.34

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$49,200.00	$49,200.00
	Intelligent Traffic System (ITS) Component Total				$49,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	$2.17	$5,208.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	4.00	EA	$7,049.17	$28,196.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$601.42	$2,405.68
	Subcomponent Total				$46,590.00
	Lighting Component Total				$46,590.00

BRIDGES COMPONENT

Bridge 10E-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	329.00
Width (LF)	132.58
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	30,160.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$98.27**
Basic Bridge Cost	**$4,089,264.38**
Description	SEQ10E-1 PORT ST. LUCIE BLVD. OVER ML

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	30,160.00	SF	$55.17	$1,663,927.20
400-2-10	CONC CLASS II, APPROACH SLABS	294.62	CY	$485.22	$142,955.52
415-1-9	REINF STEEL- APPROACH SLABS	51,558.50	LB	$1.05	$54,136.42
	Bridge 10E-1 Total				$5,950,283.53

Bridge 10E-2

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	322.81
Width (LF)	30.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	10,528.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$98.36**
Basic Bridge Cost	**$907,903.13**
Description	SEQ10E-2 RAMP OVER ML

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	10,528.00	SF	$55.17	$580,829.76
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	$485.22	$32,349.62
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	$1.05	$12,250.61
	Bridge 10E-2 Total				$1,533,333.12
	Bridges Component Total				$7,483,616.65

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	395.00
Begin height	19.00
End Height	19.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,505.00	SF	$27.00	$202,635.00
	Retaining Walls Component Total				$202,635.00

Sequence 1 Total $8,927,672.12

Sequence: 2 NUR - New Construction, Undivided, Rural **Net Length:** 0.278 MI 1,470 LF

Description: 10E-1B from Sta. 1438+50.00 to Sta. 1447+51.16

EARTHWORK COMPONENT

User Input Data

Description	Value

Standard Clearing and Grubbing Limits L/R	70.00 / 0.00
Incidental Clearing and Grubbing Area	0.82
Alignment Number	1
Distance	0.278
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.36	AC	$30,623.87	$72,272.33
110-1-1	CLEARING & GRUBBING	0.82	AC	$30,623.87	$25,111.57
120-6	EMBANKMENT	51,583.70	CY	$21.02	$1,084,289.37
	Earthwork Component Total				$1,181,673.27

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,409.86	SY	$11.20	$49,390.43
285-709	OPTIONAL BASE,BASE GROUP 09	2,503.82	SY	$25.30	$63,346.65
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	404.24	TN	$138.21	$55,870.01
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	98.00	TN	$148.28	$14,531.44

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.28	GM	$1,039.31	$291.01
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.28	GM	$4,937.59	$1,382.53
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.28	GM	$4,277.51	$1,197.70

Roadway Component Total $186,009.77

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	4.00 / 2.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,087.76	SY	$10.59	$11,519.38
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	80.85	TN	$138.21	$11,174.28
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	8.62	TN	$148.28	$1,278.17
570-1-2	PERFORMANCE TURF, SOD	979.97	SY	$4.92	$4,821.45

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	43,120.00	SY	$4.92	$212,150.40

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,821.88	LF	$1.85	$7,070.48
104-11	FLOATING TURBIDITY BARRIER	69.60	LF	$13.62	$947.95
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	69.60	LF	$10.38	$722.45
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	141.54	AC	$33.53	$4,745.84
107-2	MOWING	141.54	AC	$48.82	$6,909.98

Shoulder Component Total $264,423.38

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.01	CY	$1,858.71	$9,312.14
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	224.00	LF	$108.60	$24,326.40
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$288.14	$13,830.72
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	12.00	EA	$1,724.19	$20,690.28
570-1-2	PERFORMANCE TURF, SOD	195.99	SY	$4.92	$964.27

Drainage Component Total $69,123.81

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$13,465.11

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$111,200.00	$111,200.00
	Intelligent Traffic System (ITS) Component Total				$111,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	8

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00	LF	$9.75	$15,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	$744.91	$5,959.28
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,800.00	LF	$2.17	$10,416.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	8.00	EA	$7,049.17	$56,393.36
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	8.00	EA	$601.42	$4,811.36
	Subcomponent Total				$93,180.00
	Lighting Component Total				$93,180.00

Sequence 2 Total $1,919,075.34

Sequence: 3 NUR - New Construction, Undivided, Rural **Net Length:** 0.234 MI 1,235 LF

Description: 10E-1C from Sta. 1447+51.16 to Sta. 1459+83.75

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	29.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1

Distance	0.234
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.82	AC	$30,623.87	$25,111.57
120-6	EMBANKMENT	4,278.10	CY	$21.02	$89,925.66
	Earthwork Component Total				$115,037.23

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,567.75	SY	$11.20	$39,958.80
285-709	OPTIONAL BASE,BASE GROUP 09	1,691.94	SY	$25.30	$42,806.08
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	633.96	TN	$119.42	$75,707.50
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	65.87	TN	$148.28	$9,767.20

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.23	GM	$1,039.31	$239.04
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.23	GM	$4,937.59	$1,135.65
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.23	GM	$4,277.51	$983.83
	Roadway Component Total				$170,598.10

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,691.94	SY	$25.30	$42,806.08
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	271.70	TN	$153.46	$41,695.08
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.62	TN	$148.28	$536.77
570-1-2	PERFORMANCE TURF, SOD	274.44	SY	$4.92	$1,350.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,882.00	SY	$4.92	$14,179.44

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,210.98	LF	$1.85	$5,940.31
104-11	FLOATING TURBIDITY BARRIER	58.48	LF	$13.62	$796.50
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	58.48	LF	$10.38	$607.02
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	118.86	AC	$33.53	$3,985.38
107-2	MOWING	118.86	AC	$48.82	$5,802.75
	Shoulder Component Total				$120,782.57

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.21	CY	$1,858.71	$7,825.17
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	192.00	LF	$108.60	$20,851.20
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$288.14	$11,525.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	10.00	EA	$1,724.19	$17,241.90
570-1-2	PERFORMANCE TURF, SOD	164.67	SY	$4.92	$810.18
	Drainage Component Total				$58,254.05

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31

700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$189,111.33	$567,333.99

Signing Component Total $579,399.51

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$93,600.00	$93,600.00

Intelligent Traffic System (ITS) Component Total $93,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$744.91	$5,214.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00	EA	$7,049.17	$49,344.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$601.42	$4,209.94
	Subcomponent Total				$81,532.50

Lighting Component Total $81,532.50

Sequence 3 Total $1,219,203.96

Sequence: 4 NDR - New Construction, Divided, Rural **Net Length:** 0.284 MI 1,500 LF

Description: 10E-2A from Sta. 1427+93.67 to Sta. 1430+92.28

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	115.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.284

Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 2 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.96	AC	$30,623.87	$121,270.53
120-6	EMBANKMENT	26,815.31	CY	$21.02	$563,657.82
	Earthwork Component Total				$684,928.35

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,500.14	SY	$11.20	$50,401.57
285-709	OPTIONAL BASE,BASE GROUP 09	2,610.08	SY	$25.30	$66,035.02
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	412.51	TN	$138.21	$57,013.01
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	100.00	TN	$148.28	$14,828.00

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.28	GM	$1,039.31	$291.01
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.28	GM	$4,983.20	$1,395.30
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.28	GM	$4,937.59	$1,382.53

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00

Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	95.83	TN	$280.64	$26,893.73
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	2,875.00	LF	$19.44	$55,890.00
	Roadway Component Total				$274,130.17

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	2.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,110.04	SY	$10.59	$11,755.32
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	82.50	TN	$138.21	$11,402.32
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	8.80	TN	$148.28	$1,304.86
570-1-2	PERFORMANCE TURF, SOD	1,000.03	SY	$4.92	$4,920.15

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	14,667.00	SY	$4.92	$72,161.64

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,900.12	LF	$1.85	$7,215.22
104-11	FLOATING TURBIDITY BARRIER	71.03	LF	$13.62	$967.43
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	71.03	LF	$10.38	$737.29
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	2.00	EA	$114.05	$228.10
107-1	LITTER REMOVAL	289.38	AC	$33.53	$9,702.91
107-2	MOWING	289.38	AC	$48.82	$14,127.53
	Shoulder Component Total				$137,605.78

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.11	CY	$1,858.71	$9,498.01
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00	EA	$5,081.01	$10,162.02
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	232.00	LF	$108.60	$25,195.20
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	104.00	LF	$126.09	$13,113.36
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	88.00	LF	$288.14	$25,356.32
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	12.00	EA	$1,724.19	$20,690.28
524-1-1	CONCRETE DITCH PAVT, NR, 3"	568.20	SY	$141.05	$80,144.61
570-1-2	PERFORMANCE TURF, SOD	200.01	SY	$4.92	$984.05
	Drainage Component Total				$185,143.85

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	7.00	AS	$1,399.59	$9,797.13
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	2.00	AS	$6,638.71	$13,277.42
	Signing Component Total				$28,142.12

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$113,600.00	$113,600.00
	Intelligent Traffic System (ITS) Component Total				$113,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	8

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00	LF	$9.75	$15,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	$744.91	$5,959.28
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,800.00	LF	$2.17	$10,416.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	8.00	EA	$7,049.17	$56,393.36
715-500-1	POLE CABLE DIST SYS,	8.00	EA	$601.42	$4,811.36

CONVENTIONAL
Subcomponent Total $93,180.00

Lighting Component Total $93,180.00

Sequence 4 Total $1,516,730.27

Sequence: 5 NDR - New Construction, Divided, Rural **Net Length:** 0.407 MI 2,150 LF

Description: 10E-2B from Sta. 1409+61.15 to Sta. 1430+92.28

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.407
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.48	AC	$30,623.87	$45,323.33
120-6	EMBANKMENT	8,138.99	CY	$21.02	$171,081.57

Earthwork Component Total $216,404.90

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,450.05	SY	$11.20	$72,240.56
285-709	OPTIONAL BASE,BASE GROUP 09	3,741.03	SY	$25.30	$94,648.06
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	591.25	TN	$138.21	$81,716.66
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	143.33	TN	$148.28	$21,252.97

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.41	GM	$1,039.31	$426.12
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.41	GM	$4,983.20	$2,043.11
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.41	GM	$4,937.59	$2,024.41

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	2,220.00	LF	$315.35	$700,077.00
	Roadway Component Total				$974,428.89

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	4.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,034.40	SY	$10.59	$10,954.30
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	78.83	TN	$138.21	$10,895.09
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.31	TN	$148.28	$935.65
570-1-2	PERFORMANCE TURF, SOD	477.78	SY	$4.92	$2,350.68

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,539.00	SY	$4.92	$22,331.88

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,590.04	LF	$1.85	$10,341.57
104-11	FLOATING TURBIDITY BARRIER	101.80	LF	$13.62	$1,386.52
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	101.80	LF	$10.38	$1,056.68
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	3.00	EA	$114.05	$342.15
107-1	LITTER REMOVAL	414.54	AC	$33.53	$13,899.53
107-2	MOWING	414.54	AC	$48.82	$20,237.84
	Shoulder Component Total				$97,814.89

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	6.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	6.00 / 0.00
Paved Median Shoulder Width L/R	6.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,512.18	SY	$10.59	$16,013.99
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	118.25	TN	$138.21	$16,343.33
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.31	TN	$148.28	$935.65
	Median Component Total				$33,292.97

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	7.33	CY	$1,858.71	$13,624.34
425-1-551	INLETS, DT BOT, TYPE E, <10'	3.00	EA	$5,081.01	$15,243.03
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	328.00	LF	$108.60	$35,620.80
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	144.00	LF	$126.09	$18,156.96
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	120.00	LF	$288.14	$34,576.80
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	17.00	EA	$1,724.19	$29,311.23
524-1-1	CONCRETE DITCH PAVT, NR, 3"	814.40	SY	$141.05	$114,871.12
570-1-2	PERFORMANCE TURF, SOD	286.67	SY	$4.92	$1,410.42
	Drainage Component Total				$262,814.70

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	10.00	AS	$1,399.59	$13,995.90
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	3.00	AS	$6,638.71	$19,916.13
	Signing Component Total				$38,979.60

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$162,800.00	$162,800.00
	Intelligent Traffic System (ITS) Component Total				$162,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	11

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,200.00	LF	$9.75	$21,450.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	11.00	EA	$744.91	$8,194.01
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,600.00	LF	$2.17	$14,322.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	11.00	EA	$7,049.17	$77,540.87
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	11.00	EA	$601.42	$6,615.62
	Subcomponent Total				$128,122.50
	Lighting Component Total				$128,122.50

Sequence 5 Total $1,914,658.45

Sequence: 6 NDR - New Construction, Divided, Rural **Net Length:** 0.395 MI 2,085 LF

Description: 10E-2C from Sta. 1409+61.15 to Sta. 1426+38.39

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	53.00 / 0.00

Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.395
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.54	AC	$30,623.87	$77,784.63
120-6	EMBANKMENT	8,116.85	CY	$21.02	$170,616.19
	Earthwork Component Total				$248,400.82

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,255.22	SY	$11.20	$70,058.46
285-709	OPTIONAL BASE,BASE GROUP 09	3,628.03	SY	$25.30	$91,789.16
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	573.39	TN	$138.21	$79,248.23
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	139.00	TN	$148.28	$20,610.92

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.39	GM	$1,039.31	$405.33
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.39	GM	$4,983.20	$1,943.45
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.39	GM	$4,937.59	$1,925.66

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,010.00	LF	$315.35	$318,503.50

Roadway Component Total $584,484.71

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	4.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,003.15	SY	$10.59	$10,623.36
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	76.45	TN	$138.21	$10,566.15
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.12	TN	$148.28	$907.47
570-1-2	PERFORMANCE TURF, SOD	463.35	SY	$4.92	$2,279.68

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	7,182.00	SY	$4.92	$35,335.44

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,421.19	LF	$1.85	$10,029.20
104-11	FLOATING TURBIDITY BARRIER	98.72	LF	$13.62	$1,344.57
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	98.72	LF	$10.38	$1,024.71
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	3.00	EA	$114.05	$342.15
107-1	LITTER REMOVAL	401.94	AC	$33.53	$13,477.05
107-2	MOWING	401.94	AC	$48.82	$19,622.71

Shoulder Component Total $108,635.49

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	6.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 6.00
Paved Median Shoulder Width L/R	0.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,466.50	SY	$10.59	$15,530.24
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	114.68	TN	$138.21	$15,849.92
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.12	TN	$148.28	$907.47

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.40	GM	$1,884.99	$754.00
	Median Component Total				$33,041.63

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	7.11	CY	$1,858.71	$13,215.43
425-1-551	INLETS, DT BOT, TYPE E, <10'	3.00	EA	$5,081.01	$15,243.03
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	320.00	LF	$108.60	$34,752.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	136.00	LF	$126.09	$17,148.24
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	120.00	LF	$288.14	$34,576.80
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	16.00	EA	$1,724.19	$27,587.04
524-1-1	CONCRETE DITCH PAVT, NR, 3"	789.80	SY	$141.05	$111,401.29
570-1-2	PERFORMANCE TURF, SOD	278.01	SY	$4.92	$1,367.81
	Drainage Component Total				$255,291.64

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	10.00	AS	$1,399.59	$13,995.90
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	3.00	AS	$6,638.71	$19,916.13

	Signing Component Total	$38,979.60

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$158,000.00	$158,000.00
	Intelligent Traffic System (ITS) Component Total				$158,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	11

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,200.00	LF	$9.75	$21,450.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	11.00	EA	$744.91	$8,194.01
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,600.00	LF	$2.17	$14,322.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	11.00	EA	$7,049.17	$77,540.87
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	11.00	EA	$601.42	$6,615.62
	Subcomponent Total				$128,122.50
	Lighting Component Total				$128,122.50

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,560.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,800.00	SF	$27.00	$210,600.00
	Retaining Walls Component Total				$210,600.00

Sequence 6 Total	$1,765,556.39

Sequence: 7 NDR - New Construction, Divided, Rural **Net Length:** 0.303 MI 1,600 LF

Description: 10E-2D from Sta. 1393+61.24 to Sta. 1409+61.15

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.303
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.29	AC	$30,623.87	$39,504.79
120-6	EMBANKMENT	7,798.33	CY	$21.02	$163,920.90
	Earthwork Component Total				$203,425.69

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,465.92	SY	$11.20	$83,618.30
285-709	OPTIONAL BASE,BASE GROUP 09	4,383.56	SY	$25.30	$110,904.07
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	703.93	TN	$138.21	$97,290.17
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	170.65	TN	$148.28	$25,303.98

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.30	GM	$388.03	$116.41
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.30	GM	$1,492.26	$447.68

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1

Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	41.00	EA	$7.32	$300.12
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.30	GM	$1,039.31	$311.79
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.30	GM	$4,983.20	$1,494.96
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.30	GM	$4,937.59	$1,481.28
	Roadway Component Total				$321,268.76

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	10.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,836.26	SY	$10.59	$19,445.99
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	146.65	TN	$153.46	$22,504.91
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.69	TN	$148.28	$695.43
570-1-2	PERFORMANCE TURF, SOD	355.52	SY	$4.92	$1,749.16

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	3,200.00	SY	$2.19	$7,008.00
570-1-2	PERFORMANCE TURF, SOD	3,200.00	SY	$4.92	$15,744.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,159.58	LF	$1.85	$7,695.22
104-11	FLOATING TURBIDITY BARRIER	75.75	LF	$13.62	$1,031.72
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	75.75	LF	$10.38	$786.29
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	2.00	EA	$114.05	$228.10
107-1	LITTER REMOVAL	308.28	AC	$33.53	$10,336.63
107-2	MOWING	308.28	AC	$48.82	$15,050.23
	Shoulder Component Total				$105,358.68

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	6.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 6.00
Paved Median Shoulder Width L/R	0.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,125.22	SY	$10.59	$11,916.08
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	87.99	TN	$138.21	$12,161.10
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.69	TN	$148.28	$695.43
	Median Component Total				$24,772.61

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.45	CY	$1,858.71	$10,129.97
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00	EA	$5,081.01	$10,162.02
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	248.00	LF	$108.60	$26,932.80
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	112.00	LF	$126.09	$14,122.08
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	96.00	LF	$288.14	$27,661.44
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	13.00	EA	$1,724.19	$22,414.47
524-1-1	CONCRETE DITCH PAVT, NR, 3"	606.00	SY	$141.05	$85,476.30
570-1-2	PERFORMANCE TURF, SOD	213.31	SY	$4.92	$1,049.49
	Drainage Component Total				$197,948.57

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00	AS	$1,399.59	$11,196.72
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	2.00	AS	$6,638.71	$13,277.42
	Signing Component Total				$29,541.71

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$121,200.00	$121,200.00
	Intelligent Traffic System (ITS) Component Total				$121,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	8

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00	LF	$9.75	$15,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	$744.91	$5,959.28
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,800.00	LF	$2.17	$10,416.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	8.00	EA	$7,049.17	$56,393.36
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	8.00	EA	$601.42	$4,811.36
	Subcomponent Total				$93,180.00
	Lighting Component Total				$93,180.00

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,600.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,000.00	SF	$27.00	$216,000.00
	Retaining Walls Component Total				$216,000.00

Sequence 7 Total $1,312,696.02

Sequence: 8 NUR - New Construction, Undivided, Rural **Net Length:** 0.215 MI 1,136 LF

Description: 10E-2E from Sta. 1378+70.57 to Sta. 1393+61.24

EARTHWORK COMPONENT

User Input Data

Description	Value

Standard Clearing and Grubbing Limits L/R	29.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.215
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.76	AC	$30,623.87	$23,274.14
120-6	EMBANKMENT	3,930.74	CY	$21.02	$82,624.15
	Earthwork Component Total				$105,898.29

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,282.52	SY	$11.20	$36,764.22
285-709	OPTIONAL BASE,BASE GROUP 09	1,556.67	SY	$25.30	$39,383.75
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	583.28	TN	$119.42	$69,655.30
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	60.60	TN	$148.28	$8,985.77

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.22	GM	$1,039.31	$228.65
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.22	GM	$4,937.59	$1,086.27
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.22	GM	$4,277.51	$941.05
	Roadway Component Total				$157,045.01

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,556.67	SY	$25.30	$39,383.75
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	249.98	TN	$153.46	$38,361.93
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.33	TN	$148.28	$493.77
570-1-2	PERFORMANCE TURF, SOD	252.50	SY	$4.92	$1,242.30

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,544.00	SY	$4.92	$22,356.48

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,954.27	LF	$1.85	$5,465.40
104-11	FLOATING TURBIDITY BARRIER	53.80	LF	$13.62	$732.76
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	53.80	LF	$10.38	$558.44
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	109.62	AC	$33.53	$3,675.56
107-2	MOWING	109.62	AC	$48.82	$5,351.65
	Shoulder Component Total				$120,705.04

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.87	CY	$1,858.71	$7,193.21
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	176.00	LF	$108.60	$19,113.60
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$288.14	$11,525.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00	EA	$1,724.19	$15,517.71
570-1-2	PERFORMANCE TURF, SOD	151.50	SY	$4.92	$745.38
	Drainage Component Total				$54,095.50

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$86,000.00	$86,000.00
	Intelligent Traffic System (ITS) Component Total				$86,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00	LF	$9.75	$11,700.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$744.91	$4,469.46
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00	LF	$2.17	$7,812.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	6.00	EA	$7,049.17	$42,295.02
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$601.42	$3,608.52
	Subcomponent Total				$69,885.00
	Lighting Component Total				$69,885.00

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,140.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,700.00	SF	$27.00	$153,900.00
	Retaining Walls Component Total				$153,900.00

Sequence 8 Total $759,594.36

Sequence: 9 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 0.271 MI 1,430 LF

Description: 10E-3A from Sta. 1388+26.76 to Sta. 1402+57.24

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	65.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.271
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	0 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Front Slope L/R	0 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.14	AC	$30,623.87	$65,535.08
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	2,886.14	CY	$41.85	$120,784.96
	Earthwork Component Total				$186,320.04

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	12.00 / 0.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,130.60	SY	$11.20	$46,262.72
285-709	OPTIONAL BASE,BASE GROUP 09	1,958.86	SY	$25.30	$49,559.16
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	733.98	TN	$119.42	$87,651.89
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	76.26	TN	$148.28	$11,307.83

Pavement Marking Subcomponent

Description	Value

Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.27	GM	$1,039.31	$280.61
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.27	GM	$4,937.59	$1,333.15
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.27	GM	$4,277.51	$1,154.93
	Roadway Component Total				$197,550.29

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,958.86	SY	$25.30	$49,559.16
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	314.56	TN	$153.46	$48,272.38
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.19	TN	$148.28	$621.29
570-1-2	PERFORMANCE TURF, SOD	317.74	SY	$4.92	$1,563.28

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	7,945.00	SY	$4.92	$39,089.40

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,288.60	LF	$1.85	$6,083.91
104-11	FLOATING TURBIDITY BARRIER	27.08	LF	$13.62	$368.83
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	27.08	LF	$10.38	$281.09
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	1.00	EA	$114.05	$114.05
107-1	LITTER REMOVAL	27.72	AC	$33.53	$929.45
107-2	MOWING	27.72	AC	$48.82	$1,353.29

Shoulder Component Total $151,319.13

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.87	CY	$1,858.71	$9,051.92
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	40.00	LF	$108.60	$4,344.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$288.14	$6,915.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	3.00	EA	$1,724.19	$5,172.57
570-1-2	PERFORMANCE TURF, SOD	109.40	SY	$4.92	$538.25

Drainage Component Total $26,022.10

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	6.00	AS	$30.99	$185.94
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	1.00	AS	$5,016.71	$5,016.71
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$189,111.33	$567,333.99

Signing Component Total $582,459.46

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$108,400.00	$108,400.00

Intelligent Traffic System (ITS) Component Total $108,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	8

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00 LF	$9.75	$15,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00 EA	$744.91	$5,959.28
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,800.00 LF	$2.17	$10,416.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	8.00 EA	$7,049.17	$56,393.36
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	8.00 EA	$601.42	$4,811.36
	Subcomponent Total			$93,180.00
	Lighting Component Total			$93,180.00

Sequence 9 Total $1,345,251.02

Sequence: 10 NUR - New Construction, Undivided, Rural **Net Length:** 0.122 MI 645 LF

Description: 10E-3B from Sta. 1402+57.24 to Sta. 1408+98.75

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	70.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.122
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.04	AC	$30,623.87	$31,848.82
120-6	EMBANKMENT	2,286.77	CY	$21.02	$48,067.91
	Earthwork Component Total				$79,916.73

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,935.65	SY	$11.20	$21,679.28
285-709	OPTIONAL BASE,BASE GROUP 09	1,099.02	SY	$25.30	$27,805.21
334-1-53	SUPERPAVE ASPH CONC, TRAF C,	177.43	TN	$138.21	$24,522.60

	PG76-22			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	43.01 TN	$148.28	$6,377.52

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.12	GM	$1,039.31	$124.72
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.12	GM	$4,937.59	$592.51
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.12	GM	$4,277.51	$513.30
	Roadway Component Total				$81,615.14

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	2.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	477.46	SY	$10.59	$5,056.30
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	35.49	TN	$138.21	$4,905.07
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.79	TN	$148.28	$561.98
570-1-2	PERFORMANCE TURF, SOD	430.14	SY	$4.92	$2,116.29

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,437.00	SY	$4.92	$11,990.04

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,677.56	LF	$1.85	$3,103.49
104-11	FLOATING TURBIDITY BARRIER	30.55	LF	$13.62	$416.09
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	30.55	LF	$10.38	$317.11
104-15	SOIL TRACKING PREVENTION	1.00	EA	$3,083.00	$3,083.00

	DEVICE			
107-1	LITTER REMOVAL	62.16 AC	$33.53	$2,084.22
107-2	MOWING	62.16 AC	$48.82	$3,034.65
	Shoulder Component Total			$36,668.24

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.20	CY	$1,858.71	$4,089.16
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	104.00	LF	$108.60	$11,294.40
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$288.14	$6,915.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00	EA	$1,724.19	$8,620.95
570-1-2	PERFORMANCE TURF, SOD	86.03	SY	$4.92	$423.27
	Drainage Component Total				$31,343.14

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$9,266.34

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$48,800.00	$48,800.00
	Intelligent Traffic System (ITS) Component Total				$48,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	$2.17	$5,208.00

715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	4.00 EA	$7,049.17	$28,196.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00 EA	$601.42	$2,405.68
	Subcomponent Total			$46,590.00
	Lighting Component Total			$46,590.00

Sequence 10 Total $334,199.59

Sequence: 11 NUR - New Construction, Undivided, Rural **Net Length:** 0.313 MI 1,650 LF

Description: 10E-3C from Sta. 1408+98.75 to Sta. 1420+86.61

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	111.00 / 85.00
Incidental Clearing and Grubbing Area	1.40
Alignment Number	1
Distance	0.313
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	7.41	AC	$30,623.87	$226,922.88
110-1-1	CLEARING & GRUBBING	1.40	AC	$30,623.87	$42,873.42
120-6	EMBANKMENT	7,176.13	CY	$21.02	$150,842.25
	Earthwork Component Total				$420,638.55

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	8,066.67	SY	$11.20	$90,346.70
285-709	OPTIONAL BASE,BASE GROUP 09	4,460.50	SY	$25.30	$112,850.65
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	726.00	TN	$138.21	$100,340.46
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	176.00	TN	$148.28	$26,097.28

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	42.00	EA	$7.32	$307.44
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.31	GM	$1,039.31	$322.19
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.31	GM	$388.03	$120.29
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.31	GM	$1,492.26	$462.60
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.31	GM	$4,937.59	$1,530.65
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.31	GM	$4,277.51	$1,326.03

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,200.00	LF	$315.35	$378,420.00
	Roadway Component Total				$712,124.29

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 10.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	2,687.67	SY	$10.59	$28,462.43
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	211.75	TN	$138.21	$29,265.97
337-7-25	ASPH CONC FC,INC BIT,FC-	9.68	TN	$148.28	$1,435.35

	5,PG76-22				
570-1-2	PERFORMANCE TURF, SOD	1,100.00	SY	$4.92	$5,412.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	19,983.00	SY	$4.92	$98,316.36

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,290.00	LF	$1.85	$7,936.50
104-11	FLOATING TURBIDITY BARRIER	78.12	LF	$13.62	$1,063.99
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	78.12	LF	$10.38	$810.89
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	159.18	AC	$33.53	$5,337.31
107-2	MOWING	159.18	AC	$48.82	$7,771.17
	Shoulder Component Total				$188,894.97

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.62	CY	$1,858.71	$10,445.95
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	256.00	LF	$108.60	$27,801.60
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00	LF	$288.14	$16,135.84
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	13.00	EA	$1,724.19	$22,414.47
570-1-2	PERFORMANCE TURF, SOD	220.00	SY	$4.92	$1,082.40
	Drainage Component Total				$77,880.26

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	7.00	AS	$1,399.59	$9,797.13
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$14,864.70

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$125,200.00	$125,200.00

Intelligent Traffic System (ITS) Component Total $125,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	9

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,800.00	LF	$9.75	$17,550.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	9.00	EA	$744.91	$6,704.19
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	5,400.00	LF	$2.17	$11,718.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	9.00	EA	$7,049.17	$63,442.53
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	9.00	EA	$601.42	$5,412.78
	Subcomponent Total				$104,827.50

Lighting Component Total $104,827.50

Sequence 11 Total $1,644,430.27

Sequence: 12 NUR - New Construction, Undivided, Rural **Net Length:** 0.145 MI 765 LF

Description: 10E-4A from Sta. 1438+98.57 to Sta. 1441+88.02

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	65.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.145
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.14	AC	$30,623.87	$34,911.21
120-6	EMBANKMENT	3,324.41	CY	$21.02	$69,879.10

Earthwork Component Total $104,790.31

ROADWAY COMPONENT

User Input Data

Description	Value

Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,740.35	SY	$11.20	$41,891.92
285-709	OPTIONAL BASE,BASE GROUP 09	2,068.24	SY	$25.30	$52,326.47
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	336.63	TN	$138.21	$46,525.63
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	81.61	TN	$148.28	$12,101.13

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	20.00	EA	$7.32	$146.40
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.14	GM	$1,039.31	$145.50
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.14	GM	$388.03	$54.32
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.14	GM	$1,492.26	$208.92
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.14	GM	$4,937.59	$691.26
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.14	GM	$4,277.51	$598.85
	Roadway Component Total				$154,690.40

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 10.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,246.22	SY	$10.59	$13,197.47
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	98.18	TN	$138.21	$13,569.46
337-7-25	ASPH CONC FC,INC BIT,FC-	4.49	TN	$148.28	$665.78

	5,PG76-22				
570-1-2	PERFORMANCE TURF, SOD	510.05	SY	$4.92	$2,509.45

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,550.00	SY	$4.92	$12,546.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,989.19	LF	$1.85	$3,680.00
104-11	FLOATING TURBIDITY BARRIER	36.22	LF	$13.62	$493.32
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	36.22	LF	$10.38	$375.96
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	73.92	AC	$33.53	$2,478.54
107-2	MOWING	73.92	AC	$48.82	$3,608.77
	Shoulder Component Total				$56,207.75

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.61	CY	$1,858.71	$4,851.23
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	120.00	LF	$108.60	$13,032.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$288.14	$9,220.48
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	6.00	EA	$1,724.19	$10,345.14
570-1-2	PERFORMANCE TURF, SOD	102.01	SY	$4.92	$501.89
	Drainage Component Total				$37,950.74

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$9,266.34

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	3
Description	3 LANES

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,250.00	LF	$9.75	$21,937.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	750.00	LF	$23.35	$17,512.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	3.00	PI	$5,689.63	$17,068.89
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	48.00	EA	$744.91	$35,755.68
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	3.00	AS	$2,608.78	$7,826.34
639-2-1	ELECTRICAL SERVICE WIRE, F&I	180.00	LF	$4.86	$874.80
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	12.00	EA	$40,287.14	$483,445.68
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	36.00	AS	$972.57	$35,012.52
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	24.00	AS	$643.00	$15,432.00
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	36.00	EA	$172.57	$6,212.52
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	36.00	AS	$880.20	$31,687.20
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	24.00	EA	$196.44	$4,714.56
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	3.00	AS	$26,757.43	$80,272.29
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	12.00	EA	$224.30	$2,691.60
	Signalizations Component Total				$760,444.08

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$58,000.00	$58,000.00
	Intelligent Traffic System (ITS) Component Total				$58,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	$2.17	$5,208.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	4.00	EA	$7,049.17	$28,196.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$601.42	$2,405.68
	Subcomponent Total				$46,590.00
	Lighting Component Total				$46,590.00

Sequence 12 Total $1,227,939.62

Sequence: 13 NUR - New Construction, Undivided, Rural **Net Length:** 0.068 MI 360 LF

Description: 10E-4B from Sta. 1441+88.02 to Sta. 1445+05.34

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	300.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.068
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.47	AC	$30,623.87	$75,640.96
120-6	EMBANKMENT	1,274.59	CY	$21.02	$26,791.88
	Earthwork Component Total				$102,432.84

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,080.29	SY	$11.20	$12,099.25
285-709	OPTIONAL BASE,BASE GROUP 09	613.36	SY	$25.30	$15,518.01
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	99.03	TN	$138.21	$13,686.94
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	24.01	TN	$148.28	$3,560.20

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.07	GM	$1,039.31	$72.75
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.07	GM	$4,937.59	$345.63
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.07	GM	$4,277.51	$299.43
	Roadway Component Total				$45,582.21

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	2.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	266.47	SY	$10.59	$2,821.92
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	19.81	TN	$138.21	$2,737.94
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.11	TN	$148.28	$312.87
570-1-2	PERFORMANCE TURF, SOD	240.06	SY	$4.92	$1,181.10

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	7,360.00	SY	$4.92	$36,211.20

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	936.25	LF	$1.85	$1,732.06
104-11	FLOATING TURBIDITY BARRIER	17.05	LF	$13.62	$232.22
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	17.05	LF	$10.38	$176.98
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	34.86	AC	$33.53	$1,168.86
107-2	MOWING	34.86	AC	$48.82	$1,701.87
	Shoulder Component Total				$51,360.02

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.23	CY	$1,858.71	$2,286.21

430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	56.00	LF	$108.60	$6,081.60
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$288.14	$4,610.24
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	3.00	EA	$1,724.19	$5,172.57
570-1-2	PERFORMANCE TURF, SOD	48.01	SY	$4.92	$236.21
	Drainage Component Total				$18,386.83

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$7,866.75

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$27,200.00	$27,200.00
	Intelligent Traffic System (ITS) Component Total				$27,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	400.00	LF	$9.75	$3,900.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	2.00	EA	$744.91	$1,489.82
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,200.00	LF	$2.17	$2,604.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	2.00	EA	$7,049.17	$14,098.34
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	2.00	EA	$601.42	$1,202.84
	Subcomponent Total				$23,295.00
	Lighting Component Total				$23,295.00

Sequence 13 Total $276,123.65

Sequence: 14 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 0.307 MI

1,620 LF

Description: 10E-4C from Sta. 1445+05.34 to Sta. 1461+21.77

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	70.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.307
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	0 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.60	AC	$30,623.87	$79,622.06
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	7,587.29	CY	$41.85	$317,528.09
	Earthwork Component Total				$397,150.15

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	12.00 / 0.00
Widened Structural Spread Rate	770
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,679.72	SY	$11.20	$52,412.86
285-709	OPTIONAL BASE,BASE GROUP 09	2,219.27	SY	$25.30	$56,147.53
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	831.55	TN	$138.21	$114,928.53
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	86.39	TN	$148.28	$12,809.91

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1

Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.31	GM	$1,039.31	$322.19
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.31	GM	$4,937.59	$1,530.65
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.31	GM	$4,277.51	$1,326.03
	Roadway Component Total				$239,477.70

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Existing Paved Outside Shoulder Width L/R	0.00 / 0.00
New Paved Outside Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	2,219.27	SY	$25.30	$56,147.53
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	356.38	TN	$138.21	$49,255.28
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.75	TN	$148.28	$704.33
570-1-2	PERFORMANCE TURF, SOD	359.98	SY	$4.92	$1,771.10

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	9,900.00	SY	$4.92	$48,708.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,725.78	LF	$1.85	$6,892.69
104-11	FLOATING TURBIDITY BARRIER	30.68	LF	$13.62	$417.86
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	30.68	LF	$10.38	$318.46
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	1.00	EA	$114.05	$114.05
107-1	LITTER REMOVAL	31.08	AC	$33.53	$1,042.11
107-2	MOWING	31.08	AC	$48.82	$1,517.33
	Shoulder Component Total				$169,971.74

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	5.52	CY	$1,858.71	$10,260.08
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	48.00	LF	$108.60	$5,212.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$288.14	$6,915.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	$1,724.19	$6,896.76
570-1-2	PERFORMANCE TURF, SOD	123.95	SY	$4.92	$609.83
	Drainage Component Total				$29,894.83

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	7.00	AS	$1,399.59	$9,797.13
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	7.00	AS	$30.99	$216.93
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	1.00	AS	$5,016.71	$5,016.71
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56
	Signing Component Total				$16,556.05

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$122,800.00	$122,800.00
	Intelligent Traffic System (ITS) Component Total				$122,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	9

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,800.00	LF	$9.75	$17,550.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	9.00	EA	$744.91	$6,704.19
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	5,400.00	LF	$2.17	$11,718.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	9.00	EA	$7,049.17	$63,442.53
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	9.00	EA	$601.42	$5,412.78
	Subcomponent Total				$104,827.50

Lighting Component Total	$104,827.50

Sequence 14 Total	$1,080,677.97

Sequence: 15 NDU - New Construction, Divided, Urban **Net Length:** 0.157 MI 830 LF

Description: 10E-5A from SR 91 to 830' LT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	240.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.157
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	122.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.57	AC	$30,623.87	$139,951.09
120-6	EMBANKMENT	7,571.48	CY	$21.02	$159,152.51
	Earthwork Component Total				$299,103.60

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	40.00 / 40.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	8,329.67	SY	$11.20	$93,292.30
285-709	OPTIONAL BASE,BASE GROUP 09	7,377.92	SY	$25.30	$186,661.38
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,217.36	TN	$138.21	$168,251.33
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	608.68	TN	$144.49	$87,948.17

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt

Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	106.00	EA	$7.32	$775.92
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.31	GM	$1,039.31	$322.19
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.63	GM	$388.03	$244.46
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.31	GM	$4,937.59	$1,530.65
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.31	GM	$4,277.51	$1,326.03
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.63	GM	$1,246.43	$785.25
	Roadway Component Total				$541,137.68

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	5,902.00	SY	$4.92	$29,037.84

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,660.03	LF	$1.85	$3,071.06
104-11	FLOATING TURBIDITY BARRIER	39.30	LF	$13.62	$535.27
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	39.30	LF	$10.38	$407.93
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	9.00	EA	$114.05	$1,026.45
107-1	LITTER REMOVAL	168.00	AC	$33.53	$5,633.04
107-2	MOWING	168.00	AC	$48.82	$8,201.76
	Shoulder Component Total				$50,996.35

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,660.03	LF	$26.14	$43,393.18
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	330.00	LF	$39.98	$13,193.40
	Median Component Total				$56,586.58

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.83	CY	$1,858.71	$5,260.15
425-1-351	INLETS, CURB, TYPE P-5, <10'	6.00	EA	$5,211.96	$31,271.76
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$4,637.83	$9,275.66
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$4,153.74	$4,153.74
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,932.16	$4,932.16
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	416.00	LF	$126.09	$52,453.44
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$288.14	$11,525.60
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	792.00	LF	$483.06	$382,583.52
570-1-2	PERFORMANCE TURF, SOD	47.79	SY	$4.92	$235.13
	Drainage Component Total				$501,691.16

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$402.31	$1,609.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33
	Signing Component Total				$209,670.57

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$62,800.00	$62,800.00
	Intelligent Traffic System (ITS) Component Total				$62,800.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	830.02	LF	$9.75	$8,092.70
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	164.75	LF	$23.35	$3,846.91
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$744.91	$4,469.46
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,031.44	LF	$2.17	$6,578.22
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	6.00	EA	$5,333.82	$32,002.92
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$601.42	$3,608.52
	Subcomponent Total				$58,598.73
	Lighting Component Total				$58,598.73

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	430.00
Begin height	17.00
End Height	17.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,310.00	SF	$27.00	$197,370.00
	Retaining Walls Component Total				$197,370.00

Sequence 15 Total $1,977,954.67

Sequence: 16 NDU - New Construction, Divided, Urban **Net Length:** 0.038 MI 200 LF

Description: 10E-5B from SR 91 to 200' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	220.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.038
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	122.00

Front Slope L/R	2 to 1 / 2 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.01	AC	$30,623.87	$30,930.11
120-1	REGULAR EXCAVATION	1,784.25	CY	$18.41	$32,848.04
	Earthwork Component Total				$63,778.15

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	7
Roadway Pavement Width L/R	40.00 / 51.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,252.82	SY	$11.20	$25,231.58
285-709	OPTIONAL BASE,BASE GROUP 09	2,023.35	SY	$25.30	$51,190.76
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	333.85	TN	$138.21	$46,141.41
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	166.93	TN	$144.49	$24,119.72

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	31.00	EA	$7.32	$226.92
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.08	GM	$1,039.31	$83.14
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.19	GM	$388.03	$73.73
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.08	GM	$4,937.59	$395.01
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.08	GM	$4,277.51	$342.20
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.19	GM	$1,246.43	$236.82
	Roadway Component Total				$148,041.29

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,867.00	SY	$4.92	$9,185.64

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	400.22	LF	$1.85	$740.41
104-11	FLOATING TURBIDITY BARRIER	9.48	LF	$13.62	$129.12
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	9.48	LF	$10.38	$98.40
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	2.00	EA	$114.05	$228.10
107-1	LITTER REMOVAL	40.32	AC	$33.53	$1,351.93
107-2	MOWING	40.32	AC	$48.82	$1,968.42
	Shoulder Component Total				$16,785.02

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	400.22	LF	$26.14	$10,461.75
	Median Component Total				$10,461.75

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	0.68	CY	$1,858.71	$1,263.92
425-1-351	INLETS, CURB, TYPE P-5, <10'	2.00	EA	$5,211.96	$10,423.92
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	$4,637.83	$4,637.83
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$4,153.74	$4,153.74
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,932.16	$4,932.16
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	104.00	LF	$126.09	$13,113.36
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	8.00	LF	$288.14	$2,305.12
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	192.00	LF	$483.06	$92,747.52
570-1-1	PERFORMANCE TURF	11.52	SY	$2.19	$25.23

Drainage Component Total $133,602.80

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33

Signing Component Total $208,463.64

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$15,200.00	$15,200.00

Intelligent Traffic System (ITS) Component Total $15,200.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	200.11	LF	$9.75	$1,951.07
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	39.72	LF	$23.35	$927.46
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	2.00	EA	$744.91	$1,489.82
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	730.86	LF	$2.17	$1,585.97
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	2.00	EA	$5,333.82	$10,667.64
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	2.00	EA	$601.42	$1,202.84
	Subcomponent Total				$17,824.80

Lighting Component Total $17,824.80

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	190.00
Begin height	18.50
End Height	18.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,515.00	SF	$27.00	$94,905.00
	Retaining Walls Component Total				$94,905.00

Sequence 16 Total $709,062.45

Sequence: 17 NDU - New Construction, Divided, Urban **Net Length:** 0.079 MI 415 LF

Description: 10E-5C from 200' RT of SR 91 to 615' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	180.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.079
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	115.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	115.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.72	AC	$30,623.87	$52,673.06
120-1	REGULAR EXCAVATION	4,347.94	CY	$18.41	$80,045.58
	Earthwork Component Total				$132,718.64

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	7
Roadway Pavement Width L/R	72.00 / 40.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,640.42	SY	$11.20	$63,172.70
285-709	OPTIONAL BASE,BASE GROUP 09	5,164.54	SY	$25.30	$130,662.86
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	852.15	TN	$138.21	$117,775.65
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	426.07	TN	$144.49	$61,562.85

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	64.00	EA	$7.32	$468.48
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.16	GM	$1,039.31	$166.29
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.39	GM	$388.03	$151.33
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.16	GM	$4,937.59	$790.01
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.16	GM	$4,277.51	$684.40
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.39	GM	$1,246.43	$486.11

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	20.67	TN	$280.64	$5,800.83
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	620.00	LF	$19.44	$12,052.80
	Roadway Component Total				$393,774.31

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	4,104.00	SY	$2.19	$8,987.76
570-1-2	PERFORMANCE TURF, SOD	4,104.00	SY	$4.92	$20,191.68

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	830.02	LF	$1.85	$1,535.54
104-11	FLOATING TURBIDITY BARRIER	19.65	LF	$13.62	$267.63
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	19.65	LF	$10.38	$203.97
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$114.05	$570.25
107-1	LITTER REMOVAL	84.00	AC	$33.53	$2,816.52
107-2	MOWING	84.00	AC	$48.82	$4,100.88
	Shoulder Component Total				$41,757.23

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	10.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	830.02	LF	$26.14	$21,696.72
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	325.00	LF	$39.98	$12,993.50
	Median Component Total				$34,690.22

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.41	CY	$1,858.71	$2,620.78
425-1-351	INLETS, CURB, TYPE P-5, <10'	3.00	EA	$5,211.96	$15,635.88
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	$4,637.83	$4,637.83
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$4,153.74	$4,153.74
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,932.16	$4,932.16
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	208.00	LF	$126.09	$26,226.72
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$288.14	$6,915.36
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	400.00	LF	$483.06	$193,224.00
570-1-2	PERFORMANCE TURF, SOD	23.89	SY	$4.92	$117.54

Retention Basin 1

Description	Value
Size	5 AC
Multiplier	2
Depth	6.00

Description	4.3 & 6.1 ACRE POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00	AC	$30,623.87	$306,238.70
120-1	REGULAR EXCAVATION	96,800.00	CY	$18.41	$1,782,088.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	4.00	EA	$9,648.41	$38,593.64
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	$668.83	$74,908.96
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00	LF	$345.27	$276,216.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	3,720.00	LF	$20.83	$77,487.60
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	4.00	EA	$2,154.81	$8,619.24
570-1-2	PERFORMANCE TURF, SOD	48,400.00	SY	$4.92	$238,128.00

Retention Basin 2

Description	Value
Size	5 AC
Multiplier	1
Depth	5.50
Description	4.6 ACRE POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$30,623.87	$153,119.35
120-1	REGULAR EXCAVATION	44,366.67	CY	$18.41	$816,790.39
400-2-2	CONC CLASS II, ENDWALLS	30.00	CY	$1,858.71	$55,761.30
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$5,018.84	$5,018.84
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00	LF	$20.83	$38,743.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$2,154.81	$4,309.62
570-1-1	PERFORMANCE TURF	24,200.00	SY	$2.19	$52,998.00

Retention Basin 3

Description	Value
Size	2 AC
Multiplier	4
Depth	6.00
Description	7.5 ACRE POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	8.00	AC	$30,623.87	$244,990.96
120-1	REGULAR EXCAVATION	77,440.00	CY	$18.41	$1,425,670.40
400-2-2	CONC CLASS II, ENDWALLS	72.00	CY	$1,858.71	$133,827.12
425-1-541	INLETS, DT BOT, TYPE D, <10'	4.00	EA	$5,018.84	$20,075.36
425-2-71	MANHOLES, J-7, <10'	4.00	EA	$9,648.41	$38,593.64
430-175-142	PIPE CULV, OPT MATL, ROUND,	224.00	LF	$668.83	$149,817.92

	42"S/CD				
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00	LF	$345.27	$276,216.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	4,720.00	LF	$20.83	$98,317.60
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	4.00	EA	$2,154.81	$8,619.24
570-1-1	PERFORMANCE TURF	38,720.00	SY	$2.19	$84,796.80

Retention Basin 4

Description	Value
Size	5 AC
Multiplier	1
Depth	6.00
Description	4.8 ACRE POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00	AC	$30,623.87	$153,119.35
120-1	REGULAR EXCAVATION	48,400.00	CY	$18.41	$891,044.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	$5,018.84	$5,018.84
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	$668.83	$37,454.48
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$345.27	$138,108.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00	LF	$20.83	$38,743.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00	EA	$2,154.81	$4,309.62
570-1-1	PERFORMANCE TURF	24,200.00	SY	$2.19	$52,998.00
	Drainage Component Total				$8,213,400.38

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$402.31	$804.62
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33
	Signing Component Total				$208,865.95

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$31,600.00	$31,600.00
	Intelligent Traffic System (ITS) Component Total				$31,600.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	415.01	LF	$9.75	$4,046.35
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	82.37	LF	$23.35	$1,923.34
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,515.72	LF	$2.17	$3,289.11
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	3.00	EA	$5,333.82	$16,001.46
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	$601.42	$1,804.26
	Subcomponent Total				$29,299.25
	Lighting Component Total				$29,299.25

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	440.00
Begin height	13.50
End Height	13.50
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,940.00	SF	$27.00	$160,380.00
	Retaining Walls Component Total				$160,380.00

Sequence 17 Total $9,246,485.98

Sequence: 18 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.104 MI 550 LF

Description: 10E-5D from 800' RT of SR 91 to 1225' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	33.00 / 0.00

Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.104
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	0 to 1 / 0 to 1
Existing Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Existing Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Front Slope L/R	2 to 1 / 2 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.42	AC	$30,623.87	$12,862.03
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	2,687.84	CY	$41.85	$112,486.10
	Earthwork Component Total				$125,348.13

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 19.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,319.20	SY	$11.20	$14,775.04
285-709	OPTIONAL BASE,BASE GROUP 09	1,181.66	SY	$25.30	$29,896.00
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	191.64	TN	$138.21	$26,486.56
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	95.82	TN	$144.49	$13,845.03

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT	0.10	GM	$1,039.31	$103.93

	MARK,STD,WHITE,SOLID,6"			
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.10 GM	$4,937.59	$493.76
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.10 GM	$4,277.51	$427.75
	Roadway Component Total			$86,028.07

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,500.00	SY	$4.92	$7,380.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,100.35	LF	$1.85	$2,035.65
104-11	FLOATING TURBIDITY BARRIER	10.42	LF	$13.62	$141.92
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	10.42	LF	$10.38	$108.16
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$114.05	$570.25
107-1	LITTER REMOVAL	42.00	AC	$33.53	$1,408.26
107-2	MOWING	42.00	AC	$48.82	$2,050.44
	Shoulder Component Total				$16,777.68

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.88	CY	$1,858.71	$3,494.37
425-1-351	INLETS, CURB, TYPE P-5, <10'	4.00	EA	$5,211.96	$20,847.84
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$4,637.83	$9,275.66
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	64.00	LF	$126.09	$8,069.76
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$288.14	$4,610.24
570-1-2	PERFORMANCE TURF, SOD	31.68	SY	$4.92	$155.87
	Drainage Component Total				$46,453.74

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12	3.00	AS	$402.31	$1,206.93

	SF				
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$30.99	$92.97
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33

Signing Component Total $197,599.05

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$41,600.00	$41,600.00

Intelligent Traffic System (ITS) Component Total $41,600.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	550.18	LF	$9.75	$5,364.26
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	109.20	LF	$23.35	$2,549.82
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,009.39	LF	$2.17	$4,360.38
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	4.00	EA	$5,333.82	$21,335.28
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$601.42	$2,405.68
	Subcomponent Total				$38,995.05

Lighting Component Total $38,995.06

Sequence 18 Total $552,801.73

Sequence: 19 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.106 MI 560 LF

Description: 10E-5E from 530' RT North of PSL

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	35.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.106
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	0 to 1 / 0 to 1
Existing Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Existing Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Front Slope L/R	2 to 1 / 2 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.45	AC	$30,623.87	$13,780.74
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	3,029.32	CY	$41.85	$126,777.04
	Earthwork Component Total				$140,557.78

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 22.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,529.99	SY	$11.20	$17,135.89
285-709	OPTIONAL BASE,BASE GROUP 09	1,389.94	SY	$25.30	$35,165.48
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	225.95	TN	$138.21	$31,228.55
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	112.98	TN	$144.49	$16,324.48

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.11	GM	$1,039.31	$114.32
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.11	GM	$4,937.59	$543.13
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.11	GM	$4,277.51	$470.53
	Roadway Component Total				$100,982.38

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,500.00	SY	$4.92	$12,300.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,120.42	LF	$1.85	$2,072.78
104-11	FLOATING TURBIDITY BARRIER	10.61	LF	$13.62	$144.51
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	10.61	LF	$10.38	$110.13
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$114.05	$570.25
107-1	LITTER REMOVAL	41.40	AC	$33.53	$1,388.14
107-2	MOWING	41.40	AC	$48.82	$2,021.15
	Shoulder Component Total				$21,689.96

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.91	CY	$1,858.71	$3,550.14
425-1-351	INLETS, CURB, TYPE P-5, <10'	4.00	EA	$5,211.96	$20,847.84
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$4,637.83	$9,275.66
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	64.00	LF	$126.09	$8,069.76
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$288.14	$4,610.24
570-1-2	PERFORMANCE TURF, SOD	32.25	SY	$4.92	$158.67
	Drainage Component Total				$46,512.31

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$30.99	$92.97
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33

Signing Component Total $197,599.05

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$42,400.00	$42,400.00

Intelligent Traffic System (ITS) Component Total $42,400.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	560.21	LF	$9.75	$5,462.05
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	111.19	LF	$23.35	$2,596.29
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,046.03	LF	$2.17	$4,439.89
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	4.00	EA	$5,333.82	$21,335.28
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$601.42	$2,405.68
	Subcomponent Total				$39,218.82

Lighting Component Total $39,218.83

Sequence 19 Total $588,960.31

Sequence: 20 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.106 MI 560 LF

Description: 10E-5F from 630' RT of PSL SB to 1125' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	21.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.106
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	0 to 1 / 0 to 1
Existing Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Existing Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.27	AC	$30,623.87	$8,268.44
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	4,396.18	CY	$41.85	$183,980.13
	Earthwork Component Total				$192,248.57

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 22.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,529.99	SY	$11.20	$17,135.89
285-709	OPTIONAL BASE,BASE GROUP 09	1,389.94	SY	$25.30	$35,165.48
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	225.95	TN	$138.21	$31,228.55
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	112.98	TN	$144.49	$16,324.48

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	14.00	EA	$7.32	$102.48
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.11	GM	$1,039.31	$114.32
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.11	GM	$4,937.59	$543.13
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.11	GM	$4,277.51	$470.53
	Roadway Component Total				$101,084.86

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,500.00	SY	$4.92	$12,300.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,120.42	LF	$1.85	$2,072.78
104-11	FLOATING TURBIDITY BARRIER	10.61	LF	$13.62	$144.51
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	10.61	LF	$10.38	$110.13
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$114.05	$570.25
107-1	LITTER REMOVAL	41.40	AC	$33.53	$1,388.14
107-2	MOWING	41.40	AC	$48.82	$2,021.15
	Shoulder Component Total				$21,689.96

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	0.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	400.00	LF	$39.98	$15,992.00
	Median Component Total				$15,992.00

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.91	CY	$1,858.71	$3,550.14
425-1-351	INLETS, CURB, TYPE P-5, <10'	4.00	EA	$5,211.96	$20,847.84
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$4,637.83	$9,275.66
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	64.00	LF	$126.09	$8,069.76
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$288.14	$4,610.24
570-1-2	PERFORMANCE TURF, SOD	32.25	SY	$4.92	$158.67
	Drainage Component Total				$46,512.31

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$30.99	$92.97
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33
	Signing Component Total				$197,599.05

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$42,400.00	$42,400.00
	Intelligent Traffic System (ITS) Component Total				$42,400.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	560.21	LF	$9.75	$5,462.05
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	111.19	LF	$23.35	$2,596.29
635-2-11	PULL & SPLICE BOX, F&I, 13" x	4.00	EA	$744.91	$2,979.64

	24"			
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,046.03 LF	$2.17	$4,439.89
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	4.00 EA	$5,333.82	$21,335.28
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00 EA	$601.42	$2,405.68
	Subcomponent Total			$39,218.82
	Lighting Component Total			$39,218.83

Sequence 20 Total $656,745.58

Sequence: 21 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.106 MI 560 LF

Description: 10E-5G from SW Bayshore Blvd NB on Ramp to 370' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	20.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.106
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	0 to 1 / 0 to 1
Existing Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Existing Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Front Slope L/R	6 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.26	AC	$30,623.87	$7,962.21
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1,172.43	CY	$41.85	$49,066.20
	Earthwork Component Total				$57,028.41

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 11.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330

Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	845.29	SY	$11.20	$9,467.25
285-709	OPTIONAL BASE,BASE GROUP 09	705.24	SY	$25.30	$17,842.57
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	112.98	TN	$138.21	$15,614.97
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	56.49	TN	$144.49	$8,162.24

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.11	GM	$1,039.31	$114.32
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.11	GM	$4,937.59	$543.13
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.11	GM	$4,277.51	$470.53
	Roadway Component Total				$52,215.01

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	3,200.00	SY	$4.92	$15,744.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,120.42	LF	$1.85	$2,072.78
104-11	FLOATING TURBIDITY BARRIER	10.61	LF	$13.62	$144.51
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	10.61	LF	$10.38	$110.13
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00

104-18	INLET PROTECTION SYSTEM	5.00	EA	$114.05	$570.25
107-1	LITTER REMOVAL	42.00	AC	$33.53	$1,408.26
107-2	MOWING	42.00	AC	$48.82	$2,050.44
	Shoulder Component Total				$25,183.37

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.91	CY	$1,858.71	$3,550.14
425-1-351	INLETS, CURB, TYPE P-5, <10'	4.00	EA	$5,211.96	$20,847.84
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$4,637.83	$9,275.66
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	64.00	LF	$126.09	$8,069.76
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$288.14	$4,610.24
570-1-2	PERFORMANCE TURF, SOD	32.25	SY	$4.92	$158.67
	Drainage Component Total				$46,512.31

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$30.99	$92.97
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-124	OH STATIC SIGN STR, F&I, S 41-50 FT	1.00	EA	$179,000.00	$179,000.00
	Signing Component Total				$187,487.72

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$42,400.00	$42,400.00
	Intelligent Traffic System (ITS) Component Total				$42,400.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	560.21	LF	$9.75	$5,462.05
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	111.19	LF	$23.35	$2,596.29
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$744.91	$2,979.64
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,046.03	LF	$2.17	$4,439.89
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	4.00	EA	$5,333.82	$21,335.28
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$601.42	$2,405.68
	Subcomponent Total				$39,218.82
	Lighting Component Total				$39,218.83

Sequence 21 Total $450,045.65

Date: 4/8/2022 9:24:01 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English

Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 38 Project Grand Total **$59,781,621.41**

Description: 20210527 - CONSULTANT UPDATE. 20210513 Copied from FPID 423374-1-52-01 Version 16 [4A.Port St. Lucie Blvd. (Alt. 2) [Seq. 10E] (MP 143.1)]

Project Sequences Subtotal				**$39,425,865.40**
102-1	Maintenance of Traffic	10.00	%	$3,942,586.54
101-1	Mobilization	10.00	%	$4,336,845.19
Project Sequences Total				**$47,705,297.13**
Project Unknowns		25.00	%	$11,926,324.28
Design/Build		0.00	%	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00

Project Non-Bid Subtotal	**$150,000.00**
Version 38 Project Grand Total	**$59,781,621.41**

Date: 4/8/2022 9:12:09 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 27 Project Grand Total **$35,058,928.95**

Description: Date 20210520 - Consultant Updates. Date 20210513 - Copied from FPID 423374-1-52-01 Version 4 [5A.Crosstown Pkwy. (Alt. 3) [Seq. 11A & 12A] (MP 144.7)]

Sequence: 1 NDR - New Construction, Divided, Rural **Net Length:** 0.288 MI 1,520 LF

Description: 11A-1A - FROM STA. 1493+21.21 TO STA. 1508+00.00

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	22.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.288
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 6.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.77	AC	$31,149.19	$23,984.88
120-6	EMBANKMENT	3,006.92	CY	$20.93	$62,934.84
	Earthwork Component Total				$86,919.72

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,053.63	SY	$11.20	$45,400.66
285-709	OPTIONAL BASE,BASE GROUP 09	2,138.29	SY	$25.30	$54,098.74
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	780.32	TN	$119.42	$93,185.81
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	81.07	TN	$148.28	$12,021.06

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.15	GM	$1,039.31	$1,195.21
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	1.15	GM	$4,983.20	$5,730.68
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	1.15	GM	$4,937.59	$5,678.23

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,485.00	LF	$315.35	$468,294.75
	Roadway Component Total				$685,605.14

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

104-10-3	SEDIMENT BARRIER	3,952.29	LF	$2.08	$8,220.76
104-11	FLOATING TURBIDITY BARRIER	71.97	LF	$14.51	$1,044.28
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	71.97	LF	$10.38	$747.05
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,478.86	$3,478.86
104-18	INLET PROTECTION SYSTEM	2.00	EA	$115.30	$230.60
107-1	LITTER REMOVAL	293.16	AC	$33.53	$9,829.65
107-2	MOWING	293.16	AC	$50.48	$14,798.72
	Shoulder Component Total				$38,349.92

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	12.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 12.00
Paved Median Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	2,082.55	SY	$25.30	$52,688.52
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	334.42	TN	$153.46	$51,320.09
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	4.46	TN	$148.28	$661.33
	Median Component Total				$104,669.94

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-551	INLETS, DT BOT, TYPE E, <10'	2.00	EA	$5,081.01	$10,162.02
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	232.00	LF	$107.06	$24,837.92
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	104.00	LF	$126.09	$13,113.36
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	88.00	LF	$145.93	$12,841.84
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	12.00	EA	$1,745.67	$20,948.04
524-1-1	CONCRETE DITCH PAVT, NR, 3"	575.80	SY	$141.05	$81,216.59
570-1-1	PERFORMANCE TURF	202.68	SY	$2.45	$496.57

Box Culvert 1

Description	Value
Size	12 x 10
Length	248.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	476.48	CY	$1,227.21	$584,741.02
415-1-1	REINF STEEL- ROADWAY	51,882.00	LB	$1.79	$92,868.78

Retention Basin 1

Description	Value
Size	15 AC
Multiplier	1
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	15.00	AC	$31,149.19	$467,237.85
120-1	REGULAR EXCAVATION	145,200.00	CY	$19.92	$2,892,384.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	3.00	EA	$9,648.41	$28,945.23
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	104.00	LF	$668.83	$69,558.32
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	600.00	LF	$345.27	$207,162.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	3,600.00	LF	$20.83	$74,988.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	4.00	EA	$2,154.81	$8,619.24
570-1-2	PERFORMANCE TURF, SOD	72,600.00	SY	$4.92	$357,192.00

Retention Basin 2

Description	Value
Size	15 AC
Multiplier	1
Depth	6.00
Description	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	15.00	AC	$31,149.19	$467,237.85
120-1	REGULAR EXCAVATION	145,200.00	CY	$19.92	$2,892,384.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	3.00	EA	$9,648.41	$28,945.23
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	104.00	LF	$668.83	$69,558.32
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	600.00	LF	$345.27	$207,162.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	3,600.00	LF	$20.83	$74,988.00
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	4.00	EA	$2,154.81	$8,619.24
570-1-2	PERFORMANCE TURF, SOD	72,600.00	SY	$4.92	$357,192.00

Drainage Component Total $9,073,474.78

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$115,160.00	$115,160.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$115,160.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	8

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,600.00	LF	$9.75	$15,600.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	$743.31	$5,946.48
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,800.00	LF	$3.01	$14,448.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	8.00	EA	$7,587.46	$60,699.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	8.00	EA	$630.43	$5,043.44
	Subcomponent Total				$101,737.60
	Lighting Component Total				$101,737.60

BRIDGES COMPONENT

Bridge 12A-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	306.67
Width (LF)	79.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$98.70**
Basic Bridge Cost	**$2,271,274.69**
Description	RAMP OVER ML

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	175.56	CY	$485.22	$85,185.22
415-1-9	REINF STEEL- APPROACH SLABS	30,723.00	LB	$1.13	$34,716.99
	Bridge 12A-1 Total				$2,391,176.90

Bridge 940104

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Type	Misc/Rehab
Structure No.	940104
Description	REMOVE BRIDGE FTW SB/UNNAMED OUTFALL

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	1,748.00	SF	$68.85	$120,349.80
	Bridge 940104 Total				$120,349.80

Bridge 940105

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Type	Misc/Rehab
Structure No.	940105
Description	REMOVE BRIDGE FTE NB/UNNAMED OUTFALL

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	1,565.60	SF	$68.85	$107,791.56
	Bridge 940105 Total				$107,791.56
	Bridges Component Total				$2,619,318.26

Sequence 1 Total $12,825,235.36

Sequence: 2 NDR - New Construction, Divided, Rural **Net Length:** 0.461 MI 2,435 LF

Description: 12A-1A - FROM STA. 1508+00 TO STA. 1532+15.85

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 75.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.461
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.19	AC	$31,149.19	$130,515.11
120-6	EMBANKMENT	9,833.68	CY	$20.93	$205,818.92
	Earthwork Component Total				$336,334.03

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,305.41	SY	$11.20	$81,820.59
285-709	OPTIONAL BASE,BASE GROUP 09	4,237.14	SY	$25.30	$107,199.64
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	669.66	TN	$138.21	$92,553.71
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	162.34	TN	$148.28	$24,071.78

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.84	GM	$1,039.31	$1,912.33
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	1.84	GM	$4,983.20	$9,169.09
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	1.84	GM	$4,937.59	$9,085.17

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	51.33	TN	$280.64	$14,405.25
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	2,470.00	LF	$315.35	$778,914.50

536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,540.00 LF	$19.44	$29,937.60

Roadway Component Total $1,149,069.66

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	4.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,171.57	SY	$10.59	$12,406.93
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	89.29	TN	$138.21	$12,340.77
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7.14	TN	$148.28	$1,058.72
570-1-2	PERFORMANCE TURF, SOD	541.14	SY	$4.92	$2,662.41

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	12,446.00	SY	$4.92	$61,234.32
	Comment: 46' TURF SOD WIDTH LT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,331.35	LF	$2.08	$13,169.21
104-11	FLOATING TURBIDITY BARRIER	115.30	LF	$14.51	$1,673.00
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	115.30	LF	$10.38	$1,196.81
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,478.86	$3,478.86
104-18	INLET PROTECTION SYSTEM	3.00	EA	$115.30	$345.90
107-1	LITTER REMOVAL	469.56	AC	$33.53	$15,744.35
107-2	MOWING	469.56	AC	$50.48	$23,703.39

Shoulder Component Total $149,014.67

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	8.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 6.00
Paved Median Shoulder Width L/R	0.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O

Rumble Strips ï¿½No. of Sides 0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,712.71	SY	$15.75	$26,975.18
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	133.93	TN	$138.21	$18,510.47
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7.14	TN	$148.28	$1,058.72
	Median Component Total				$46,544.37

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-551	INLETS, DT BOT, TYPE E, <10'	3.00	EA	$5,081.01	$15,243.03
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	368.00	LF	$107.06	$39,398.08
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	160.00	LF	$126.09	$20,174.40
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	136.00	LF	$145.93	$19,846.48
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	19.00	EA	$1,745.67	$33,167.73
524-1-1	CONCRETE DITCH PAVT, NR, 3"	922.40	SY	$141.05	$130,104.52
570-1-1	PERFORMANCE TURF	324.68	SY	$2.45	$795.47
	Drainage Component Total				$258,729.71

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	12.00	AS	$1,399.59	$16,795.08
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	3.00	AS	$6,638.71	$19,916.13
	Signing Component Total				$41,778.78

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$184,480.00	$184,480.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$184,480.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	13

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,600.00	LF	$9.75	$25,350.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	13.00	EA	$743.31	$9,663.03
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7,800.00	LF	$3.01	$23,478.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	13.00	EA	$7,587.46	$98,636.98
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	13.00	EA	$630.43	$8,195.59
	Subcomponent Total				$165,323.60
	Lighting Component Total				$165,323.60

Sequence 2 Total $2,331,274.82

Sequence: 3 NDR - New Construction, Divided, Rural **Net Length:** 0.144 MI 760 LF

Description: 12A-1B - FROM STA. 1528+17.65 TO STA. 1533+18.42

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 75.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.144
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.31	AC	$31,149.19	$40,805.44
120-6	EMBANKMENT	15,034.34	CY	$20.93	$314,668.74
	Earthwork Component Total				$355,474.18

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1

Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,279.38	SY	$11.20	$25,529.06
285-709	OPTIONAL BASE,BASE GROUP 09	1,322.04	SY	$25.30	$33,447.61
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	208.94	TN	$138.21	$28,877.60
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	50.65	TN	$148.28	$7,510.38

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.58	GM	$1,039.31	$602.80
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.58	GM	$4,983.20	$2,890.26
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.58	GM	$4,937.59	$2,863.80

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	20.33	TN	$280.64	$5,705.41
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	800.00	LF	$315.35	$252,280.00
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	610.00	LF	$19.44	$11,858.40
	Roadway Component Total				$371,565.32

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	4.00 / 0.00

Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	365.54	SY	$10.59	$3,871.07
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	27.86	TN	$138.21	$3,850.53
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.23	TN	$148.28	$330.66
570-1-2	PERFORMANCE TURF, SOD	168.84	SY	$4.92	$830.69

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	3,885.00	SY	$4.92	$19,114.20
	Comment: 46' TURF WIDTH LT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,975.46	LF	$2.08	$4,108.96
104-11	FLOATING TURBIDITY BARRIER	35.98	LF	$14.51	$522.07
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	35.98	LF	$10.38	$373.47
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,478.86	$3,478.86
104-18	INLET PROTECTION SYSTEM	1.00	EA	$115.30	$115.30
107-1	LITTER REMOVAL	146.58	AC	$33.53	$4,914.83
107-2	MOWING	146.58	AC	$50.48	$7,399.36
	Shoulder Component Total				$48,910.00

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	8.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 6.00
Paved Median Shoulder Width L/R	0.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	534.39	SY	$15.75	$8,416.64
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	41.79	TN	$138.21	$5,775.80
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.23	TN	$148.28	$330.66
	Median Component Total				$14,523.10

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	$5,081.01	$5,081.01
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	120.00	LF	$107.06	$12,847.20
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	56.00	LF	$126.09	$7,061.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	6.00	EA	$1,745.67	$10,474.02
524-1-1	CONCRETE DITCH PAVT, NR, 3"	287.80	SY	$141.05	$40,594.19
570-1-1	PERFORMANCE TURF	101.31	SY	$2.45	$248.21
	Drainage Component Total				$83,310.31

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$189,111.33	$567,333.99
	Signing Component Total				$584,638.63

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$57,600.00	$57,600.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$57,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$743.31	$2,973.24
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	$3.01	$7,224.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	4.00	EA	$7,587.46	$30,349.84
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$630.43	$2,521.72
	Subcomponent Total				$50,868.80
	Lighting Component Total				$50,868.80

Sequence 3 Total $1,566,890.34

Sequence: 4 NDR - New Construction, Divided, Rural **Net Length:** 0.451 MI 2,380 LF

Description: 11A-2A - FROM STA. 1484+24.61 TO STA. 1508+00.00

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 39.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.451
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	6.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.13	AC	$31,149.19	$66,347.77
120-6	EMBANKMENT	7,922.61	CY	$20.93	$165,820.23
	Earthwork Component Total				$232,168.00

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

160-4	TYPE B STABILIZATION	11,372.18	SY	$11.20	$127,368.42
285-709	OPTIONAL BASE,BASE GROUP 09	3,348.18	SY	$25.30	$84,708.95
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	1,221.85	TN	$119.42	$145,913.33
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	126.95	TN	$148.28	$18,824.15

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.80	GM	$1,039.31	$1,870.76
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	1.80	GM	$4,983.20	$8,969.76
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	1.80	GM	$4,937.59	$8,887.66
	Roadway Component Total				$396,543.03

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,188.58	LF	$2.08	$12,872.25
104-11	FLOATING TURBIDITY BARRIER	112.70	LF	$14.51	$1,635.28
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	112.70	LF	$10.38	$1,169.83
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,478.86	$3,478.86
104-18	INLET PROTECTION SYSTEM	3.00	EA	$115.30	$345.90
107-1	LITTER REMOVAL	459.06	AC	$33.53	$15,392.28
107-2	MOWING	459.06	AC	$50.48	$23,173.35
	Shoulder Component Total				$58,067.75

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	31.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 31.00
Paved Median Shoulder Width L/R	0.00 / 31.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	8,285.82	SY	$25.30	$209,631.25
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,352.76	TN	$153.46	$207,594.55
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.98	TN	$148.28	$1,034.99
	Median Component Total				$418,260.79

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-551	INLETS, DT BOT, TYPE E, <10'	3.00	EA	$5,081.01	$15,243.03
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	360.00	LF	$107.06	$38,541.60
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	160.00	LF	$126.09	$20,174.40
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	136.00	LF	$145.93	$19,846.48
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	19.00	EA	$1,745.67	$33,167.73
524-1-1	CONCRETE DITCH PAVT, NR, 3"	901.60	SY	$141.05	$127,170.68
570-1-1	PERFORMANCE TURF	317.36	SY	$2.45	$777.53
	Drainage Component Total				$254,921.45

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	11.00	AS	$1,399.59	$15,395.49
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	3.00	AS	$6,638.71	$19,916.13

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$189,111.33	$567,333.99
	Signing Component Total				$607,713.18

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$180,320.00	$180,320.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$180,320.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	12

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,400.00	LF	$9.75	$23,400.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	$743.31	$8,919.72
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7,200.00	LF	$3.01	$21,672.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	12.00	EA	$7,587.46	$91,049.52
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	12.00	EA	$630.43	$7,565.16
	Subcomponent Total				$152,606.40
	Lighting Component Total				$152,606.40

Sequence 4 Total $2,300,600.60

Sequence: 5 NDR - New Construction, Divided, Rural **Net Length:** 0.470 MI 2,480 LF

Description: 12A-2A - FROM STA. 1508+00 TO STA. 1532+41.84

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 75.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.470
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 6 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	5.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.27	AC	$31,149.19	$133,007.04
120-6	EMBANKMENT	20,900.59	CY	$20.93	$437,449.35
	Earthwork Component Total				$570,456.39

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	7,440.05	SY	$11.20	$83,328.56
285-709	OPTIONAL BASE,BASE GROUP 09	4,315.23	SY	$25.30	$109,175.32
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	682.00	TN	$138.21	$94,259.22
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	165.33	TN	$148.28	$24,515.13

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.88	GM	$1,039.31	$1,953.90
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	1.88	GM	$4,983.20	$9,368.42
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	1.88	GM	$4,937.59	$9,282.67

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	51.33	TN	$280.64	$14,405.25
521-72-40	SHLDR CONC BARRIER,38" OR	650.00	LF	$315.35	$204,977.50

	44" HEIGHT				
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,540.00	LF	$19.44	$29,937.60
	Roadway Component Total				$581,203.57

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Paved Outside Shoulder Width L/R	0.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,193.16	SY	$10.59	$12,635.56
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	90.93	TN	$138.21	$12,567.44
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7.27	TN	$148.28	$1,078.00
570-1-2	PERFORMANCE TURF, SOD	551.11	SY	$4.92	$2,711.46

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	12,676.00	SY	$4.92	$62,365.92
	Comment: 46' TURF SOD WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,448.04	LF	$2.08	$13,411.92
104-11	FLOATING TURBIDITY BARRIER	117.42	LF	$14.51	$1,703.76
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	117.42	LF	$10.38	$1,218.82
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,478.86	$3,478.86
104-18	INLET PROTECTION SYSTEM	3.00	EA	$115.30	$345.90
107-1	LITTER REMOVAL	478.38	AC	$33.53	$16,040.08
107-2	MOWING	478.38	AC	$50.48	$24,148.62
	Shoulder Component Total				$151,706.34

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	8.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 6.00
Paved Median Shoulder Width L/R	0.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80

Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	1,744.28	SY	$15.75	$27,472.41
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	136.40	TN	$138.21	$18,851.84
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	7.27	TN	$148.28	$1,078.00
	Median Component Total				$47,402.25

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-551	INLETS, DT BOT, TYPE E, <10'	3.00	EA	$5,081.01	$15,243.03
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	376.00	LF	$107.06	$40,254.56
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	168.00	LF	$126.09	$21,183.12
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	144.00	LF	$145.93	$21,013.92
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	19.00	EA	$1,745.67	$33,167.73
524-1-1	CONCRETE DITCH PAVT, NR, 3"	939.40	SY	$141.05	$132,502.37
570-1-1	PERFORMANCE TURF	330.67	SY	$2.45	$810.14
	Drainage Component Total				$264,174.87

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	12.00	AS	$1,399.59	$16,795.08
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	3.00	AS	$6,638.71	$19,916.13
	Signing Component Total				$41,778.78

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$187,880.00	$187,880.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				

Intelligent Traffic System (ITS) Component Total $187,880.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	13

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,600.00	LF	$9.75	$25,350.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	13.00	EA	$743.31	$9,663.03
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7,800.00	LF	$3.01	$23,478.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	13.00	EA	$7,587.46	$98,636.98
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	13.00	EA	$630.43	$8,195.59
	Subcomponent Total				$165,323.60

Lighting Component Total $165,323.60

Sequence 5 Total $2,009,925.80

Sequence: 6 NDR - New Construction, Divided, Rural **Net Length:** 0.160 MI 845 LF

Description: 12A-2B - FROM STA. 1528+29.26 TO STA. 1533+76.38

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 75.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.160
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 2 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	5.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.45	AC	$31,149.19	$45,166.33
120-6	EMBANKMENT	7,115.09	CY	$20.93	$148,918.83

Earthwork Component Total $194,085.16

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,534.40	SY	$11.20	$28,385.28
285-709	OPTIONAL BASE,BASE GROUP 09	1,469.95	SY	$25.30	$37,189.74
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	232.32	TN	$138.21	$32,108.95
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	56.32	TN	$148.28	$8,351.13

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.64	GM	$1,039.31	$665.16
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.64	GM	$4,983.20	$3,189.25
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.64	GM	$4,937.59	$3,160.06

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	22.17	TN	$280.64	$6,221.79
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	665.00	LF	$19.44	$12,927.60
	Roadway Component Total				$132,198.96

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Paved Outside Shoulder Width L/R	0.00 / 4.00

Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	406.44	SY	$10.59	$4,304.20
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	30.98	TN	$138.21	$4,281.75
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.48	TN	$148.28	$367.73
570-1-2	PERFORMANCE TURF, SOD	187.73	SY	$4.92	$923.63

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,319.00	SY	$4.92	$21,249.48
	Comment: 46' TURF SOD WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,196.48	LF	$2.08	$4,568.68
104-11	FLOATING TURBIDITY BARRIER	40.00	LF	$14.51	$580.40
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	40.00	LF	$10.38	$415.20
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,478.86	$3,478.86
104-18	INLET PROTECTION SYSTEM	1.00	EA	$115.30	$115.30
107-1	LITTER REMOVAL	162.96	AC	$33.53	$5,464.05
107-2	MOWING	162.96	AC	$50.48	$8,226.22
	Shoulder Component Total				$53,975.50

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	8.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	0.00 / 6.00
Paved Median Shoulder Width L/R	0.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-704	OPTIONAL BASE,BASE GROUP 04	594.18	SY	$15.75	$9,358.34
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	46.46	TN	$138.21	$6,421.24
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.48	TN	$148.28	$367.73
	Median Component Total				$16,147.31

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	$5,081.01	$5,081.01
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	128.00	LF	$107.06	$13,703.68
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	56.00	LF	$126.09	$7,061.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	7.00	EA	$1,745.67	$12,219.69
524-1-1	CONCRETE DITCH PAVT, NR, 3"	320.00	SY	$141.05	$45,136.00
570-1-1	PERFORMANCE TURF	112.64	SY	$2.45	$275.97
	Drainage Component Total				$90,482.03

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
	Signing Component Total				$17,304.64

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$64,000.00	$64,000.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$64,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$743.31	$3,716.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$3.01	$9,030.00

715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00 EA	$7,587.46	$37,937.30
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00 EA	$630.43	$3,152.15
	Subcomponent Total			$63,586.00
	Lighting Component Total			$63,586.00

Sequence 6 Total $631,779.60

Sequence: 7 MIS - Miscellaneous Construction **Net Length:** 0.000 MI 0 LF

Description: Bi-Directional AET Ramp Toll Site

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
735-74-1	TOLL BUILDING & GANTRY	1.00	LS	$1,414,577.08	$1,414,577.08
	Miscellaneous Component Total				$1,414,577.08

Sequence 7 Total $1,414,577.08

Date: 4/8/2022 9:12:11 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English

Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 27 Project Grand Total **$35,058,928.95**

Description: Date 20210520 - Consultant Updates. Date 20210513 - Copied from FPID 423374-1-52-01 Version 4 [5A.Crosstown Pkwy. (Alt. 3) [Seq. 11A & 12A] (MP 144.7)]

Project Sequences Subtotal			**$23,080,283.60**
102-1	Maintenance of Traffic	10.00 %	$2,308,028.36
101-1	Mobilization	10.00 %	$2,538,831.20
Project Sequences Total			**$27,927,143.16**
Project Unknowns		25.00 %	$6,981,785.79
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)	LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal				**$150,000.00**
Version 27 Project Grand Total				**$35,058,928.95**

Date: 4/8/2022 9:14:19 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 32 Project Grand Total **$31,104,430.06**

Description: 20210526 - Consultant Update 20210513 Copied from FPID 423374-1-52-01 Version 9 [6B. MIDWAY RD. (ALT. 1)[SEQ. 15B] (MP 150.4)]

Sequence: 1 NUR - New Construction, Undivided, Rural **Net Length:** 0.125 MI 660 LF

Description: 15B-1A FROM STA. 1813+78.31 TO STA. 1819+40.06

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	106.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.125
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.61	AC	$30,623.87	$49,304.43
120-6	EMBANKMENT	10,830.84	CY	$20.93	$226,689.48
	Earthwork Component Total				$275,993.91

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,520.00	SY	$11.20	$39,424.00

285-709	OPTIONAL BASE,BASE GROUP 09	1,784.20	SY	$25.30	$45,140.26
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	290.40	TN	$138.21	$40,136.18
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	70.40	TN	$148.28	$10,438.91

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	17.00	EA	$7.32	$124.44
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,039.31	$259.83
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.12	GM	$377.66	$45.32
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,277.51	$1,069.38
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.25	GM	$4,263.58	$1,065.90
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.12	GM	$1,228.02	$147.36

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	6.67	TN	$280.64	$1,871.87
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	200.00	LF	$19.44	$3,888.00
	Roadway Component Total				$143,611.45

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 8.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,515.07	SY	$10.59	$16,044.59
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	121.00	TN	$153.46	$18,568.66
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.87	TN	$148.28	$573.84
570-1-2	PERFORMANCE TURF, SOD	293.33	SY	$4.92	$1,443.18

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,716.00	LF	$1.72	$2,951.52
104-11	FLOATING TURBIDITY BARRIER	31.25	LF	$13.62	$425.62
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	31.25	LF	$10.38	$324.38
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	63.84	AC	$33.53	$2,140.56
107-2	MOWING	63.84	AC	$48.82	$3,116.67

Shoulder Component Total $48,672.03

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	104.00	LF	$107.06	$11,134.24
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$145.93	$3,502.32
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00	EA	$1,745.67	$8,728.35
570-1-2	PERFORMANCE TURF, SOD	88.00	SY	$4.92	$432.96

Box Culvert 1

Description	Value
Size	10 x 5
Length	174.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	197.54	CY	$1,227.21	$242,423.06
415-1-1	REINF STEEL- ROADWAY	23,831.40	LB	$1.93	$45,994.60

Box Culvert 2

Description	Value
Size	10 x 5
Length	476.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-4-1	CONC CLASS IV, CULVERTS	502.56	CY	$1,227.21	$616,746.66

415-1-1	REINF STEEL- ROADWAY	61,913.60	LB	$1.93	$119,493.25

Retention Basin 1

Description	Value
Size	10 AC
Multiplier	1
Depth	6.00
Description	8 AC POND

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00	AC	$30,623.87	$306,238.70
120-1	REGULAR EXCAVATION	96,800.00	CY	$18.41	$1,782,088.00
400-2-2	CONC CLASS II, ENDWALLS	36.00	CY	$1,858.71	$66,913.56
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	$5,018.84	$10,037.68
425-2-71	MANHOLES, J-7, <10'	2.00	EA	$9,648.41	$19,296.82
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	104.00	LF	$668.83	$69,558.32
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	$344.47	$137,788.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00	LF	$20.83	$57,907.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00	EA	$1,969.61	$5,908.83
570-1-2	PERFORMANCE TURF, SOD	48,400.00	SY	$4.92	$238,128.00
	Drainage Component Total				$3,742,320.75

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$9,266.34

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$50,000.00	$50,000.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$50,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$743.31	$2,973.24
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	$2.17	$5,208.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	4.00	EA	$7,049.17	$28,196.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$600.24	$2,400.96
	Subcomponent Total				$46,578.88
	Lighting Component Total				$46,578.88

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	440.00
Begin height	20.00
End Height	20.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	8,800.00	SF	$27.00	$237,600.00

Retaining Wall 2

Description	Value
Length	385.00
Begin height	7.00
End Height	7.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	2,695.00	SF	$27.00	$72,765.00
	Retaining Walls Component Total				$310,365.00

Sequence 1 Total $4,626,808.36

Sequence: 2 NUR - New Construction, Undivided, Rural **Net Length:** 0.204 MI 1,075 LF

Description: 15B-1B FROM STA. 1819+40.06 TO STA. 1830+00.00

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	56.00 / 0.00

Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.204
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.38	AC	$30,623.87	$42,260.94
120-6	EMBANKMENT	9,897.14	CY	$20.93	$207,147.14
	Earthwork Component Total				$249,408.08

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,225.02	SY	$11.20	$36,120.22
285-709	OPTIONAL BASE,BASE GROUP 09	1,831.10	SY	$25.30	$46,326.83
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	295.63	TN	$138.21	$40,859.02
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	71.67	TN	$148.28	$10,627.23

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.41	GM	$1,039.31	$426.12
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.41	GM	$4,277.51	$1,753.78
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.41	GM	$4,263.58	$1,748.07

Peripherals Subcomponent

Description	Value

Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	10.33	TN	$280.64	$2,899.01
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	815.00	LF	$315.35	$257,010.25
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	310.00	LF	$19.44	$6,026.40
	Roadway Component Total				$403,796.93

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,512.18	SY	$10.59	$16,013.99
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	118.25	TN	$138.21	$16,343.33
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.31	TN	$148.28	$935.65

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,795.02	LF	$1.72	$4,807.43
104-11	FLOATING TURBIDITY BARRIER	50.90	LF	$13.62	$693.26
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	50.90	LF	$10.38	$528.34
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	103.74	AC	$33.53	$3,478.40
107-2	MOWING	103.74	AC	$48.82	$5,064.59
	Shoulder Component Total				$50,947.99

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	168.00	LF	$107.06	$17,986.08

430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00 LF	$145.93	$5,837.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00 EA	$1,745.67	$15,711.03
570-1-2	PERFORMANCE TURF, SOD	143.33 SY	$4.92	$705.18
	Drainage Component Total			$40,239.49

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$81,600.00	$81,600.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$81,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00	LF	$9.75	$11,700.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$743.31	$4,459.86
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00	LF	$2.17	$7,812.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	6.00	EA	$7,049.17	$42,295.02
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$600.24	$3,601.44
	Subcomponent Total				$69,868.32
	Lighting Component Total				$69,868.32

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,115.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	12,265.00	SF	$27.00	$331,155.00
	Retaining Walls Component Total				$331,155.00

Sequence 2 Total $1,239,081.33

Sequence: 3 NUR - New Construction, Undivided, Rural **Net Length:** 0.197 MI 1,042 LF

Description: 15B-1C FROM STA. 1833+14.78 TO STA. 1843+57.10

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.197
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.19	AC	$30,623.87	$36,442.41
120-6	EMBANKMENT	9,557.53	CY	$20.93	$200,039.10
	Earthwork Component Total				$236,481.51

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,125.23	SY	$11.20	$35,002.58
285-709	OPTIONAL BASE,BASE GROUP 09	1,774.44	SY	$25.30	$44,893.33

334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	286.48 TN	$138.21	$39,594.40
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	69.45 TN	$148.28	$10,298.05

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.39	GM	$4,277.51	$1,668.23
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.39	GM	$4,263.58	$1,662.80

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	775.00	LF	$315.35	$244,396.25

Roadway Component Total $377,515.64

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,465.39	SY	$10.59	$15,518.48
334-1-52	SUPERPAVE ASPH CONC, TRAF B, PG76-22	114.59	TN	$142.02	$16,274.07
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.11	TN	$148.28	$905.99

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,708.53	LF	$1.72	$4,658.67
104-11	FLOATING TURBIDITY BARRIER	49.32	LF	$13.62	$671.74
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	49.32	LF	$10.38	$511.94
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	2.39	AC	$33.53	$80.14
107-2	MOWING	2.39	AC	$48.82	$116.68
	Shoulder Component Total				$41,820.71

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$78,800.00	$78,800.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$78,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00	LF	$9.75	$11,700.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$743.31	$4,459.86
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00	LF	$2.17	$7,812.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	6.00	EA	$7,049.17	$42,295.02
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$600.24	$3,601.44
	Subcomponent Total				$69,868.32
	Lighting Component Total				$69,868.32

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,045.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

548-12	RET WALL SYSTEM, PERM, EX BARRIER	11,495.00 SF	$27.00	$310,365.00
	Retaining Walls Component Total			$310,365.00

Sequence 3 Total $1,114,851.18

Sequence: 4 NUR - New Construction, Undivided, Rural **Net Length:** 0.252 MI 1,328 LF

Description: 15B-1D FROM STA. 1843+57.10 TO STA. 1856+85.49

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	22.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.252
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.67	AC	$30,623.87	$20,517.99
120-6	EMBANKMENT	4,607.19	CY	$20.93	$96,428.49
	Earthwork Component Total				$116,946.48

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,836.21	SY	$11.20	$42,965.55
285-709	OPTIONAL BASE,BASE GROUP 09	1,819.25	SY	$25.30	$46,027.02
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	681.67	TN	$119.42	$81,405.03
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	70.82	TN	$148.28	$10,501.19

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y

Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.50	GM	$1,039.31	$519.66
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.50	GM	$4,277.51	$2,138.76
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.50	GM	$4,263.58	$2,131.79
	Roadway Component Total				$185,689.01

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,819.25	SY	$25.30	$46,027.02
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	292.14	TN	$153.46	$44,831.80
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.90	TN	$148.28	$578.29
570-1-2	PERFORMANCE TURF, SOD	295.09	SY	$4.92	$1,451.84

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,214.00	SY	$4.92	$10,892.88
	Comment: 15' TURF WIDTH LT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,452.59	LF	$1.72	$5,938.45
104-11	FLOATING TURBIDITY BARRIER	62.88	LF	$13.62	$856.43
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	62.88	LF	$10.38	$652.69
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	128.10	AC	$33.53	$4,295.19
107-2	MOWING	128.10	AC	$48.82	$6,253.84
	Shoulder Component Total				$124,861.44

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	208.00	LF	$107.06	$22,268.48
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	11.00	EA	$1,745.67	$19,202.37
570-1-2	PERFORMANCE TURF, SOD	177.06	SY	$4.92	$871.14
	Drainage Component Total				$49,346.63

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$189,111.33	$567,333.99
	Signing Component Total				$580,799.10

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$100,800.00	$100,800.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$100,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$743.31	$5,203.17
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-	7.00	EA	$7,049.17	$49,344.19

	STD, 45'			
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00 EA	$600.24	$4,201.68
	Subcomponent Total			$81,513.04
	Lighting Component Total			$81,513.04

Sequence 4 Total $1,239,955.70

Sequence: 5 NUR - New Construction, Undivided, Rural **Net Length:** 0.246 MI 1,300 LF

Description: 15B-2A FROM STA. 1779+21.83 TO STA. 1792+21.82

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	20.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.246
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.60	AC	$30,623.87	$18,374.32
120-6	EMBANKMENT	4,497.49	CY	$20.93	$94,132.47
	Earthwork Component Total				$112,506.79

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,755.37	SY	$11.20	$42,060.14
285-709	OPTIONAL BASE,BASE GROUP 09	1,780.91	SY	$25.30	$45,057.02
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	667.30	TN	$119.42	$79,688.97
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	69.33	TN	$148.28	$10,280.25

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.49	GM	$1,039.31	$509.26
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.49	GM	$4,277.51	$2,095.98
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.49	GM	$4,263.58	$2,089.15

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	1,000.00	LF	$315.35	$315,350.00
	Roadway Component Total				$497,130.77

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,780.91	SY	$25.30	$45,057.02
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	285.99	TN	$153.46	$43,888.03
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.81	TN	$148.28	$564.95
570-1-2	PERFORMANCE TURF, SOD	288.87	SY	$4.92	$1,421.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,214.00	SY	$4.92	$10,892.88

Comment: 15' TURF WIDTH LT

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,379.83	LF	$1.72	$5,813.31
104-11	FLOATING TURBIDITY BARRIER	61.55	LF	$13.62	$838.31
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	61.55	LF	$10.38	$638.89
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	125.16	AC	$33.53	$4,196.61
107-2	MOWING	125.16	AC	$48.82	$6,110.31
	Shoulder Component Total				$122,504.55

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	200.00	LF	$107.06	$21,412.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	10.00	EA	$1,745.67	$17,456.70
570-1-2	PERFORMANCE TURF, SOD	173.32	SY	$4.92	$852.73
	Drainage Component Total				$46,726.07

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$98,400.00	$98,400.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$98,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$743.31	$5,203.17
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00	EA	$7,049.17	$49,344.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$600.24	$4,201.68
	Subcomponent Total				$81,513.04
	Lighting Component Total				$81,513.04

Sequence 5 Total $970,846.74

Sequence: 6 NUR - New Construction, Undivided, Rural **Net Length:** 0.264 MI 1,392 LF

Description: 15B-2B FROM STA. 1792+21.82 TO STA. 1806+14.07

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	45.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.264
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.44	AC	$30,623.87	$44,098.37
120-6	EMBANKMENT	5,452.29	CY	$20.93	$114,116.43
	Earthwork Component Total				$158,214.80

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,412.59	SY	$11.20	$60,621.01
285-709	OPTIONAL BASE,BASE GROUP 09	2,370.71	SY	$25.30	$59,978.96
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	382.75	TN	$138.21	$52,899.88
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	92.79	TN	$148.28	$13,758.90

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.53	GM	$1,039.31	$550.83
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.53	GM	$4,277.51	$2,267.08
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.53	GM	$4,263.58	$2,259.70
	Roadway Component Total				$192,336.36

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	2,576.39	SY	$10.59	$27,283.97
334-1-52	SUPERPAVE ASPH CONC, TRAF B, PG76-22	204.13	TN	$142.02	$28,990.54
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	8.17	TN	$148.28	$1,211.45
570-1-2	PERFORMANCE TURF, SOD	618.58	SY	$4.92	$3,043.41

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,320.00	SY	$4.92	$11,414.40

Comment: 15' TURF WIDTH LT

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,618.70	LF	$1.72	$6,224.16
104-11	FLOATING TURBIDITY BARRIER	65.90	LF	$13.62	$897.56
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	65.90	LF	$10.38	$684.04
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	133.98	AC	$33.53	$4,492.35
107-2	MOWING	133.98	AC	$48.82	$6,540.90
	Shoulder Component Total				$93,865.78

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	216.00	LF	$107.06	$23,124.96
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	11.00	EA	$1,745.67	$19,202.37
570-1-2	PERFORMANCE TURF, SOD	185.57	SY	$4.92	$913.00
	Drainage Component Total				$50,244.97

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$13,465.11

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$105,600.00	$105,600.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				

Intelligent Traffic System (ITS) Component Total $105,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$743.31	$5,203.17
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00	EA	$7,049.17	$49,344.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$600.24	$4,201.68
	Subcomponent Total				$81,513.04
	Lighting Component Total				$81,513.04

Sequence 6 Total $695,240.06

Sequence: 7 NUR - New Construction, Undivided, Rural **Net Length:** 0.123 MI / 650 LF

Description: 15B-2C FROM STA. 180+14.07 TO STA. 1812+66.30

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	140.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.123
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 2 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.09	AC	$30,623.87	$64,003.89
120-6	EMBANKMENT	10,657.55	CY	$20.93	$223,062.52
	Earthwork Component Total				$287,066.41

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2

Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,466.50	SY	$11.20	$38,824.80
285-709	OPTIONAL BASE,BASE GROUP 09	1,757.08	SY	$25.30	$44,454.12
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	285.99	TN	$138.21	$39,526.68
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	69.33	TN	$148.28	$10,280.25

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	17.00	EA	$7.32	$124.44
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,039.31	$259.83
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.12	GM	$377.66	$45.32
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,277.51	$1,069.38
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.25	GM	$4,263.58	$1,065.90
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.12	GM	$1,228.02	$147.36

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	10.00	TN	$280.64	$2,806.40
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	300.00	LF	$19.44	$5,832.00
	Roadway Component Total				$144,436.48

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	12.00 / 8.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,492.04	SY	$10.59	$15,800.70
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	119.16	TN	$138.21	$16,469.10
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.81	TN	$148.28	$564.95
570-1-2	PERFORMANCE TURF, SOD	288.87	SY	$4.92	$1,421.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,912.00	SY	$4.92	$24,167.04
	Comment: 20' TURF WIDTH LT 48' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,689.92	LF	$1.72	$2,906.66
104-11	FLOATING TURBIDITY BARRIER	30.78	LF	$13.62	$419.22
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	30.78	LF	$10.38	$319.50
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	17.88	AC	$33.53	$599.52
107-2	MOWING	17.88	AC	$48.82	$872.90
	Shoulder Component Total				$66,623.83

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	104.00	LF	$107.06	$11,134.24
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$145.93	$3,502.32
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00	EA	$1,745.67	$8,728.35
570-1-2	PERFORMANCE TURF, SOD	86.66	SY	$4.92	$426.37
	Drainage Component Total				$23,791.28

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31

700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$9,266.34

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$49,200.00	$49,200.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$49,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$743.31	$2,973.24
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,400.00	LF	$2.17	$5,208.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	4.00	EA	$7,049.17	$28,196.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$600.24	$2,400.96
	Subcomponent Total				$46,578.88
	Lighting Component Total				$46,578.88

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	650.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,150.00	SF	$27.00	$193,050.00

Retaining Wall 2

Description	Value
Length	350.00

Begin height	5.00
End Height	5.00
Multiplier	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,250.00	SF	$27.00	$141,750.00
	Retaining Walls Component Total				$334,800.00

Sequence 7 Total $961,763.22

Sequence: 8 NUR - New Construction, Undivided, Rural **Net Length:** 0.245 MI 1,295 LF

Description: 15B-3A FROM STA. 1782+93.61 TO STA. 1795+88.90

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.245
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	1,431.10	CY	$20.93	$29,952.92
	Earthwork Component Total				$29,952.92

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,741.64	SY	$11.20	$41,906.37
285-709	OPTIONAL BASE,BASE GROUP 09	1,774.40	SY	$25.30	$44,892.32
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	664.86	TN	$119.42	$79,397.58
337-7-25	ASPH CONC FC,INC BIT,FC-	69.08	TN	$148.28	$10,243.18

5,PG76-22

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.49	GM	$1,039.31	$509.26
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.49	GM	$4,277.51	$2,095.98
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.49	GM	$4,263.58	$2,089.15
	Roadway Component Total				$181,133.84

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Paved Outside Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,774.40	SY	$25.30	$44,892.32
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	284.94	TN	$153.46	$43,726.89
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.80	TN	$148.28	$563.46
570-1-2	PERFORMANCE TURF, SOD	287.82	SY	$4.92	$1,416.07

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	3,598.00	SY	$4.92	$17,702.16
	Comment: 25' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,367.48	LF	$1.72	$5,792.07
104-11	FLOATING TURBIDITY BARRIER	61.32	LF	$13.62	$835.18
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	61.32	LF	$10.38	$636.50
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00

107-1	LITTER REMOVAL	124.74	AC	$33.53	$4,182.53
107-2	MOWING	124.74	AC	$48.82	$6,089.81
	Shoulder Component Total				$128,919.99

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	200.00	LF	$107.06	$21,412.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$145.93	$7,004.64
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	10.00	EA	$1,745.67	$17,456.70
570-1-2	PERFORMANCE TURF, SOD	172.69	SY	$4.92	$849.63
	Drainage Component Total				$46,722.97

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$189,111.33	$567,333.99
	Signing Component Total				$579,399.51

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$98,000.00	$98,000.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$98,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00 LF	$9.75	$13,650.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00 EA	$743.31	$5,203.17
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00 LF	$2.17	$9,114.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00 EA	$7,049.17	$49,344.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00 EA	$600.24	$4,201.68
	Subcomponent Total			$81,513.04
	Lighting Component Total			$81,513.04

Sequence 8 Total $1,145,642.27

Sequence: 9 NUR - New Construction, Undivided, Rural **Net Length:** 0.182 MI 960 LF

Description: 15B-3B FROM STA. 1795+88.90 TO STA. 1805+22.64

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	211.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.182
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.65	AC	$30,623.87	$142,401.00
120-6	EMBANKMENT	3,781.20	CY	$20.93	$79,140.52
	Earthwork Component Total				$221,541.52

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,879.71	SY	$11.20	$32,252.75
285-709	OPTIONAL BASE,BASE GROUP 09	1,635.04	SY	$25.30	$41,366.51
334-1-53	SUPERPAVE ASPH CONC, TRAF C,	263.97	TN	$138.21	$36,483.29

	PG76-22			
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	63.99 TN	$148.28	$9,488.44

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.36	GM	$1,039.31	$374.15
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.36	GM	$4,277.51	$1,539.90
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.36	GM	$4,263.58	$1,534.89
	Roadway Component Total				$123,039.93

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	2.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	710.33	SY	$10.59	$7,522.39
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	52.79	TN	$138.21	$7,296.11
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	5.63	TN	$148.28	$834.82
570-1-2	PERFORMANCE TURF, SOD	639.94	SY	$4.92	$3,148.50

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	6,400.00	SY	$4.92	$31,488.00
	Comment: 30' TURF WIDTH LT 30' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,495.75	LF	$1.72	$4,292.69
104-11	FLOATING TURBIDITY BARRIER	45.45	LF	$13.62	$619.03
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	45.45	LF	$10.38	$471.77

104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	92.40	AC	$33.53	$3,098.17
107-2	MOWING	92.40	AC	$48.82	$4,510.97
	Shoulder Component Total				$66,365.45

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	152.00	LF	$107.06	$16,273.12
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00	EA	$1,745.67	$13,965.36
570-1-2	PERFORMANCE TURF, SOD	127.99	SY	$4.92	$629.71
	Drainage Component Total				$35,537.95

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$72,800.00	$72,800.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$72,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$743.31	$3,716.55
715-1-13	LIGHTING CONDUCTORS, F&I,	3,000.00	LF	$2.17	$6,510.00

	INSUL, NO.4-2			
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00 EA	$7,049.17	$35,245.85
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00 EA	$600.24	$3,001.20
	Subcomponent Total			$58,223.60
	Lighting Component Total			$58,223.60

Sequence 9 Total $588,174.38

Sequence: 10 NUR - New Construction, Undivided, Rural **Net Length:** 0.091 MI 480 LF

Description: 15B-3C FROM STA. 1805+22.64 TO STA. 1810+06.30

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	361.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.091
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	110.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 2 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.98	AC	$30,623.87	$121,883.00
120-6	EMBANKMENT	5,147.01	CY	$20.93	$107,726.92
	Earthwork Component Total				$229,609.92

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	36.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,986.37	SY	$11.20	$33,447.34
285-709	OPTIONAL BASE,BASE GROUP 09	1,937.41	SY	$25.30	$49,016.47
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	316.77	TN	$138.21	$43,780.78
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	76.79	TN	$148.28	$11,386.42

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	49.00	EA	$7.32	$358.68
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.18	GM	$1,039.31	$187.08
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.18	GM	$377.66	$67.98
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.18	GM	$4,277.51	$769.95
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.18	GM	$4,263.58	$767.44
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.18	GM	$1,228.02	$221.04

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	26.67	TN	$280.64	$7,484.67
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	800.00	LF	$19.44	$15,552.00
	Roadway Component Total				$163,039.85

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 10.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	781.79	SY	$10.59	$8,279.16
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	61.59	TN	$138.21	$8,512.35

337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.82	TN	$148.28	$418.15
570-1-2	PERFORMANCE TURF, SOD	319.97	SY	$4.92	$1,574.25

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	5,014.00	SY	$4.92	$24,668.88
	Comment: 48' TURF WIDTH LT 46' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,247.88	LF	$1.72	$2,146.35
104-11	FLOATING TURBIDITY BARRIER	22.72	LF	$13.62	$309.45
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	22.72	LF	$10.38	$235.83
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	46.20	AC	$33.53	$1,549.09
107-2	MOWING	46.20	AC	$48.82	$2,255.48
	Shoulder Component Total				$53,031.99

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	72.00	LF	$107.06	$7,708.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$145.93	$2,334.88
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	$1,745.67	$6,982.68
570-1-2	PERFORMANCE TURF, SOD	63.99	SY	$4.92	$314.83
	Drainage Component Total				$17,340.71

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$7,866.75

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

7777777	ITS	1.00	LS	$36,400.00	$36,400.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$36,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	600.00	LF	$9.75	$5,850.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$743.31	$2,229.93
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,800.00	LF	$2.17	$3,906.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	3.00	EA	$7,049.17	$21,147.51
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	$600.24	$1,800.72
	Subcomponent Total				$34,934.16
	Lighting Component Total				$34,934.16

Sequence 10 Total $542,223.38

Sequence: 11 NUR - New Construction, Undivided, Rural **Net Length:** 0.202 MI 1,065 LF

Description: 15B-4A FROM STA. 1811+11.32 TO STA. 1820+38.65

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	125.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.202
Top of Structural Course For Begin Section	110.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.06	AC	$30,623.87	$93,709.04
120-6	EMBANKMENT	12,775.02	CY	$20.93	$267,381.17
	Earthwork Component Total				$361,090.21

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,206.55	SY	$11.20	$58,313.36
285-709	OPTIONAL BASE,BASE GROUP 09	2,878.99	SY	$25.30	$72,838.45
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	468.59	TN	$138.21	$64,763.82
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	113.60	TN	$148.28	$16,844.61

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	27.00	EA	$7.32	$197.64
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.40	GM	$1,039.31	$415.72
710-11-231	PAINTED PAVT MARK,STD,YELLOW,SKIP,6"	0.20	GM	$377.66	$75.53
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.40	GM	$4,277.51	$1,711.00
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.40	GM	$4,263.58	$1,705.43
711-16-231	THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6"	0.20	GM	$1,228.02	$245.60
	Roadway Component Total				$217,111.16

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 10.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,734.73	SY	$10.59	$18,370.79

334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	136.67	TN	$138.21	$18,889.16
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.25	TN	$148.28	$926.75
570-1-2	PERFORMANCE TURF, SOD	709.98	SY	$4.92	$3,493.10

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	12,544.00	SY	$4.92	$61,716.48
	Comment: 56' TURF WIDTH LT 50' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,768.94	LF	$1.72	$4,762.58
104-11	FLOATING TURBIDITY BARRIER	50.42	LF	$13.62	$686.72
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	50.42	LF	$10.38	$523.36
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	102.48	AC	$33.53	$3,436.15
107-2	MOWING	102.48	AC	$48.82	$5,003.07
	Shoulder Component Total				$120,891.16

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	168.00	LF	$107.06	$17,986.08
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$145.93	$5,837.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00	EA	$1,745.67	$15,711.03
570-1-2	PERFORMANCE TURF, SOD	142.00	SY	$4.92	$698.64
	Drainage Component Total				$40,232.95

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	2.00	EA	$189,111.33	$378,222.66
	Signing Component Total				$386,089.41

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$80,800.00	$80,800.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$80,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00	LF	$9.75	$11,700.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$743.31	$4,459.86
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00	LF	$2.17	$7,812.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	6.00	EA	$7,049.17	$42,295.02
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$600.24	$3,601.44
	Subcomponent Total				$69,868.32
	Lighting Component Total				$69,868.32

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	260.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	1,300.00	SF	$27.00	$35,100.00
	Retaining Walls Component Total				$35,100.00

Sequence 11 Total $1,311,183.21

Sequence: 12 NUR - New Construction, Undivided, Rural **Net Length:** 0.189 MI 1,000 LF

Description: 15B-4B FROM STA. 1820+38.65 TO STA. 1830+38.80

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	49.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.189
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.12	AC	$30,623.87	$34,298.73
120-6	EMBANKMENT	6,584.05	CY	$20.93	$137,804.17
	Earthwork Component Total				$172,102.90

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,222.33	SY	$11.20	$36,090.10
285-709	OPTIONAL BASE,BASE GROUP 09	1,703.39	SY	$25.30	$43,095.77
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	275.01	TN	$138.21	$38,009.13
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	66.67	TN	$148.28	$9,885.83

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.38	GM	$1,039.31	$394.94
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.38	GM	$4,277.51	$1,625.45
711-16-201	THERMOPLASTIC, STD-	0.38	GM	$4,263.58	$1,620.16

OTH,YELLOW, SOLID, 6"

Roadway Component Total $130,721.38

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Paved Outside Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,370.04	SY	$10.59	$14,508.72
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	110.00	TN	$153.46	$16,880.60
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.93	TN	$148.28	$434.46
570-1-2	PERFORMANCE TURF, SOD	222.23	SY	$4.92	$1,093.37

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	5,556.00	SY	$4.92	$27,335.52
	Comment: 50' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,600.08	LF	$1.72	$4,472.14
104-11	FLOATING TURBIDITY BARRIER	47.35	LF	$13.62	$644.91
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	47.35	LF	$10.38	$491.49
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	96.60	AC	$33.53	$3,239.00
107-2	MOWING	96.60	AC	$48.82	$4,716.01

Shoulder Component Total $76,899.22

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	152.00	LF	$107.06	$16,273.12
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00	EA	$1,745.67	$13,965.36
570-1-2	PERFORMANCE TURF, SOD	133.34	SY	$4.92	$656.03

Drainage Component Total $35,564.27

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

Signing Component Total $10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$75,600.00	$75,600.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				

Intelligent Traffic System (ITS) Component Total $75,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$743.31	$3,716.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$2.17	$6,510.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	$7,049.17	$35,245.85
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$600.24	$3,001.20
	Subcomponent Total				$58,223.60

Lighting Component Total $58,223.60

Sequence 12 Total $559,777.30

Sequence: 13 NUR - New Construction, Undivided, Rural **Net Length:** 0.186 MI 980 LF

Description: 15B-4C FROM STA.1830+38.80 TO STA. 1843+38.80

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	40.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.186
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 6.00 %
Roadway Cross Slope L/R	0.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.90	AC	$30,623.87	$27,561.48
120-6	EMBANKMENT	5,014.79	CY	$20.93	$104,959.55
	Earthwork Component Total				$132,521.03

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,831.02	SY	$11.20	$31,707.42
285-709	OPTIONAL BASE,BASE GROUP 09	1,342.56	SY	$25.30	$33,966.77
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	503.05	TN	$119.42	$60,074.23
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	52.26	TN	$148.28	$7,749.11

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.37	GM	$1,039.31	$384.54
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.37	GM	$4,277.51	$1,582.68
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.37	GM	$4,263.58	$1,577.52

Roadway Component Total $137,042.27

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 14.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Paved Outside Shoulder Width L/R	0.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,342.56	SY	$25.30	$33,966.77
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	215.59	TN	$153.46	$33,084.44
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.87	TN	$148.28	$425.56
570-1-2	PERFORMANCE TURF, SOD	217.77	SY	$4.92	$1,071.43

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	5,445.00	SY	$4.92	$26,789.40
	Comment: 50' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,547.92	LF	$1.72	$4,382.42
104-11	FLOATING TURBIDITY BARRIER	46.40	LF	$13.62	$631.97
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	46.40	LF	$10.38	$481.63
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	94.50	AC	$33.53	$3,168.58
107-2	MOWING	94.50	AC	$48.82	$4,613.49

Shoulder Component Total $111,698.70

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	152.00	LF	$107.06	$16,273.12
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$145.93	$4,669.76
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00	EA	$1,745.67	$13,965.36
570-1-2	PERFORMANCE TURF, SOD	130.66	SY	$4.92	$642.85

Drainage Component Total $35,551.09

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
7777777	ITS	1.00	LS	$74,400.00	$74,400.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$74,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$9.75	$9,750.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$743.31	$3,716.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$2.17	$6,510.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	$7,049.17	$35,245.85
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$600.24	$3,001.20
	Subcomponent Total				$58,223.60
	Lighting Component Total				$58,223.60

Sequence 13 Total $560,102.62

Sequence: 14 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.095 MI 500 LF

Description: 15B-5A FROM SR 91 TO 500' LT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	62.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.095
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	122.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	2 to 1 / 0 to 1
Existing Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Existing Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Front Slope L/R	2 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.71	AC	$30,623.87	$21,742.95
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	240.77	CY	$41.85	$10,076.22
	Earthwork Component Total				$31,819.17

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	11.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	754.47	SY	$11.20	$8,450.06
285-709	OPTIONAL BASE,BASE GROUP 09	629.46	SY	$25.30	$15,925.34
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	100.84	TN	$138.21	$13,937.10
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	24.45	TN	$148.28	$3,625.45

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.38	GM	$1,039.31	$394.94

711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.38 GM	$4,277.51	$1,625.45
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.38 GM	$4,263.58	$1,620.16
	Roadway Component Total			$45,578.50

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,667.00	SY	$4.92	$8,201.64
	Comment: 30' TURF WIDTH LT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,000.03	LF	$1.72	$1,720.05
104-11	FLOATING TURBIDITY BARRIER	9.47	LF	$13.62	$128.98
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	9.47	LF	$10.38	$98.30
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$114.94	$574.70
107-1	LITTER REMOVAL	34.86	AC	$33.53	$1,168.86
107-2	MOWING	34.86	AC	$48.82	$1,701.87
	Shoulder Component Total				$16,677.40

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	4.00	EA	$5,211.96	$20,847.84
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	$4,637.83	$4,637.83
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	56.00	LF	$126.09	$7,061.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$145.93	$2,334.88
570-1-2	PERFORMANCE TURF, SOD	28.79	SY	$4.92	$141.65
	Drainage Component Total				$35,023.24

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93

700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$30.99	$92.97
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33

Signing Component Total $197,599.05

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	4 LANE, 1 MAST ARM, ONE LOCATION

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00	LF	$9.75	$7,312.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00	LF	$22.97	$5,742.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$4,895.59	$4,895.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00	EA	$743.31	$11,892.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	1.00	EA	$56,601.03	$56,601.03
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	4.00	AS	$1,078.93	$4,315.72
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	2.00	AS	$675.59	$1,351.18
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	4.00	EA	$369.50	$1,478.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	4.00	AS	$1,030.75	$4,123.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	2.00	EA	$244.78	$489.56
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 2

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	2 LANE, 1 MAST ARM, ONE LOCATION

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$9.75	$7,800.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	$22.97	$4,594.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$4,895.59	$4,895.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	$743.31	$8,919.72
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
649-21-4	STEEL MAST ARM ASSEMBLY, F&I, 40'- 30'	1.00	EA	$44,324.24	$44,324.24
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	2.00	AS	$1,078.93	$2,157.86
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	2.00	AS	$675.59	$1,351.18
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	2.00	EA	$369.50	$739.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	2.00	AS	$1,030.75	$2,061.50
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	2.00	EA	$244.78	$489.56
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 3

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	3 LANE, ONE MAST ARM, ONE LOCATION

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00	LF	$9.75	$7,312.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00	LF	$22.97	$5,742.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$4,895.59	$4,895.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00	EA	$743.31	$11,892.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	1.00	EA	$56,601.03	$56,601.03
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	3.00	AS	$1,078.93	$3,236.79
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	2.00	AS	$675.59	$1,351.18
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	3.00	EA	$369.50	$1,108.50
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	3.00	AS	$1,030.75	$3,092.25
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	2.00	EA	$244.78	$489.56
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalizations Component Total $392,407.63

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$38,000.00	$38,000.00
	Comment: Assume cost per mile when express lanes not present to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$38,000.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	500.02	LF	$9.75	$4,875.20
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	99.25	LF	$22.97	$2,279.77
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$743.31	$2,973.24
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,826.19	LF	$2.17	$3,962.83
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	4.00	EA	$5,441.47	$21,765.88
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$600.24	$2,400.96
	Subcomponent Total				$38,257.88
	Lighting Component Total				$38,257.88

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	290.00
Begin height	11.00
End Height	11.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,190.00	SF	$27.00	$86,130.00
	Retaining Walls Component Total				$86,130.00

Sequence 14 Total $881,492.87

Sequence: 15 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.133 MI 700 LF

Description: 15B-5B FROM 700' RT OF SR 91 TO 1420' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	58.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.133
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	110.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	110.00
Existing Front Slope L/R	0 to 1 / 2 to 1
Existing Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Existing Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Front Slope L/R	0 to 1 / 2 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.94	AC	$30,623.87	$28,786.44
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	326.67	CY	$41.85	$13,671.14
	Earthwork Component Total				$42,457.58

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	11.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,056.42	SY	$11.20	$11,831.90
285-709	OPTIONAL BASE,BASE GROUP 09	881.38	SY	$25.30	$22,298.91
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	141.19	TN	$138.21	$19,513.87
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	34.23	TN	$148.28	$5,075.62

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1

Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.53	GM	$1,039.31	$550.83
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.53	GM	$4,277.51	$2,267.08
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.53	GM	$4,263.58	$2,259.70

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	6.67	TN	$280.64	$1,871.87
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	200.00	LF	$19.44	$3,888.00
	Roadway Component Total				$69,557.78

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,723.00	SY	$4.92	$13,397.16
	Comment: 35' TURF WIDTH RT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,400.26	LF	$1.72	$2,408.45
104-11	FLOATING TURBIDITY BARRIER	13.26	LF	$13.62	$180.60
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	13.26	LF	$10.38	$137.64
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	7.00	EA	$114.94	$804.58
107-1	LITTER REMOVAL	48.72	AC	$33.53	$1,633.58
107-2	MOWING	48.72	AC	$48.82	$2,378.51

Shoulder Component Total $24,023.52

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	5.00	EA	$5,211.96	$26,059.80
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$4,637.83	$9,275.66
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	80.00	LF	$126.09	$10,087.20
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$145.93	$3,502.32
570-1-2	PERFORMANCE TURF, SOD	40.31	SY	$4.92	$198.33

Drainage Component Total $49,123.31

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$30.99	$92.97
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$189,111.33	$189,111.33

Signing Component Total $197,599.05

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	4 LANE, 1 MAST ARM, ONE LOCATION

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00	LF	$9.75	$7,312.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00	LF	$22.97	$5,742.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$4,895.59	$4,895.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00	EA	$743.31	$11,892.96
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17

639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	1.00	EA	$56,601.03	$56,601.03
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	4.00	AS	$1,078.93	$4,315.72
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	2.00	AS	$675.59	$1,351.18
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	4.00	EA	$369.50	$1,478.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	4.00	AS	$1,030.75	$4,123.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	2.00	EA	$244.78	$489.56
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 2

Description	Value
Type	4 Lane Mast Arm
Multiplier	2
Description	3 LANE, 1 MAST ARM, ONE LOCATION

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,500.00	LF	$9.75	$14,625.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	500.00	LF	$22.97	$11,485.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00	PI	$4,895.59	$9,791.18
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	32.00	EA	$743.31	$23,785.92
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$2,508.17	$5,016.34
639-2-1	ELECTRICAL SERVICE WIRE, F&I	120.00	LF	$5.76	$691.20
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	2.00	EA	$56,601.03	$113,202.06
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	6.00	AS	$1,078.93	$6,473.58
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	AS	$675.59	$2,702.36
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	6.00	EA	$369.50	$2,217.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	6.00	AS	$1,030.75	$6,184.50
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	4.00	EA	$244.78	$979.12
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00	AS	$35,970.31	$71,940.62
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	2.00	EA	$389.82	$779.64
	Signalizations Component Total				$408,458.92

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$53,200.00	$53,200.00

Comment: Assume cost per mile when express lanes not present to be $400,000

Intelligent Traffic System (ITS) Component Total $53,200.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.13	LF	$9.75	$6,826.27
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	138.96	LF	$22.97	$3,191.91
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$743.31	$3,716.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,557.06	LF	$2.17	$5,548.82
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	5.00	EA	$5,441.47	$27,207.35
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$600.24	$3,001.20
	Subcomponent Total				$49,492.10

Lighting Component Total $49,492.10

Sequence 15 Total $893,912.26

Sequence: 16 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.100 MI 530 LF

Description: 15B-5C FROM 700' RT OF SR 91 TO 1420' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	58.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.100
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 0 to 1
Existing Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Existing Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Front Slope L/R	6 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.70	AC	$30,623.87	$21,436.71
120-2-2	BORROW EXCAVATION, TRUCK	1,544.50	CY	$41.85	$64,637.32

MEASURE

Earthwork Component Total $86,074.04

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Existing Roadway Pavement Width L/R	0.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	18.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,212.19	SY	$11.20	$13,576.53
285-709	OPTIONAL BASE,BASE GROUP 09	1,079.66	SY	$25.30	$27,315.40
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	174.94	TN	$138.21	$24,178.46
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	42.41	TN	$148.28	$6,288.55

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.40	GM	$1,039.31	$415.72
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.40	GM	$4,277.51	$1,711.00
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.40	GM	$4,263.58	$1,705.43

Roadway Component Total $75,191.09

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

570-1-2	PERFORMANCE TURF, SOD	1,473.00	SY	$4.92	$7,247.16
	Comment: 35' TURF WIDTH LT				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,060.22	LF	$1.72	$1,823.58
104-11	FLOATING TURBIDITY BARRIER	10.04	LF	$13.62	$136.74
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	10.04	LF	$10.38	$104.22
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	5.00	EA	$114.94	$574.70
107-1	LITTER REMOVAL	36.96	AC	$33.53	$1,239.27
107-2	MOWING	36.96	AC	$48.82	$1,804.39
	Shoulder Component Total				$16,013.06

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	4.00	EA	$5,211.96	$20,847.84
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$4,637.83	$9,275.66
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	56.00	LF	$126.09	$7,061.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$145.93	$3,502.32
570-1-2	PERFORMANCE TURF, SOD	30.52	SY	$4.92	$150.16
	Drainage Component Total				$40,837.02

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$402.31	$1,206.93
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$297.41	$297.41
700-1-60	SINGLE POST SIGN, REMOVE	3.00	AS	$30.99	$92.97
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$825.56	$825.56
	Signing Component Total				$8,487.72

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
777777	ITS	1.00	LS	$40,000.00	$40,000.00
	Comment: Assume cost per mile when express lanes not				

present to be $400,000

Intelligent Traffic System (ITS) Component Total $40,000.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	**Value**
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	530.11	LF	$9.75	$5,168.57
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	105.22	LF	$22.97	$2,416.90
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	4.00	EA	$743.31	$2,973.24
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,936.11	LF	$2.17	$4,201.36
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	4.00	EA	$5,441.47	$21,765.88
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	4.00	EA	$600.24	$2,400.96
	Subcomponent Total				$38,926.91

Lighting Component Total $38,926.91

Sequence 16 Total $305,529.84

Sequence: 17 MIS - Miscellaneous Construction **Net Length:** 0.000 MI 0 LF

Description: NB-On and SB-Off Toll Buildings and Gantries

MISCELLANEOUS COMPONENT

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
735-74-1	TOLL BUILDING & GANTRY	1.00	LS	$1,414,577.08	$1,414,577.08
	Comment: NB-ON RAMP				
735-74-2	TOLL BUILDING & GANTRY	1.00	LS	$1,414,577.08	$1,414,577.08
	Comment: SB-OFF RAMP				

Miscellaneous Component Total $2,829,154.16

Sequence 17 Total $2,829,154.16

Date: 4/8/2022 9:14:23 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English

Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 32 Project Grand Total **$31,104,430.06**

Description: 20210526 - Consultant Update 20210513 Copied from FPID 423374-1-52-01 Version 9 [6B. MIDWAY RD. (ALT. 1)[SEQ. 15B] (MP 150.4)]

Project Sequences Subtotal				**$20,465,738.88**
102-1	Maintenance of Traffic	10.00 %		$2,046,573.89
101-1	Mobilization	10.00 %		$2,251,231.28
Project Sequences Total				**$24,763,544.05**
Project Unknowns		25.00 %		$6,190,886.01
Design/Build		0.00 %		$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$150,000.00**
Version 32 Project Grand Total					**$31,104,430.06**

Date: 4/8/2022 9:10:47 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 40 Project Grand Total **$37,745,152.26**

Description: 20210525 - Consultant Update. 20210513 Copied from FPID 423374-1-52-01 Version 18 [7A.SR 70/Okeechobee Rd. (Alt. 4) [Seq. 17A] (MP 153.2)]

Sequence: 1 NUR - New Construction, Undivided, Rural **Net Length:** 0.172 MI 910 LF

Description: 17A-1A From Sta. 1964+73.30 to Sta. 1973+54.80

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	160.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.172
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.34	AC	$31,159.31	$104,072.10
120-6	EMBANKMENT	4,737.23	CY	$29.68	$140,600.99
	Earthwork Component Total				$244,673.09

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	36.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	5,660.63	SY	$11.20	$63,399.06

285-709	OPTIONAL BASE,BASE GROUP 09	3,672.33	SY	$29.77	$109,325.26
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	600.43	TN	$173.97	$104,456.81
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	145.56	TN	$157.11	$22,868.93

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	93.00	EA	$7.32	$680.76
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.17	GM	$1,054.72	$179.30
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.34	GM	$408.99	$139.06
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.34	GM	$1,608.56	$546.91
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.17	GM	$4,468.54	$759.65
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.17	GM	$4,146.96	$704.98
	Roadway Component Total				$303,060.72

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 8.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	10.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,481.87	SY	$24.06	$35,653.79
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	116.75	TN	$173.97	$20,311.00
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	5.34	TN	$157.11	$838.97
570-1-2	PERFORMANCE TURF, SOD	606.50	SY	$4.92	$2,983.98

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,044.00	SY	$4.92	$19,896.48

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,365.33	LF	$2.08	$4,919.89
104-11	FLOATING TURBIDITY BARRIER	43.08	LF	$13.62	$586.75
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	43.08	LF	$10.38	$447.17
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	87.78	AC	$35.11	$3,081.96
107-2	MOWING	87.78	AC	$59.29	$5,204.48
	Shoulder Component Total				$97,007.47

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.10	CY	$1,858.71	$5,762.00
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	144.00	LF	$185.13	$26,658.72
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$288.14	$9,220.48
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	7.00	EA	$1,858.01	$13,006.07
570-1-2	PERFORMANCE TURF, SOD	121.30	SY	$4.92	$596.80
	Drainage Component Total				$55,244.07

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$68,800.00	$68,800.00
	Comment: Assume cost per mile to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$68,800.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value

Multiplier (Number of Poles) 5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$11.79	$11,790.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$2.55	$7,650.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	$7,587.46	$37,937.30
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$630.43	$3,152.15
	Subcomponent Total				$64,254.00
	Lighting Component Total				$64,254.00

BRIDGES COMPONENT

Bridge 17A-1

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	193.25
Width (LF)	204.67
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	$75.00
Factored Cost per SF	$93.75
Final Cost per SF	**$102.27**
Basic Bridge Cost	**$3,708,044.77**
Description	OKEECHOBEE/SR 70

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	454.82	CY	$557.09	$253,375.67
415-1-9	REINF STEEL- APPROACH SLABS	79,593.50	LB	$1.05	$83,573.18
	Bridge 17A-1 Total				$4,044,993.62

Bridge 940053

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Type	Misc/Rehab
Structure No.	940053
Description	REMOVE BRIDGE SB ML RAMP OVER ML

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	7,700.00	SF	$69.57	$535,689.00
	Bridge 940053 Total				$535,689.00

Bridge 940134

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Type	Misc/Rehab
Structure No.	940134
Description	REMOVE BRIDGE OKEECHOBEE/SR 70

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	11,760.00	SF	$69.57	$818,143.20
	Bridge 940134 Total				$818,143.20

Bridge 940135

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Type	Misc/Rehab
Structure No.	940135
Description	REMOVE BRIDGE OKEECHOBEE/SR 70

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	12,390.00	SF	$69.57	$861,972.30
	Bridge 940135 Total				$861,972.30
	Bridges Component Total				$6,260,798.12

Sequence 1 Total $7,104,503.40

Sequence: 2 NUR - New Construction, Undivided, Rural **Net Length:** 0.213 MI 1,125 LF

Description: 17A-1B From Sta. 1973+54.80 to Sta. 1184+57.80

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	140.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.213
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.61	AC	$31,159.31	$112,485.11

120-6	EMBANKMENT	3,894.17	CY	$29.68	$115,578.97
	Earthwork Component Total				$228,064.08

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	15.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,375.50	SY	$11.20	$37,805.60
285-709	OPTIONAL BASE,BASE GROUP 09	1,916.54	SY	$29.77	$57,055.40
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	309.42	TN	$173.97	$53,829.80
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	75.01	TN	$157.11	$11,784.82

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.21	GM	$1,054.72	$221.49
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.21	GM	$4,468.54	$938.39
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.21	GM	$4,146.96	$870.86
	Roadway Component Total				$162,506.36

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	4.00 / 2.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	832.62	SY	$24.06	$20,032.84

334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	61.88	TN	$173.97	$10,765.26
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	6.60	TN	$157.11	$1,036.93
570-1-2	PERFORMANCE TURF, SOD	750.11	SY	$4.92	$3,690.54

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	5,000.00	SY	$4.92	$24,600.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,925.44	LF	$2.08	$6,084.92
104-11	FLOATING TURBIDITY BARRIER	53.28	LF	$13.62	$725.67
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	53.28	LF	$10.38	$553.05
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	108.36	AC	$35.11	$3,804.52
107-2	MOWING	108.36	AC	$59.29	$6,424.66
	Shoulder Component Total				$80,801.39

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.84	CY	$1,858.71	$7,137.45
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	176.00	LF	$185.13	$32,582.88
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$288.14	$11,525.60
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	9.00	EA	$1,858.01	$16,722.09
570-1-2	PERFORMANCE TURF, SOD	150.02	SY	$4.92	$738.10
	Drainage Component Total				$68,706.12

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$85,200.00	$85,200.00
	Comment: Assume cost per mile to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$85,200.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	6

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,200.00	LF	$11.79	$14,148.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00	EA	$744.91	$4,469.46
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,600.00	LF	$2.55	$9,180.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	6.00	EA	$7,587.46	$45,524.76
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00	EA	$630.43	$3,782.58
	Subcomponent Total				$77,104.80
	Lighting Component Total				$77,104.80

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	80.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	400.00	SF	$46.63	$18,652.00
	Retaining Walls Component Total				$18,652.00

Sequence 2 Total $733,100.27

Sequence: 3 NUR - New Construction, Undivided, Rural **Net Length:** 0.254 MI 1,340 LF

Description: 17A-1C From Sta. 1184+57.80 to Sta. 1997+95.75

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.254
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	4,643.75	CY	$29.68	$137,826.50
	Earthwork Component Total				$137,826.50

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,871.30	SY	$11.20	$43,358.56
285-709	OPTIONAL BASE,BASE GROUP 09	1,835.89	SY	$29.77	$54,654.45
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	687.90	TN	$134.08	$92,233.63
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	71.47	TN	$157.11	$11,228.65

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,054.72	$263.68
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.25	GM	$4,468.54	$1,117.14
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,146.96	$1,036.74
	Roadway Component Total				$203,892.85

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,835.89	SY	$29.77	$54,654.45
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	294.81	TN	$134.26	$39,581.19
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.93	TN	$157.11	$617.44
570-1-2	PERFORMANCE TURF, SOD	297.79	SY	$4.92	$1,465.13

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,978.00	SY	$4.92	$14,651.76

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,484.17	LF	$2.08	$7,247.07
104-11	FLOATING TURBIDITY BARRIER	63.45	LF	$13.62	$864.19
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	63.45	LF	$10.38	$658.61
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	129.36	AC	$35.11	$4,541.83
107-2	MOWING	129.36	AC	$59.29	$7,669.75
	Shoulder Component Total				$135,034.42

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.57	CY	$1,858.71	$8,494.30
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	208.00	LF	$185.13	$38,507.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$288.14	$13,830.72
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	11.00	EA	$1,858.01	$20,438.11
570-1-2	PERFORMANCE TURF, SOD	178.68	SY	$4.92	$879.11
	Drainage Component Total				$82,149.28

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31

700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	6.00	AS	$1,399.59	$8,397.54
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	3.00	EA	$152,019.45	$456,058.35

Signing Component Total $469,523.46

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$101,600.00	$101,600.00
	Comment: Assume cost per mile to be $400,000				

Intelligent Traffic System (ITS) Component Total $101,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00	LF	$11.79	$16,506.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00	EA	$744.91	$5,214.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00	LF	$2.55	$10,710.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00	EA	$7,587.46	$53,112.22
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00	EA	$630.43	$4,413.01
	Subcomponent Total				$89,955.60

Lighting Component Total $89,955.60

Sequence 3 Total $1,219,982.11

Sequence: 4 NUR - New Construction, Undivided, Rural **Net Length:** 0.180 MI 950 LF

Description: 17A-2A from Sta. 1964+73.30 to Sta. 1967+07.18

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	90.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1

Distance	0.180
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	110.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	5.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.96	AC	$31,159.31	$61,072.25
120-6	EMBANKMENT	11,383.68	CY	$29.68	$337,867.62
	Earthwork Component Total				$398,939.87

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,643.82	SY	$11.20	$52,010.78
285-709	OPTIONAL BASE,BASE GROUP 09	2,567.82	SY	$29.77	$76,444.00
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	417.94	TN	$173.97	$72,709.02
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	101.32	TN	$157.11	$15,918.39

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	24.00	EA	$7.32	$175.68
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.18	GM	$1,054.72	$189.85
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.18	GM	$408.99	$73.62
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.18	GM	$1,608.56	$289.54
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.18	GM	$4,468.54	$804.34
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.18	GM	$4,146.96	$746.45

	Roadway Component Total	$219,361.67

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 10.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	1,547.24	SY	$24.06	$37,226.59
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	121.90	TN	$173.97	$21,206.94
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	5.57	TN	$157.11	$875.10
570-1-2	PERFORMANCE TURF, SOD	633.25	SY	$4.92	$3,115.59

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,222.00	SY	$4.92	$20,772.24

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,469.67	LF	$2.08	$5,136.91
104-11	FLOATING TURBIDITY BARRIER	44.98	LF	$13.62	$612.63
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	44.98	LF	$10.38	$466.89
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	91.56	AC	$35.11	$3,214.67
107-2	MOWING	91.56	AC	$59.29	$5,428.59

	Shoulder Component Total	$101,139.15

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.24	CY	$1,858.71	$6,022.22
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	144.00	LF	$185.13	$26,658.72
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$288.14	$9,220.48
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00	EA	$1,858.01	$14,864.08
570-1-2	PERFORMANCE TURF, SOD	126.65	SY	$4.92	$623.12

	Drainage Component Total	$57,388.62

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$72,000.00	$72,000.00
	Comment: Assume cost per mile to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$72,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$11.79	$11,790.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$2.55	$7,650.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	$7,587.46	$37,937.30
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$630.43	$3,152.15
	Subcomponent Total				$64,254.00
	Lighting Component Total				$64,254.00

Sequence 4 Total $923,749.24

Sequence: 5 NDR - New Construction, Divided, Rural **Net Length:** 0.070 MI 370 LF

Description: 17A-2B from Sta. 1963+37.75 to 1967+07.18

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	70.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.070
Top of Structural Course For Begin Section	110.00
Top of Structural Course For End Section	122.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.59	AC	$31,159.31	$18,383.99
120-6	EMBANKMENT	14,755.53	CY	$29.68	$437,944.13
	Earthwork Component Total				$456,328.12

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	24.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,385.27	SY	$11.20	$26,715.02
285-709	OPTIONAL BASE,BASE GROUP 09	1,014.15	SY	$29.77	$30,191.25
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	162.86	TN	$173.97	$28,332.75
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	39.48	TN	$157.11	$6,202.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.07	GM	$408.99	$28.63
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.07	GM	$1,608.56	$112.60

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	9.00	EA	$7.32	$65.88

710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.07	GM	$1,054.72	$73.83
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.07	GM	$4,449.38	$311.46
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.07	GM	$4,468.54	$312.80

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	10.00	TN	$292.36	$2,923.60
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	410.00	LF	$315.35	$129,293.50
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	300.00	LF	$21.78	$6,534.00
	Roadway Component Total				$231,098.02

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 8.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 4.00
Paved Outside Shoulder Width L/R	8.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	520.65	SY	$24.06	$12,526.84
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	40.71	TN	$173.97	$7,082.32
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.17	TN	$157.11	$340.93
570-1-2	PERFORMANCE TURF, SOD	246.75	SY	$4.92	$1,214.01

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,562.00	SY	$4.92	$7,685.04

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	962.33	LF	$2.08	$2,001.65
104-11	FLOATING TURBIDITY BARRIER	17.52	LF	$13.62	$238.62
104-12	STAKED TURBIDITY BARRIER-	17.52	LF	$10.38	$181.86

	NYL REINF PVC			
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	1.00 EA	$114.05	$114.05
107-1	LITTER REMOVAL	71.40 AC	$35.11	$2,506.85
107-2	MOWING	71.40 AC	$59.29	$4,233.31
	Shoulder Component Total			$41,208.48

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	40.00
Performance Turf Width	16.00
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	658.01	SY	$4.92	$3,237.41
	Median Component Total				$3,237.41

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.26	CY	$1,858.71	$2,341.97
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	$5,081.01	$5,081.01
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	64.00	LF	$185.13	$11,848.32
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	32.00	LF	$125.72	$4,023.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$288.14	$6,915.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	3.00	EA	$1,858.01	$5,574.03
524-1-1	CONCRETE DITCH PAVT, NR, 3"	140.20	SY	$141.05	$19,775.21
570-1-2	PERFORMANCE TURF, SOD	49.35	SY	$4.92	$242.80
	Drainage Component Total				$55,801.74

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26

700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
	Signing Component Total				$14,505.46

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	400.00	LF	$11.79	$4,716.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	2.00	EA	$744.91	$1,489.82
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,200.00	LF	$2.55	$3,060.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	2.00	EA	$7,587.46	$15,174.92
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	2.00	EA	$630.43	$1,260.86
	Subcomponent Total				$25,701.60
	Lighting Component Total				$25,701.60

Sequence 5 Total $827,880.83

Sequence: 6 NDR - New Construction, Divided, Rural **Net Length:** 0.070 MI 370 LF

Description: 17A-2C from Sta. 1952+97.49 to 1960+58.73

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	60.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.070
Top of Structural Course For Begin Section	122.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.51	AC	$31,159.31	$15,891.25
120-6	EMBANKMENT	11,278.28	CY	$29.68	$334,739.35
	Earthwork Component Total				$350,630.60

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	18.50 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,241.33	SY	$11.20	$25,102.90
285-709	OPTIONAL BASE,BASE GROUP 09	787.96	SY	$29.77	$23,457.57
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	125.54	TN	$173.97	$21,840.19
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	30.43	TN	$157.11	$4,780.86

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.07	GM	$1,054.72	$73.83
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.07	GM	$4,449.38	$311.46
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.07	GM	$4,468.54	$312.80

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	25.83	TN	$292.36	$7,551.66
521-72-40	SHLDR CONC BARRIER,38" OR 44" HEIGHT	510.00	LF	$315.35	$160,828.50
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	775.00	LF	$21.78	$16,879.50
	Roadway Component Total				$261,139.27

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	8.00 / 2.00
Paved Outside Shoulder Width L/R	2.00 / 8.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	438.40	SY	$24.06	$10,547.90
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	33.93	TN	$173.97	$5,902.80
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.17	TN	$157.11	$340.93
570-1-2	PERFORMANCE TURF, SOD	411.25	SY	$4.92	$2,023.35

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,562.00	SY	$4.92	$7,685.04

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	962.33	LF	$2.08	$2,001.65
104-11	FLOATING TURBIDITY BARRIER	17.52	LF	$13.62	$238.62
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	17.52	LF	$10.38	$181.86
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	1.00	EA	$114.05	$114.05
107-1	LITTER REMOVAL	71.40	AC	$35.11	$2,506.85
107-2	MOWING	71.40	AC	$59.29	$4,233.31
	Shoulder Component Total				$38,859.36

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	40.00
Performance Turf Width	16.00
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	658.01	SY	$4.92	$3,237.41
	Median Component Total				$3,237.41

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.26	CY	$1,858.71	$2,341.97
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	$5,081.01	$5,081.01
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	64.00	LF	$185.13	$11,848.32
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	32.00	LF	$125.72	$4,023.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$288.14	$6,915.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	3.00	EA	$1,858.01	$5,574.03
524-1-1	CONCRETE DITCH PAVT, NR, 3"	140.20	SY	$141.05	$19,775.21
570-1-2	PERFORMANCE TURF, SOD	49.35	SY	$4.92	$242.80
	Drainage Component Total				$55,801.74

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
	Signing Component Total				$14,505.46

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$28,000.00	$28,000.00
	Intelligent Traffic System (ITS) Component Total				$28,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	400.00	LF	$11.79	$4,716.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	2.00	EA	$744.91	$1,489.82
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,200.00	LF	$2.55	$3,060.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	2.00	EA	$7,587.46	$15,174.92

715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	2.00	EA	$630.43	$1,260.86
	Subcomponent Total				$25,701.60
	Lighting Component Total				$25,701.60

Sequence 6 Total $777,875.44

Sequence: 7 NUR - New Construction, Undivided, Rural **Net Length:** 0.189 MI 1,000 LF

Description: 17A-2D from Sta. 1942+97.49 to Sta. 1952+97.49

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.189
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	3,546.31	CY	$29.68	$105,254.48
	Earthwork Component Total				$105,254.48

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	13.50 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,055.65	SY	$11.20	$34,223.28
285-709	OPTIONAL BASE,BASE GROUP 09	1,536.72	SY	$29.77	$45,748.15
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	577.52	TN	$134.08	$77,433.88
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	60.00	TN	$157.11	$9,426.60

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt

Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.19	GM	$1,054.72	$200.40
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.19	GM	$4,468.54	$849.02
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.19	GM	$4,146.96	$787.92
	Roadway Component Total				$168,669.25

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,370.04	SY	$29.77	$40,786.09
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	220.01	TN	$134.26	$29,538.54
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2.93	TN	$157.11	$460.33
570-1-2	PERFORMANCE TURF, SOD	222.23	SY	$4.92	$1,093.37

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	3,333.00	SY	$4.92	$16,398.36

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,600.08	LF	$2.08	$5,408.17
104-11	FLOATING TURBIDITY BARRIER	47.35	LF	$13.62	$644.91
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	47.35	LF	$10.38	$491.49
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	96.60	AC	$35.11	$3,391.63
107-2	MOWING	96.60	AC	$59.29	$5,727.41
	Shoulder Component Total				$107,023.30

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.41	CY	$1,858.71	$6,338.20
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	152.00	LF	$185.13	$28,139.76
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$288.14	$9,220.48
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	8.00	EA	$1,858.01	$14,864.08
570-1-2	PERFORMANCE TURF, SOD	133.34	SY	$4.92	$656.03
	Drainage Component Total				$59,218.55

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,399.59	$5,598.36
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$10,665.93

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$75,600.00	$75,600.00
	Comment: Assume cost per mile to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$75,600.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	$11.79	$11,790.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	$2.55	$7,650.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	5.00	EA	$7,587.46	$37,937.30
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$630.43	$3,152.15
	Subcomponent Total				$64,254.00
	Lighting Component Total				$64,254.00

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	130.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	650.00	SF	$46.63	$30,309.50
	Retaining Walls Component Total				$30,309.50

Sequence 7 Total $620,995.01

Sequence: 8 NUR - New Construction, Undivided, Rural **Net Length:** 0.246 MI 1,300 LF

Description: 17A-2E from Sta. 1930+03.12 to Sta. 1942+97.49

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.246
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	4,497.49	CY	$29.68	$133,485.50
	Earthwork Component Total				$133,485.50

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	12.00 / 0.00
Structural Spread Rate	770
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,755.37	SY	$11.20	$42,060.14
285-709	OPTIONAL BASE,BASE GROUP 09	1,780.91	SY	$29.77	$53,017.69
334-1-55	SUPERPAVE ASPH CONC, TRAF E, PG76-22	667.30	TN	$134.08	$89,471.58
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	69.33	TN	$157.11	$10,892.44

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.25	GM	$1,054.72	$263.68
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.25	GM	$4,468.54	$1,117.14
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.25	GM	$4,146.96	$1,036.74

Roadway Component Total $197,859.41

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	14.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,780.91	SY	$29.77	$53,017.69
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	285.99	TN	$134.26	$38,397.02
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	3.81	TN	$157.11	$598.59
570-1-2	PERFORMANCE TURF, SOD	288.87	SY	$4.92	$1,421.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,167.00	SY	$4.92	$10,661.64

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,379.83	LF	$2.08	$7,030.05

104-11	FLOATING TURBIDITY BARRIER	61.55	LF	$13.62	$838.31
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	61.55	LF	$10.38	$638.89
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
107-1	LITTER REMOVAL	125.16	AC	$35.11	$4,394.37
107-2	MOWING	125.16	AC	$59.29	$7,420.74
	Shoulder Component Total				$127,501.54

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	4.43	CY	$1,858.71	$8,234.09
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	200.00	LF	$185.13	$37,026.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$288.14	$13,830.72
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	10.00	EA	$1,858.01	$18,580.10
570-1-2	PERFORMANCE TURF, SOD	173.32	SY	$4.92	$852.73
	Drainage Component Total				$78,523.64

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	5.00	AS	$1,399.59	$6,997.95
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
	Signing Component Total				$12,065.52

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$98,400.00	$98,400.00
	Comment: Assume cost per mile to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$98,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

630-2-11	CONDUIT, F& I, OPEN TRENCH	1,400.00 LF	$11.79	$16,506.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	7.00 EA	$744.91	$5,214.37
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4,200.00 LF	$2.55	$10,710.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	7.00 EA	$7,587.46	$53,112.22
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	7.00 EA	$630.43	$4,413.01
	Subcomponent Total			$89,955.60
	Lighting Component Total			$89,955.60

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	1,310.00
Begin height	5.00
End Height	5.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	6,550.00	SF	$46.63	$305,426.50
	Retaining Walls Component Total				$305,426.50

Sequence 8 Total $1,043,217.71

Sequence: 9 NDU - New Construction, Divided, Urban **Net Length:** 0.171 MI 900 LF

Description: 17A-3A from SR 91 to 900' LT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	185.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.170
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	3.81	AC	$31,159.31	$118,716.97

120-6	EMBANKMENT	13,278.83	CY	$29.68	$394,115.67
	Earthwork Component Total				$512,832.64

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	43.00 / 55.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,834.89	SY	$11.20	$121,350.77
285-709	OPTIONAL BASE,BASE GROUP 09	9,802.61	SY	$29.77	$291,823.70
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,617.43	TN	$173.97	$281,384.30
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	808.72	TN	$145.31	$117,515.10

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	115.00	EA	$7.32	$841.80
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.34	GM	$1,054.72	$358.60
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.68	GM	$408.99	$278.11
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.34	GM	$4,468.54	$1,519.30
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.34	GM	$4,146.96	$1,409.97
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.68	GM	$1,260.88	$857.40
	Roadway Component Total				$817,339.05

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,000.00	SY	$4.92	$19,680.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,800.48	LF	$2.08	$3,745.00
104-11	FLOATING TURBIDITY BARRIER	42.62	LF	$13.62	$580.48
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	42.62	LF	$10.38	$442.40
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	9.00	EA	$114.05	$1,026.45
107-1	LITTER REMOVAL	182.28	AC	$35.11	$6,399.85
107-2	MOWING	182.28	AC	$59.29	$10,807.38
	Shoulder Component Total				$45,764.56

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	18.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,800.48	LF	$30.19	$54,356.49
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	200.00	LF	$54.54	$10,908.00
570-1-2	PERFORMANCE TURF, SOD	1,800.48	SY	$4.92	$8,858.36
	Median Component Total				$74,122.85

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	3.07	CY	$1,858.71	$5,706.24
425-1-351	INLETS, CURB, TYPE P-5, <10'	7.00	EA	$5,735.20	$40,146.40
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,940.92	$15,881.84
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$4,153.74	$4,153.74
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,936.73	$4,936.73
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	456.00	LF	$125.72	$57,328.32
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	48.00	LF	$288.14	$13,830.72
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	856.00	LF	$515.48	$441,250.88
570-1-2	PERFORMANCE TURF, SOD	51.83	SY	$4.92	$255.00
	Drainage Component Total				$583,489.87

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	5.00	AS	$402.31	$2,011.55
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$152,019.45	$152,019.45

Signing Component Total $172,981.00

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	4 LANES

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00	LF	$11.79	$8,842.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00	LF	$24.83	$6,207.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00	EA	$744.91	$11,918.56
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	4.00	EA	$56,601.03	$226,404.12
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00	AS	$1,078.93	$12,947.16
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00	EA	$366.45	$4,397.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00	AS	$1,030.75	$12,369.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 2

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	5 LANES

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.79	$8,253.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$24.83	$7,449.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$744.91	$16,388.02
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,172.93	$1,172.93
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$80,286.38	$481,718.28
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,078.93	$21,578.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,030.75	$20,615.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 3

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	3 LANES

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00	LF	$11.79	$8,842.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00	LF	$24.83	$6,207.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00	EA	$744.91	$11,918.56
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
649-21-10	STEEL MAST ARM ASSEMBLY, F&I, 60'	4.00	EA	$56,601.03	$226,404.12
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00	AS	$1,078.93	$12,947.16
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00	EA	$366.45	$4,397.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00	AS	$1,030.75	$12,369.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31

700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 4

Description	Value
Type	2 Lane Mast Arm
Multiplier	1
Description	2 LANES

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	$11.79	$9,432.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	$24.83	$4,966.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	$744.91	$8,938.92
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
649-21-4	STEEL MAST ARM ASSEMBLY, F&I, 40'- 30'	4.00	EA	$42,475.14	$169,900.56
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	8.00	AS	$1,078.93	$8,631.44
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	8.00	EA	$366.45	$2,931.60
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	8.00	AS	$1,030.75	$8,246.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28
	Signalizations Component Total				$1,557,081.67

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$68,000.00	$68,000.00
	Intelligent Traffic System (ITS) Component Total				$68,000.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	900.24	LF	$11.79	$10,613.83
630-2-12	CONDUIT, F& I, DIRECTIONAL	178.68	LF	$24.83	$4,436.62

	BORE			
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	6.00 EA	$744.91	$4,469.46
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,287.92 LF	$2.55	$8,384.20
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	6.00 EA	$6,027.73	$36,166.38
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	6.00 EA	$630.43	$3,782.58
	Subcomponent Total			$67,853.07
	Lighting Component Total			$67,853.07

Sequence 9 Total $3,899,464.71

Sequence: 10 NDU - New Construction, Divided, Urban **Net Length:** 0.140 MI 740 LF

Description: 17A-3B from 900' LT of SR 91 to 1640' LT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	120.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.140
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 0.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.04	AC	$31,159.31	$63,564.99
120-6	EMBANKMENT	5,188.64	CY	$29.68	$153,998.84
	Earthwork Component Total				$217,563.83

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	48.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	4,372.45	SY	$11.20	$48,971.44
285-709	OPTIONAL BASE,BASE GROUP 09	3,948.03	SY	$29.77	$117,532.85

334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	651.43	TN	$173.97	$113,329.28
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	325.71	TN	$145.31	$47,328.92

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	57.00	EA	$7.32	$417.24
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.14	GM	$1,054.72	$147.66
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.28	GM	$408.99	$114.52
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.14	GM	$4,468.54	$625.60
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.14	GM	$4,146.96	$580.57
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.28	GM	$1,260.88	$353.05
	Roadway Component Total				$329,401.13

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,644.00	SY	$4.92	$8,088.48

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,480.51	LF	$2.08	$3,079.46
104-11	FLOATING TURBIDITY BARRIER	35.05	LF	$13.62	$477.38
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	35.05	LF	$10.38	$363.82
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	8.00	EA	$114.05	$912.40
107-1	LITTER REMOVAL	149.94	AC	$35.11	$5,264.39
107-2	MOWING	149.94	AC	$59.29	$8,889.94
	Shoulder Component Total				$30,158.87

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	18.00
Performance Turf Width	14.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	1,480.51	LF	$30.19	$44,696.60
570-1-2	PERFORMANCE TURF, SOD	1,151.51	SY	$4.92	$5,665.43
	Median Component Total				$50,362.03

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	2.52	CY	$1,858.71	$4,683.95
425-1-351	INLETS, CURB, TYPE P-5, <10'	6.00	EA	$5,735.20	$34,411.20
425-1-451	INLETS, CURB, TYPE J-5, <10'	2.00	EA	$7,940.92	$15,881.84
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$4,153.74	$4,153.74
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,936.73	$4,936.73
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	376.00	LF	$125.72	$47,270.72
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$288.14	$11,525.60
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	704.00	LF	$515.48	$362,897.92
570-1-2	PERFORMANCE TURF, SOD	42.62	SY	$4.92	$209.69
	Drainage Component Total				$485,971.39

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$402.31	$1,609.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$152,019.45	$152,019.45
	Signing Component Total				$172,578.69

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$56,000.00	$56,000.00
	Intelligent Traffic System (ITS) Component Total				$56,000.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	740.26	LF	$11.79	$8,727.67
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	146.93	LF	$24.83	$3,648.27
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$744.91	$3,724.55
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	2,703.62	LF	$2.55	$6,894.23
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	5.00	EA	$6,027.73	$30,138.65
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	$630.43	$3,152.15
	Subcomponent Total				$56,285.52
	Lighting Component Total				$56,285.52

Sequence 10 Total $1,398,321.46

Sequence: 11 NDU - New Construction, Divided, Urban **Net Length:** 0.064 MI 340 LF

Description: 17A-3C from SR 91 to 340' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	150.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.064
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.16	AC	$31,159.31	$36,144.80

120-6	EMBANKMENT	4,442.02 CY	$29.68	$131,839.15
	Earthwork Component Total			$167,983.95

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	7
Roadway Pavement Width L/R	43.00 / 43.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	3,639.10	SY	$11.20	$40,757.92
285-709	OPTIONAL BASE,BASE GROUP 09	3,249.19	SY	$29.77	$96,728.39
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	536.12	TN	$173.97	$93,268.80
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	268.06	TN	$145.31	$38,951.80

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	5

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	52.00	EA	$7.32	$380.64
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.13	GM	$1,054.72	$137.11
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.32	GM	$408.99	$130.88
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.13	GM	$4,468.54	$580.91
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.13	GM	$4,146.96	$539.10
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.32	GM	$1,260.88	$403.48

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	11.33	TN	$292.36	$3,312.44
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	340.00	LF	$21.78	$7,405.20
	Roadway Component Total				$282,596.67

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,511.00	SY	$4.92	$7,434.12

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	680.06	LF	$2.08	$1,414.52
104-11	FLOATING TURBIDITY BARRIER	16.10	LF	$13.62	$219.28
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	16.10	LF	$10.38	$167.12
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	4.00	EA	$114.05	$456.20
107-1	LITTER REMOVAL	68.88	AC	$35.11	$2,418.38
107-2	MOWING	68.88	AC	$59.29	$4,083.90
	Shoulder Component Total				$19,276.52

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	18.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	680.06	LF	$30.19	$20,531.01
570-1-2	PERFORMANCE TURF, SOD	680.06	SY	$4.92	$3,345.90
	Median Component Total				$23,876.91

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.16	CY	$1,858.71	$2,156.10
425-1-351	INLETS, CURB, TYPE P-5, <10'	3.00	EA	$5,735.20	$17,205.60
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	$7,940.92	$7,940.92
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$4,153.74	$4,153.74
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,936.73	$4,936.73
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	176.00	LF	$125.72	$22,126.72
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	16.00	LF	$288.14	$4,610.24
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	328.00	LF	$515.48	$169,077.44
570-1-2	PERFORMANCE TURF, SOD	19.58	SY	$4.92	$96.33
	Drainage Component Total				$232,303.82

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$402.31	$804.62
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-125	OH STATIC SIGN STR, F&I, S 51-100 FT	1.00	EA	$152,019.45	$152,019.45
	Signing Component Total				$171,774.07

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$25,600.00	$25,600.00
	Intelligent Traffic System (ITS) Component Total				$25,600.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

630-2-11	CONDUIT, F& I, OPEN TRENCH	340.03 LF	$11.79	$4,008.95
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	67.49 LF	$24.83	$1,675.78
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00 EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,241.89 LF	$2.55	$3,166.82
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	3.00 EA	$6,027.73	$18,083.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00 EA	$630.43	$1,891.29
	Subcomponent Total			$31,060.76
	Lighting Component Total			$31,060.76

Sequence 11 Total $954,472.70

Sequence: 12 NDU - New Construction, Divided, Urban **Net Length:** 0.078 MI 410 LF

Description: 17A-3D from 340' RT of SR 91 to 750' RT

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	170.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.078
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.61	AC	$31,159.31	$50,166.49
120-6	EMBANKMENT	6,189.96	CY	$29.68	$183,718.01
	Earthwork Component Total				$233,884.50

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	9
Roadway Pavement Width L/R	75.00 / 43.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

160-4	TYPE B STABILIZATION	5,849.34	SY	$11.20	$65,512.61
285-709	OPTIONAL BASE,BASE GROUP 09	5,378.91	SY	$29.77	$160,130.15
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	887.52	TN	$173.97	$154,401.85
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	443.76	TN	$145.31	$64,482.77

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	7

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	84.00	EA	$7.32	$614.88
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.16	GM	$1,054.72	$168.76
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.54	GM	$408.99	$220.85
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.16	GM	$4,468.54	$714.97
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.16	GM	$4,146.96	$663.51
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	0.54	GM	$1,260.88	$680.88

Peripherals Subcomponent

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	13.67	TN	$292.36	$3,996.56
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	410.00	LF	$21.78	$8,929.80
	Roadway Component Total				$460,517.59

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Sidewalk Width L/R	0.00 / 0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

570-1-2	PERFORMANCE TURF, SOD	1,868.00	SY	$4.92	$9,190.56

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	820.51	LF	$2.08	$1,706.66
104-11	FLOATING TURBIDITY BARRIER	19.42	LF	$13.62	$264.50
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	19.42	LF	$10.38	$201.58
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	4.00	EA	$114.05	$456.20
107-1	LITTER REMOVAL	83.16	AC	$35.11	$2,919.75
107-2	MOWING	83.16	AC	$59.29	$4,930.56
	Shoulder Component Total				$22,752.81

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	18.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	820.51	LF	$30.19	$24,771.20
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	150.00	LF	$54.54	$8,181.00
570-1-2	PERFORMANCE TURF, SOD	820.51	SY	$4.92	$4,036.91
	Median Component Total				$36,989.11

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.40	CY	$1,858.71	$2,602.19
425-1-351	INLETS, CURB, TYPE P-5, <10'	3.00	EA	$5,735.20	$17,205.60
425-1-451	INLETS, CURB, TYPE J-5, <10'	1.00	EA	$7,940.92	$7,940.92
425-1-521	INLETS, DT BOT, TYPE C, <10'	1.00	EA	$4,153.74	$4,153.74
425-2-41	MANHOLES, P-7, <10'	1.00	EA	$4,936.73	$4,936.73
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	208.00	LF	$125.72	$26,149.76
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$288.14	$6,915.36
430-175-148	PIPE CULV, OPT MATL, ROUND, 48"S/CD	392.00	LF	$515.48	$202,068.16
570-1-2	PERFORMANCE TURF, SOD	23.62	SY	$4.92	$116.21
	Drainage Component Total				$272,088.67

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	$402.31	$804.62
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,399.59	$1,399.59
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
700-2-16	MULTI- POST SIGN, F&I GM, 101-200 SF	1.00	AS	$10,911.70	$10,911.70
	Signing Component Total				$19,754.62

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	9 LANES

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.79	$8,253.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$24.83	$7,449.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$744.91	$16,388.02
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,172.93	$1,172.93
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$80,286.38	$481,718.28
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,078.93	$21,578.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,030.75	$20,615.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 2

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	5 LANES

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.79	$8,253.00
630-2-12	CONDUIT, F& I, DIRECTIONAL	300.00	LF	$24.83	$7,449.00

	BORE				
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$744.91	$16,388.02
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,172.93	$1,172.93
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$80,286.38	$481,718.28
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,078.93	$21,578.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,030.75	$20,615.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 3

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	6 LANES

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.79	$8,253.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$24.83	$7,449.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$744.91	$16,388.02
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,172.93	$1,172.93
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$80,286.38	$481,718.28
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,078.93	$21,578.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,030.75	$20,615.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28

Signalization 4

Description		Value
Type		6 Lane Mast Arm
Multiplier		1
Description	7 LANES	

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.79	$8,253.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$24.83	$7,449.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$744.91	$16,388.02
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$2,508.17	$2,508.17
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.76	$345.60
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,172.93	$1,172.93
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$80,286.38	$481,718.28
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,078.93	$21,578.60
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$675.59	$5,404.72
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$366.45	$7,329.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,030.75	$20,615.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$244.78	$1,958.24
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$35,970.31	$35,970.31
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$389.82	$1,559.28
	Signalizations Component Total				$2,471,374.16

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$31,200.00	$31,200.00
	Intelligent Traffic System (ITS) Component Total				$31,200.00

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	410.26	LF	$11.79	$4,836.97
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	81.43	LF	$24.83	$2,021.91
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$744.91	$2,234.73

715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,498.37 LF	$2.55	$3,820.84
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	3.00 EA	$6,027.73	$18,083.19
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00 EA	$630.43	$1,891.29
	Subcomponent Total			$32,888.93
	Lighting Component Total			$32,888.93

Sequence 12 Total $3,581,450.39

Sequence: 13 NDR - New Construction, Divided, Rural **Net Length:** 0.100 MI 530 LF

Description: 17A-4A Side Road

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	80.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.100
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.97	AC	$31,159.31	$30,224.53
120-6	EMBANKMENT	4,847.43	CY	$29.68	$143,871.72
	Earthwork Component Total				$174,096.25

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	16.00 / 16.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,591.66	SY	$11.20	$29,026.59
285-709	OPTIONAL BASE,BASE GROUP 09	1,962.59	SY	$29.77	$58,426.30
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	311.00	TN	$173.97	$54,104.67

337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	155.50	TN	$145.31	$22,595.70

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	14.00	EA	$7.32	$102.48
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.20	GM	$1,054.72	$210.94
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.20	GM	$4,449.38	$889.88
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.20	GM	$4,468.54	$893.71
	Roadway Component Total				$166,250.28

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	510.09	SY	$24.06	$12,272.77
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	38.87	TN	$173.97	$6,762.21
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	18.85	TN	$145.31	$2,739.09
570-1-2	PERFORMANCE TURF, SOD	235.61	SY	$4.92	$1,159.20

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	2,591.00	SY	$4.92	$12,747.72

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,378.29	LF	$2.08	$2,866.84
104-11	FLOATING TURBIDITY BARRIER	25.10	LF	$13.62	$341.86
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	25.10	LF	$10.38	$260.54

104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	1.00	EA	$114.05	$114.05
107-1	LITTER REMOVAL	102.06	AC	$35.11	$3,583.33
107-2	MOWING	102.06	AC	$59.29	$6,051.14
	Shoulder Component Total				$51,981.75

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	10.00
Performance Turf Width	10.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	589.01	SY	$4.92	$2,897.93
	Median Component Total				$2,897.93

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.81	CY	$1,858.71	$3,364.27
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	$5,081.01	$5,081.01
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	88.00	LF	$185.13	$16,291.44
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	40.00	LF	$125.72	$5,028.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$288.14	$9,220.48
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	5.00	EA	$1,858.01	$9,290.05
524-1-1	CONCRETE DITCH PAVT, NR, 3"	200.80	SY	$141.05	$28,322.84
570-1-2	PERFORMANCE TURF, SOD	70.68	SY	$4.92	$347.75
	Drainage Component Total				$76,946.64

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100	1.00	AS	$6,638.71	$6,638.71

SF

Signing Component Total $15,905.05

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$40,000.00	$40,000.00
	Comment: Assume cost per mile to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$40,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	600.00	LF	$11.79	$7,074.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,800.00	LF	$2.55	$4,590.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	3.00	EA	$7,587.46	$22,762.38
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	$630.43	$1,891.29
	Subcomponent Total				$38,552.40
	Lighting Component Total				$38,552.40

Sequence 13 Total $566,630.30

Sequence: 14 NDR - New Construction, Divided, Rural **Net Length:** 0.076 MI 400 LF

Description: 17A-4B Side Road

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	135.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.076
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %

Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.24	AC	$31,159.31	$38,637.54
120-6	EMBANKMENT	4,628.99	CY	$29.68	$137,388.42
	Earthwork Component Total				$176,025.96

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,600.90	SY	$11.20	$17,930.08
285-709	OPTIONAL BASE,BASE GROUP 09	1,125.96	SY	$29.77	$33,519.83
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	176.10	TN	$173.97	$30,636.12
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	88.05	TN	$145.31	$12,794.55

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	10.00	EA	$7.32	$73.20
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.15	GM	$1,054.72	$158.21
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.15	GM	$4,449.38	$667.41
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.15	GM	$4,468.54	$670.28
	Roadway Component Total				$96,449.68

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 4.00

Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	385.10	SY	$24.06	$9,265.51
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	29.35	TN	$173.97	$5,106.02
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	14.23	TN	$145.31	$2,067.76
570-1-2	PERFORMANCE TURF, SOD	177.88	SY	$4.92	$875.17

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	3,156.00	SY	$4.92	$15,527.52

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,040.58	LF	$2.08	$2,164.41
104-11	FLOATING TURBIDITY BARRIER	18.95	LF	$13.62	$258.10
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	18.95	LF	$10.38	$196.70
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	1.00	EA	$114.05	$114.05
107-1	LITTER REMOVAL	77.28	AC	$35.11	$2,713.30
107-2	MOWING	77.28	AC	$59.29	$4,581.93
	Shoulder Component Total				$45,953.47

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	30.00
Performance Turf Width	30.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	1,334.08	SY	$4.92	$6,563.67
	Median Component Total				$6,563.67

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

400-2-2	CONC CLASS II, ENDWALLS	1.36	CY	$1,858.71	$2,527.85
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	$5,081.01	$5,081.01
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	64.00	LF	$185.13	$11,848.32
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	32.00	LF	$125.72	$4,023.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$288.14	$6,915.36
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	$1,858.01	$7,432.04
524-1-1	CONCRETE DITCH PAVT, NR, 3"	151.60	SY	$141.05	$21,383.18
570-1-2	PERFORMANCE TURF, SOD	53.36	SY	$4.92	$262.53
	Drainage Component Total				$59,473.33

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	$402.31	$402.31
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,399.59	$2,799.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71
	Signing Component Total				$14,505.46

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$30,400.00	$30,400.00
	Comment: Assume cost per mile to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$30,400.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	400.00	LF	$11.79	$4,716.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	2.00	EA	$744.91	$1,489.82
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,200.00	LF	$2.55	$3,060.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	2.00	EA	$7,587.46	$15,174.92
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	2.00	EA	$630.43	$1,260.86
	Subcomponent Total				$25,701.60

Lighting Component Total	$25,701.60

Sequence 14 Total	$455,073.17

Sequence: 15 NDR - New Construction, Divided, Rural **Net Length:** 0.085 MI 450 LF

Description: 17A-4C Side Road

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	160.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.085
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.65	AC	$31,159.31	$51,412.86
120-6	EMBANKMENT	4,907.88	CY	$29.68	$145,665.88
	Earthwork Component Total				$197,078.74

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	12.00 / 24.00
Structural Spread Rate	330
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,399.23	SY	$11.20	$26,871.38
285-709	OPTIONAL BASE,BASE GROUP 09	1,865.40	SY	$29.77	$55,532.96
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	296.90	TN	$173.97	$51,651.69
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	148.45	TN	$145.31	$21,571.27

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE/RAISED PAVEMENT MARKERS	23.00	EA	$7.32	$168.36
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.17	GM	$1,054.72	$179.30
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.09	GM	$408.99	$36.81
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.17	GM	$4,449.38	$756.39
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.09	GM	$1,608.56	$144.77
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.17	GM	$4,468.54	$759.65
	Roadway Component Total				$157,672.58

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 4.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-702	OPTIONAL BASE,BASE GROUP 02	432.86	SY	$24.06	$10,414.61
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	32.99	TN	$173.97	$5,739.27
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	15.99	TN	$145.31	$2,323.51
570-1-2	PERFORMANCE TURF, SOD	199.94	SY	$4.92	$983.70

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	4,550.00	SY	$4.92	$22,386.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,169.63	LF	$2.08	$2,432.83

104-11	FLOATING TURBIDITY BARRIER	21.30	LF	$13.62	$290.11
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	21.30	LF	$10.38	$221.09
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	$3,083.00	$3,083.00
104-18	INLET PROTECTION SYSTEM	1.00	EA	$114.05	$114.05
107-1	LITTER REMOVAL	86.94	AC	$35.11	$3,052.46
107-2	MOWING	86.94	AC	$59.29	$5,154.67
	Shoulder Component Total				$56,195.30

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	20.00
Performance Turf Width	20.00
Total Median Shoulder Width L/R	0.00 / 0.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-2	PERFORMANCE TURF, SOD	999.68	SY	$4.92	$4,918.43
	Median Component Total				$4,918.43

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	1.53	CY	$1,858.71	$2,843.83
425-1-551	INLETS, DT BOT, TYPE E, <10'	1.00	EA	$5,081.01	$5,081.01
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	72.00	LF	$185.13	$13,329.36
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	32.00	LF	$125.72	$4,023.04
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00	LF	$288.14	$9,220.48
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	4.00	EA	$1,858.01	$7,432.04
524-1-1	CONCRETE DITCH PAVT, NR, 3"	170.40	SY	$141.05	$24,034.92
570-1-2	PERFORMANCE TURF, SOD	59.98	SY	$4.92	$295.10
	Drainage Component Total				$66,259.78

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12	1.00	AS	$402.31	$402.31

	SF				
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	$1,399.59	$4,198.77
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	$4,665.26	$4,665.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	1.00	AS	$6,638.71	$6,638.71

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-124	OH STATIC SIGN STR, F&I, S 41-50 FT	1.00	EA	$179,000.00	$179,000.00
	Signing Component Total				$194,905.05

INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

Description of Work

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
77777	ITS	1.00	LS	$34,000.00	$34,000.00
	Comment: Assume cost per mile to be $400,000				
	Intelligent Traffic System (ITS) Component Total				$34,000.00

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	3

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	600.00	LF	$11.79	$7,074.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	$744.91	$2,234.73
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,800.00	LF	$2.55	$4,590.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	3.00	EA	$7,587.46	$22,762.38
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	$630.43	$1,891.29
	Subcomponent Total				$38,552.40
	Lighting Component Total				$38,552.40

Sequence 15 Total $749,582.28

Date: 4/8/2022 9:10:52 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 423374-1-52-01 **Letting Date:** 01/2099

Description: WIDENING FROM JUPITER/INDIANTOWN RD (MP 117.0) TO OKECHOBEE RD (SR 70) (MP 153.7)

District: 08 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 7 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 37.010 MI

Project Manager: DAVE WOOD

Version 40 Project Grand Total **$37,745,152.26**

Description: 20210525 - Consultant Update. 20210513 Copied from FPID 423374-1-52-01 Version 18 [7A.SR 70/Okeechobee Rd. (Alt. 4) [Seq. 17A] (MP 153.2)]

Project Sequences Subtotal			**$24,856,299.02**
102-1	Maintenance of Traffic	10.00 %	$2,485,629.90
101-1	Mobilization	10.00 %	$2,734,192.89
Project Sequences Total			**$30,076,121.81**
Project Unknowns		25.00 %	$7,519,030.45
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$150,000.00**
Version 40 Project Grand Total					**$37,745,152.26**

APPENDIX C

Project Traffic Forecast Memorandum

Florida Department of Transportation

Project Development and Environment (PD&E) Study

Florida's Turnpike,
North of Jupiter/Indiantown Road to
Fort Pierce / Okeechobee Road
Palm Beach, Martin and
St. Lucie Counties, Florida
FPN: 423374-1

Project Traffic Forecast Memorandum

DRAFT

June 2017



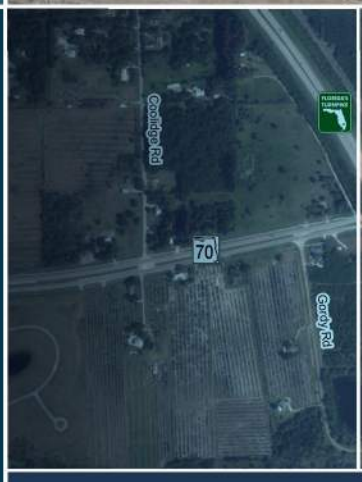




Table of Contents

Section 1 Introduction 1-1

1.1 Project Study Area 1-1

Section 2 Analysis Procedures 2-1

2.1 Traffic Operational Analysis Methodology 2-1
2.2 Traffic Factors 2-3

Section 3 Existing Conditions 3-1

3.1 Demographics 3-1
3.2 Roadway Facilities 3-1
3.3 Data Collection 3-7

Section 4 Existing Traffic Analysis 4-1

4.1 Existing Traffic Data 4-1
4.2 Existing Operational Performance 4-2
4.2.1 Freeway Segment Analysis 4-2
4.2.2 Ramp Capacity Analysis 4-2
4.2.3 Intersection Analysis 4-2
4.2.4 Microsimulation Evaluation 4-2

Section 5 Future Traffic Data 5-1

5.1 Traffic Forecasts 5-1
5.2 Mainline and Ramps Lane Requirements 5-8

Section 6 Future Traffic Conditions 6-1

Tables

		Page
Table 2.1	Freeway Segments 2010 HCM Level of Service Criteria	2-1
Table 2.2	Ramp Roadway Capacity 2010 HCM Level of Service Criteria	2-2
Table 2.3	Signalized Intersection 2010 HCM Level of Service Criteria	2-3
Table 2.4	Traffic Factors	2-4
Table 3.1	Population Projections	3-1
Table 3.2	Data Collection Locations	3-8
Table 4.1	Year 2016 AADT	4-1
Table 4.2	Existing (2016) Peak Hour HCS Freeway Segment Level of Service	4-7
Table 4.3	Existing (2016) Peak Hour HCS Ramp Capacity Analysis	4-8
Table 5.1	Mainline and Ramp Forecasts for No Build	5-2
Table 5.2	Mainline and Ramp Forecasts for Build without Kanner Highway	5-3
Table 5.3	Mainline and Ramp Forecasts for Build with Kanner Highway	5-4
Table 5.4	Lane Requirements by Year for No Build	5-9
Table 5.5	Lane Requirements by Year for Build without Kanner Highway	5-10
Table 5.6	Lane Requirements by Year for Build with Kanner Highway	5-11

Figures

Figure 1.1	Project Location and Study Limits	1-3
Figure 3.1	Fort Pierce (S.R. 70) Aerial Photograph	3-3
Figure 3.2	Port St. Lucie Boulevard Aerial Photograph	3-4
Figure 3.3	Becker Road Aerial Photograph	3-5
Figure 3.4	S.W. Martin Highway (S.R. 714) Aerial Photograph	3-6
Figure 4.1	Existing (2016) Peak Hour Volumes	4-3
Figure 5.1	2045 Peak Hour Volumes for No Build	5-5
Figure 5.2	2045 Peak Hour Volumes for Build without Kanner Highway	5-6
Figure 5.3	2045 Peak Hour Volumes for Build with Kanner Highway	5-7

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 (S.R. 91) corridor in Palm Beach, Martin and St. Lucie Counties. The project limits extend from north of Jupiter/Indiantown Road at Milepost (MP) 116 to Fort Pierce/Okeechobee Road (S.R. 70) at MP 152, a distance of approximately 36 miles. This Project Traffic Forecast Memorandum (PTFM) will support the effort.

Currently, Florida's Turnpike (S.R. 91) is a four (4) lane limited access toll facility. The Turnpike intersects at S.R. 70/Okeechobee Road (MP 152) in Fort Pierce, St. Lucie County. The Turnpike has two interchanges in Port St. Lucie, one at Becker Road (MP 138) and the other at S.R. 716/Port St. Lucie Boulevard (MP 142), followed by the Fort Pierce/Port St. Lucie Service Plaza at MP 144. The interchange of Turnpike and S.R. 714/S.W. Martin Highway (MP 133) is the only exit to Martin County.

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 will be evaluated as part of the study (FPID 406143-1), as well as improvements to the existing interchanges.

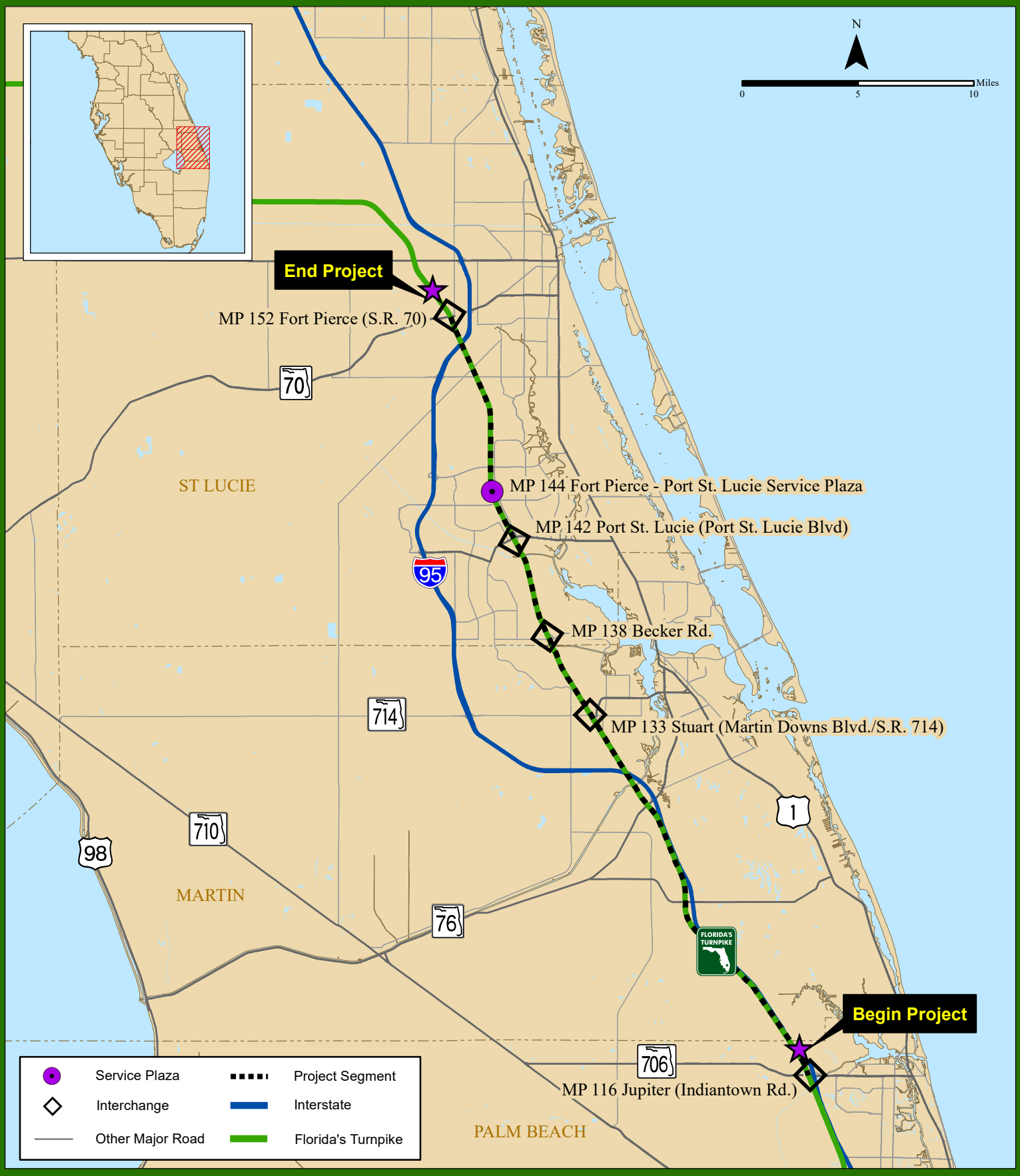
1.1 PROJECT STUDY AREA

This project is located within the Florida's Turnpike Ticket System, a limited access facility with two lanes of travel in each direction of the freeway mainline within the project limits. The project limits extend from north of Jupiter/Indiantown Road (MP 116) to Fort Pierce (S.R. 70)/Okeechobee Road (MP 152). Outside and inside shoulders are 10 feet wide each and the posted speed is 70 mph. The anticipated Area of Influence (AOI) of the PD&E study includes the following existing interchanges and intersections:

- Interchanges along the Turnpike:
  - S.R. 70 at MP 152
  - Port St. Lucie Boulevard at MP 142
  - Becker Road at MP 138
  - S.W. Martin Highway (S.R. 714) at MP 133
- Intersections along S.R. 70 (MP 152):
  - Turnpike ramps/South Kings Highway
  - Crossroads Parkway
  - I-95 southbound ramps
  - I-95 northbound ramps

- Intersections along Port St. Lucie Boulevard (MP 142):
  - S.W. Cameo Boulevard
  - Turnpike ramps/S.W. Bayshore Boulevard
- Intersections along Becker Road (MP 138):
  - Turnpike southbound ramps
  - Turnpike northbound ramps
- Intersections along S.R. 714 (MP 133):
  - S.W. Citrus Boulevard
  - S.W. 42nd Avenue
  - Turnpike ramps/S.W. Martin Downs Boulevard
  - S.W. High Meadow Avenue

Figure 1.1 shows the project location and study limits.



Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum

Project Location and Study Limits

Figure 1.1

This section highlights the traffic operational analysis procedure and traffic factors used in development of the analysis contained in this document.

2.1 TRAFFIC OPERATIONAL ANALYSIS METHODOLOGY

Detailed operational analyses were performed for existing (2016) conditions. Freeway segments (basic, merge/diverge, and weave) analysis was based on the capacity thresholds published in the FDOT Systems Planning Office *Estimation of Capacities on Florida Freeways Report*, dated September 2014 and prepared by the Transportation Research Center, University of Florida. The FDOT thresholds were adjusted for local conditions such as speed, truck proportion, Peak Hour Factor (PHF), and driver population.

The Highway Capacity Software (HCS) Version 6.70 was used to identify Level of Service (LOS) along freeway segments. The HCS is based on 2010 Highway Capacity Manual (HCM) methodologies. The HCM estimates LOS based on density – a function of flow rate (volumes) and travel speed – for uninterrupted flow facilities such as basic freeway segments, merge and diverge segments, and freeway weaving segments. Density is measured in passenger cars per mile per lane (pcpmpl). The 2010 HCM LOS and density thresholds for freeway segments are listed in **Table 2.1**.

Table 2.1
Freeway Segments 2010 HCM Level of Service Criteria

(Passenger Cars/Mile/Lane)

LOS	Basic (HCM Exhibit 11-5)	Merge and Diverge (HCM Exhibit 13-2)	Weaving (HCM Exhibit 12-10)
A	≤ 11	≤ 10	0-10
B	> 11-18	> 10-20	> 10-20
C	> 18-26	> 20-28	> 20-28
D	> 26-35	> 28-35	> 28-35
E	> 35-45	> 35	> 35
F	> 45	Demand Exceeds Capacity	Demand Exceeds Capacity

The HCS software was calibrated based on the adjusted FDOT capacities. Since the freeway segment analysis modules in HCS lack a capacity reduction factor, the Driver Population Factor was used to adjust capacity to the LOS E density threshold of 45 pcpmpl for a basic segment (see **Table 2.1**). The resulting Adjustment Factor (Driver Population Factor) was 0.85. LOS was then estimated using this factor for all the segments. Other critical HCS input assumptions included:

- Turnpike Free-Flow Speed (FFS) = 75 mph
- Turnpike peak hour truck percentage = 7%

- Lane width = 12 feet
- Right shoulder clearance = 6 feet

For freeway merge and diverge areas, the HCM methodology also includes a capacity check for the influence area and the upstream or downstream ramp roadway. Capacity is dependent upon FFS and number of lanes. HCM capacity thresholds for ramp roadways are shown in **Table 2.2**. Similar to freeway segments capacities, the HCM ramp roadway capacities were also adjusted for local conditions.

Table 2.2
Ramp Roadway Capacity 2010 HCM Level of Service Criteria

Ramp FFS	Single-Lane Ramps	Two-Lane Ramps
(HCM Exhibit 13-10)		
> 50	2,200	4,400
> 40-50	2,100	4,200
> 30-40	2,000	4,000
≥ 20-30	1,900	3,800
< 20	1,800	3,600

Intersections will be evaluated using Synchro Version 8, based on the 2010 HCM LOS and delay thresholds for signalized intersections presented in **Table 2.3**. Unlike the HCM, Synchro has additional procedures for estimating control delay, such as estimation of right turn on red and queue delay associated with starvation and spillback. Thus, Synchro is felt to yield more accurate results than HCM because of these additional refinements.

The VISSIM microsimulation software will be used to further analyze existing and future traffic operations at a more detailed level for the entire study area. VISSIM is a microscopic traffic flow simulation model based on car following, lane change, and queuing logic. VISSIM has the ability to model Express Lanes (ELs), High Occupancy Vehicle lanes, and other transportation strategies that are being implemented within the state. VISSIM models each individual vehicle within the network in order to determine the performance measures for freeways, ramps, and intersections.

In VISSIM microsimulation, Measures of Effectiveness (MOEs) selected for evaluating freeway segments (basic, weave, and merge/diverge) include percentage of demand served, speed, and density in pcpmpl. Research indicates that the HCM methodology for calculating density is different from microsimulation methods. Therefore, density estimated by microsimulation tools like VISSIM cannot be accurately related to the HCM LOS criteria in **Table 2.1**. However, density output presented in a later version of this report will not be directly obtained from VISSIM evaluation files. Density from VISSIM files (vehicles per mile) will be converted into pcpmpl by

dividing the VISSIM density by the number of lanes and multiplying by a heavy vehicle factor, following the HCM methodology. Ramp roadways in VISSIM will be evaluated based on percentage of demand served and average travel speed.

Intersections will be evaluated in VISSIM based on percentage of demand served, average intersection delay, and queue lengths. Due to the incongruences between HCM and microsimulation methodologies, delay estimated by microsimulation tools like VISSIM cannot be accurately related to the HCM LOS criteria in **Table 2.3**.

Table 2.3
Signalized Intersection 2010 HCM Level of Service Criteria

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio*	
	≤1.0	>1.0
≤ 10	A	F
> 10-20	B	F
> 20-35	C	F
> 35-55	D	F
> 55-80	E	F
>80	F	F

*For approach-based and intersection wide assessments, LOS is defined solely by control delay. Control delay and volume-to-capacity ratio are used to characterize LOS for a lane group.

2.2 TRAFFIC FACTORS

The traffic factors for this study are presented in **Table 2.4**. The Design Hour Factor (K) is the proportion of the Annual Average Daily Traffic (AADT) that occurs during the design hour. Consistent with all FDOT districts, the Turnpike has developed standard K factors for use in all planning and design applications. The Directional Distribution Factor (D) is the proportion of traffic traveling in the peak direction during the design hour. These factors represent the traffic demand a roadway is typically designed to accommodate.

The Truck Factor (T) represents the estimated percentage of the AADT that is composed of trucks. The Design Hour Truck (DHT) factor is the peak hour truck factor and is estimated as half of the T factor. The Peak Hour Factor (PHF) is the ratio of total peak hour volume to the peak rate of flow within the hour. It accounts for the variability of traffic within the hour.

Table 2.4
Traffic Factors

Ticket System	Traffic Factors			
	K	D	T_{24} (%)	DHT (%)
Mainline				
B/W Three Lakes Plaza (MP 236) & Yeehaw Junction (MP 193) B/W Yeehaw Junction (MP 193) & Fort Pierce (MP 152) B/W Fort Pierce (MP 152) & Port St. Lucie (MP 142) B/W Port St. Lucie (MP 142) & Becker Road (MP 138) B/W Becker Road (MP 138) & Stuart (MP 133) B/W Stuart (MP 133) & Jupiter (MP 116)	10.5%	58.0%	14.0%	7.0%
Ramps				
Fort Pierce (MP 152) Northbound on & Southbound off-ramps Northbound off & Southbound on-ramps *Ramp Roadways under Toll Plaza*	10.0%	55.6% *50.0%*	20.6%	10.0%
Port St. Lucie (MP 142) Northbound on & Southbound off-ramps Northbound off & Southbound on-ramps *Ramp Roadways under Toll Plaza*	10.0%	NA *50.0%*	6.2%	3.0%
Becker Road (MP 138) Northbound on & Southbound off-ramps Northbound off & Southbound on-ramps *Northbound on & off-ramps under Toll Plaza* *Southbound on-ramp under Toll Plaza* *Southbound off-ramp under Toll Plaza*	13.0% *10.0%*	82.0% *NA*	6.0%	3.0%

Table 2.4 (continued)
Traffic Factors

Ticket System	Traffic Factors			
	K	D	T_{24} (%)	DHT (%)
Ramps				
Stuart (MP 133)				
Northbound on & Southbound off-ramps	11.0%	63.0%	9.4%	5.0%
Northbound off & Southbound on-ramps				
Ramp Roadways under Toll Plaza		*50.0%*		
Arterials				
S.R. 70	9.0%	58.8%	13.3%	7%
Port St. Lucie Boulevard	9.0%	67.3%	4.1%	2%
Becker Road	9.0%	69.8%	2.1%	1%
S.W. Martin Highway	9.0%	62.3%	5.2%	3%

Existing conditions such as demographics, roadway facilities, and traffic data collection are described in this section.

3.1 DEMOGRAPHICS

The Turnpike corridor is located within the St. Lucie, Martin and Palm Beach Counties. **Table 3.1** shows the population growth of these three counties. There was over 40 percent growth between 2000 and 2010 in St. Lucie County. The population is estimated to reach 1.8 million by year 2045 in Palm Beach County. As the city and county population increases, traffic will increase on area roadways as well.

Table 3.1
Population Projections

Area	Population			2000 to 2010 % Change	2010 to 2045 % Change
	2000	2010	2045		
St. Lucie County	192,695	277,789	474,000	44.2	70.6
Martin County	126,731	146,318	184,900	15.5	26.4
Palm Beach County	1,131,191	1,320,134	1,789,000	16.7	35.5

Source: 2000 and 2010 Census and Bureau of Economic and Business Research (BEBR)

3.2 ROADWAY FACILITIES

The Turnpike provides multi-regional connectivity from Miami-Dade County in South Florida to Interstate 75 (I-75) north of Wildwood in Sumter County. The study corridor is within the Turnpike's Ticket System. The Ticket System extends 148 miles from south of the Three Lakes Toll Plaza in Osceola County, to Lantana Plaza in Palm Beach County. The existing Turnpike mainline within the study area has two 12-foot lanes in each direction with a posted speed limit of 70 mph.

The following is a description of the cross-streets with existing interchanges within the study limits:

Fort Pierce (S.R. 70)

S.R. 70 is a divided principal arterial with six lanes to the east of the Turnpike ramps/South Kings Highway intersection and four lanes to the west. The posted speed limit is 45 mph. The Turnpike interchange has a trumpet configuration with ramps that connect to S.R. 70 at a single intersection. An aerial photograph of the interchange is presented on **Figure 3.1**.

Port St. Lucie Boulevard

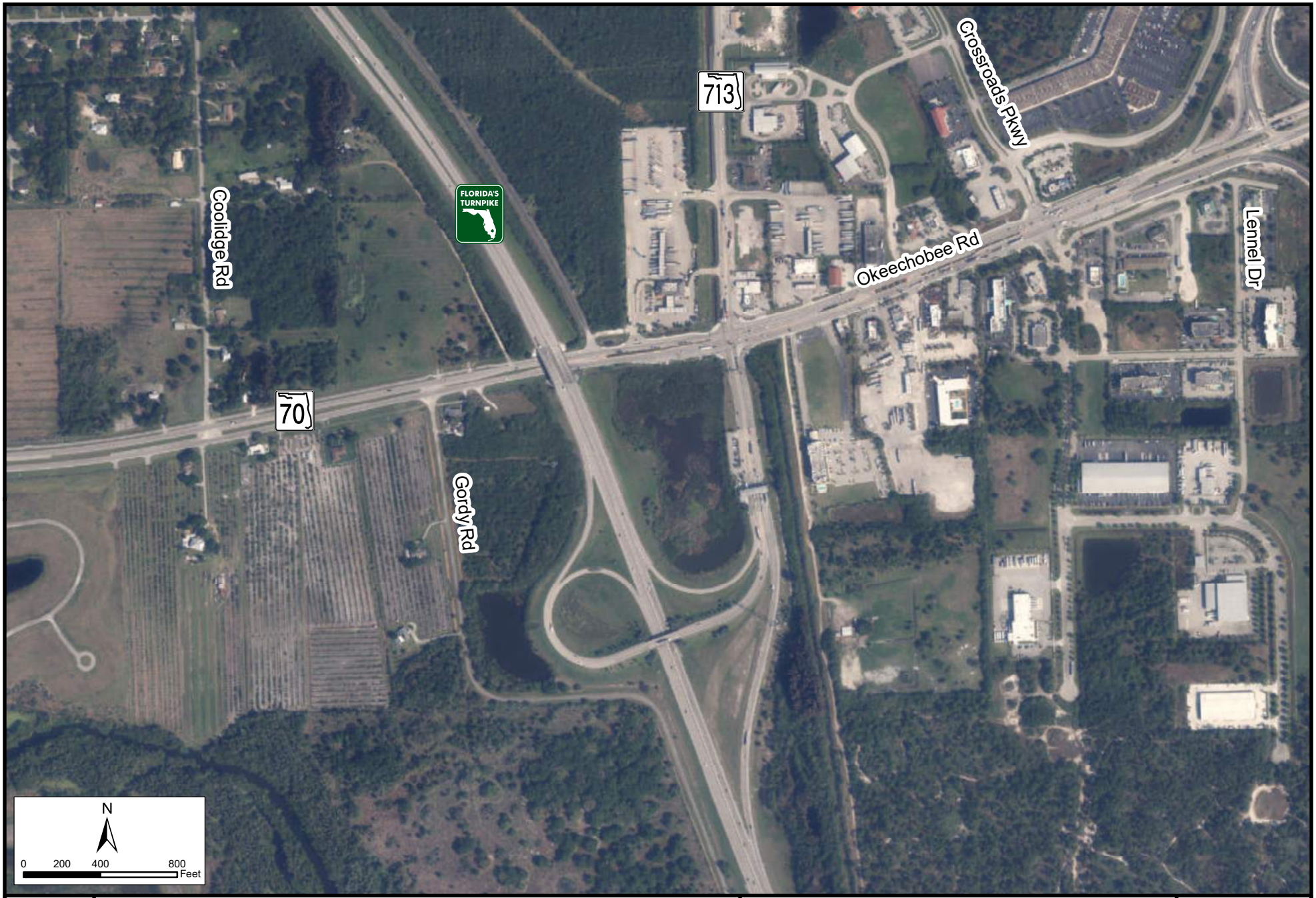
Port St. Lucie Boulevard is a six-lane divided principal arterial with a posted speed limit of 45 mph. The Turnpike interchange has a trumpet configuration as depicted on the aerial photograph on **Figure 3.2**. The Turnpike ramps connect to Port St. Lucie Boulevard at a single intersection.

Becker Road

Becker Road is a four-lane divided minor arterial that forms a partial cloverleaf interchange with the Turnpike. The posted speed limit within the interchange is 40 mph. An aerial photograph of the interchange is presented on **Figure 3.3**.

S.W. Martin Highway (S.R. 714)

S.R. 714 is a four-lane divided minor arterial with a posted speed limit of 45 mph. The Turnpike interchange has a trumpet configuration with ramps that connect to S.R. 714 at a single intersection. An aerial photograph of the interchange is presented on **Figure 3.4**.

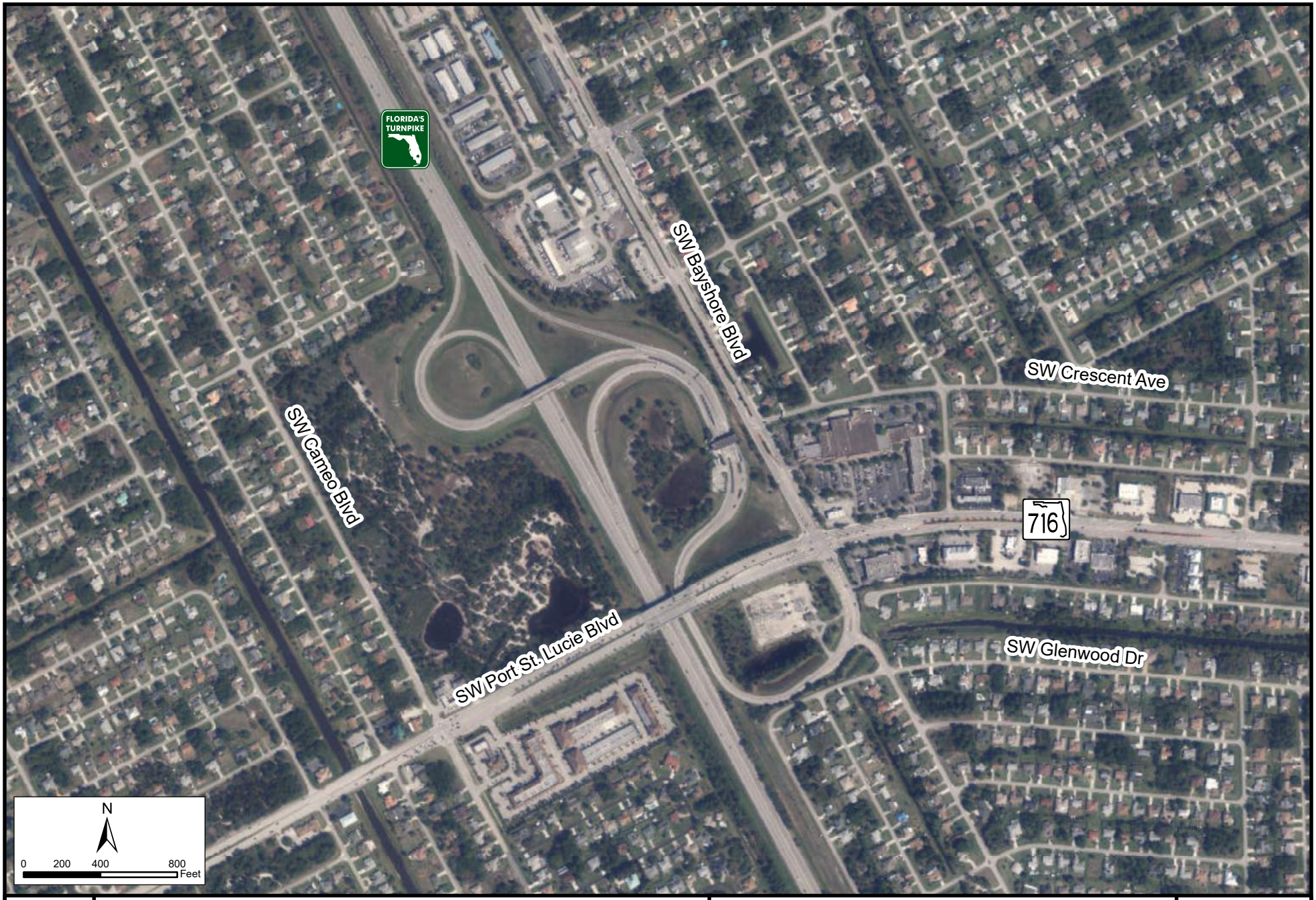


Florida's Turnpike PD&E Study
from MP 116 to MP 152
Project Traffic Forecast Memorandum

Fort Pierce (S.R. 70) Interchange

Aerial Photograph

Figure 3.1

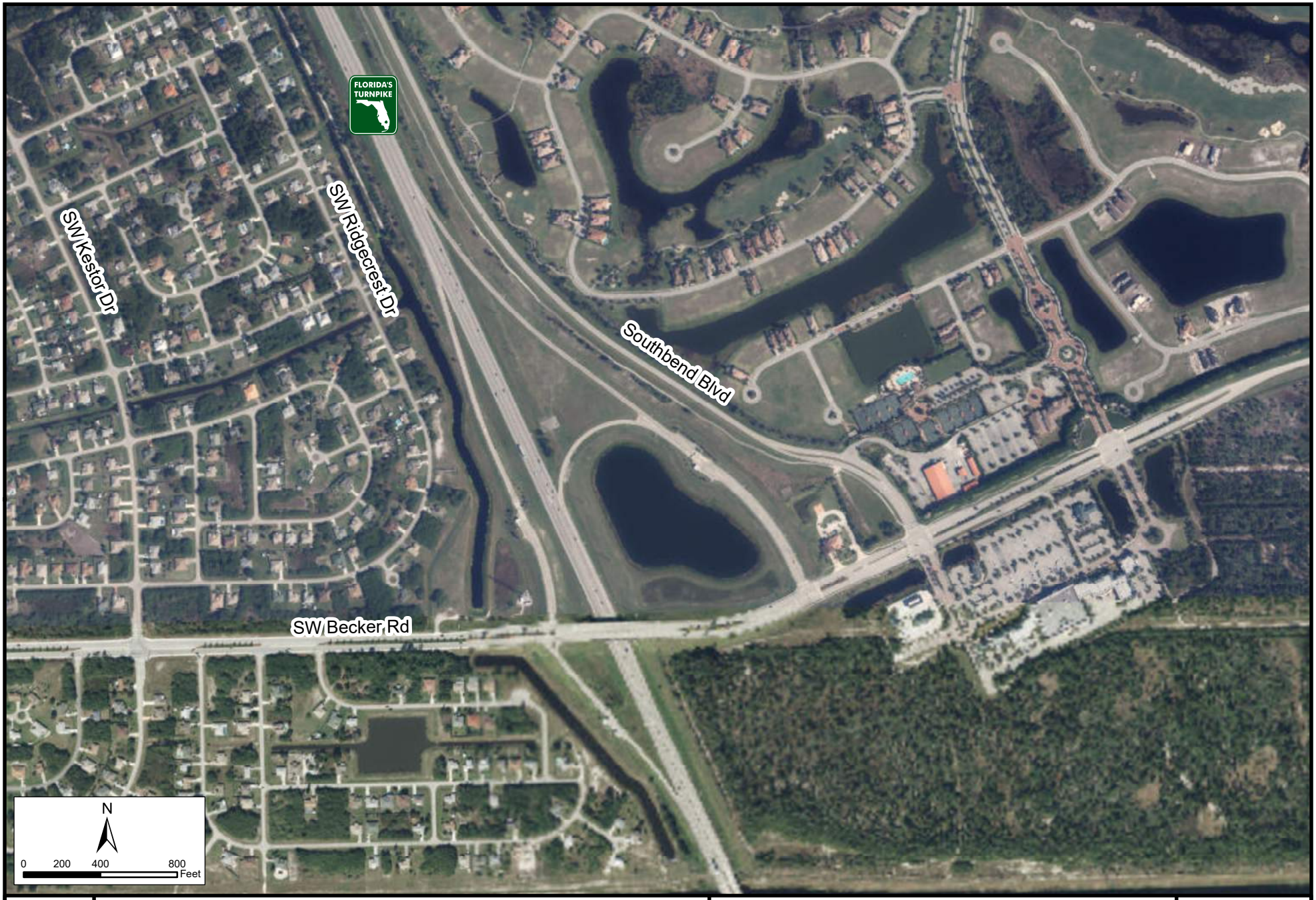


Florida's Turnpike PD&E Study
from MP 116 to MP 152
Project Traffic Forecast Memorandum

Port St. Lucie Boulevard Interchange

Aerial Photograph

Figure 3.2

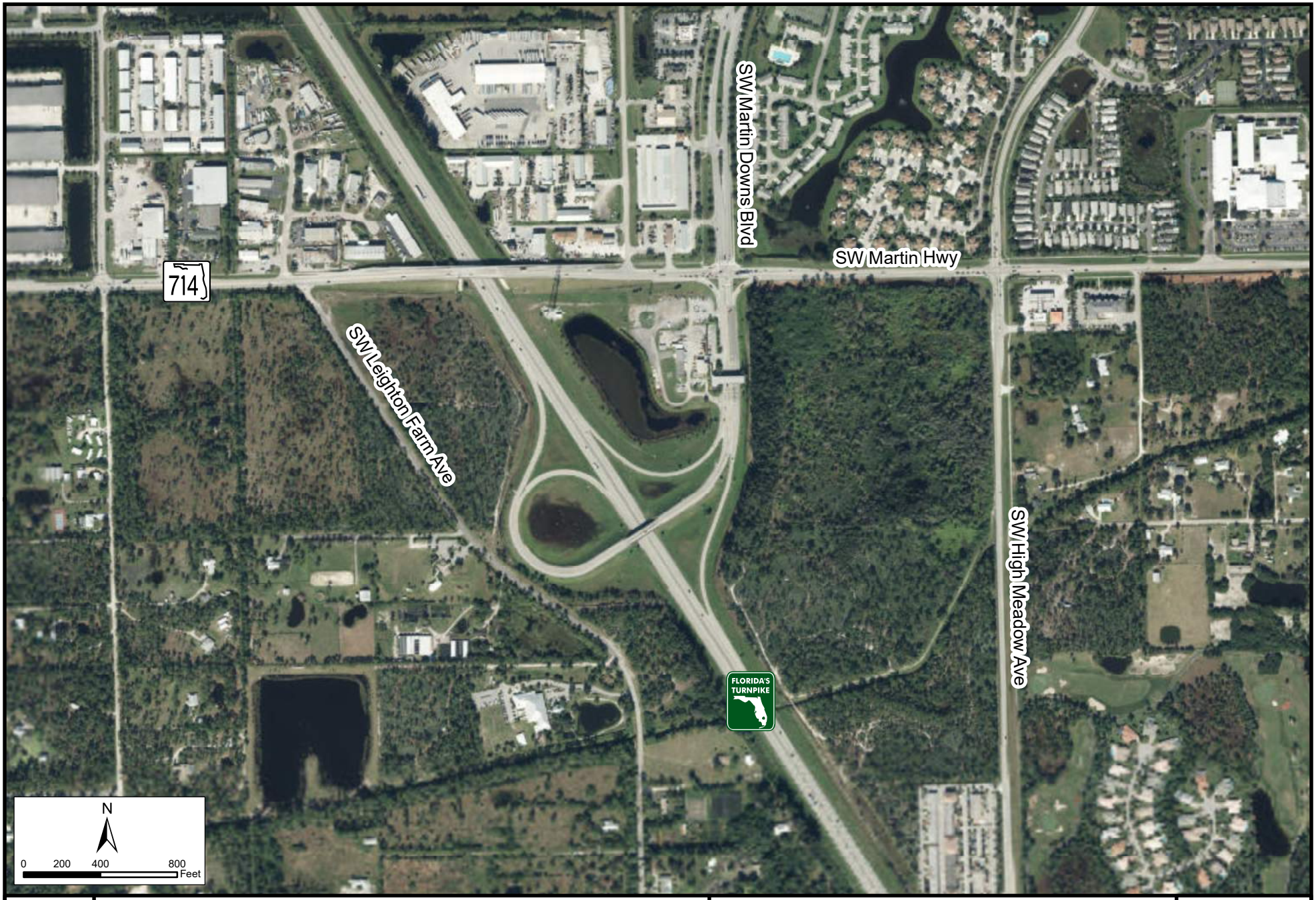


Florida's Turnpike PD&E Study
from MP 116 to MP 152
Project Traffic Forecast Memorandum

Becker Road Interchange

Aerial Photograph

Figure 3.3



Florida's Turnpike PD&E Study
from MP 116 to MP 152
Project Traffic Forecast Memorandum

S.W. Martin Highway (S.R. 714) Interchange

Aerial Photograph

Figure 3.4

3.3 DATA COLLECTION

Traffic volumes for the Turnpike mainline were obtained from the Financial Year 2016 Service Plaza Survey data for the Fort Pierce/Port St. Lucie Service Area. Daily hose and intersection movement counts were collected at the locations and dates listed in **Table 3.2**. The data were collected at existing interchanges and cross-streets expected to be impacted by proposed future interchanges.

All data collection was conducted in accordance with the procedures from the latest edition of the Florida Department of Transportation (FDOT) *Manual on Uniform Traffic Studies* (MUTS), FDOT Manual Number 750-020-007. Growth, seasonal, and axle adjustment factors were applied to the data where applicable.

Table 3.2
Data Collection Locations

Interchange/Cross-Street	Hose Count Location	Intersection Count Location	Count Date
S.R. 70 (MP 152)	Turnpike northbound off-ramp to S.R. 70	S.R. 70 and South Kings Highway	April 2016
	Turnpike southbound on-ramp from S.R. 70	S.R. 70 and Crossroads Parkway	
	S.R. 70 (under the Turnpike overpass)	S.R. 70 and I-95 southbound ramps	
	I-95 northbound on-ramp from S.R. 70 East	S.R. 70 and I-95 northbound ramps	
	I-95 southbound on-ramp from S.R. 70 West		
Midway Road (MP 150)	West of Glades Cut-Off Road	Glades Cut-Off Road	February 2015
	Glades Cut-Off Road, North of Midway Road	N.W. East Torino Parkway	
	Midway Road over the Turnpike	South Jenkins Road	
	East of South Jenkins Road	Selvitz Road	
St. Lucie Boulevard (MP 145)	Not Applicable	S.W. Cashmere Boulevard	April 2017
		S.W. Bayshore Boulevard	
Crosstown Parkway (MP 143)	Between S.W. Cashmere Boulevard and S.W. Bayshore Boulevard (under the Turnpike)	Crosstown Parkway and S.W. Cameo Boulevard	April 2016
		Crosstown Parkway and S.W. Bayshore Boulevard	
Port St. Lucie Boulevard (MP 142)	Turnpike northbound off-ramp to Port St. Lucie Boulevard	Port St. Lucie Boulevard and S.W. Cameo Boulevard	April 2016
	Turnpike southbound on-ramp from Port St. Lucie Boulevard		
	Between S.W. Cameo Boulevard and the Turnpike	Port St. Lucie Boulevard and S.W. Bayshore Boulevard/Turnpike ramps	
	S.W. Bayshore Boulevard, North of Port St. Lucie Boulevard		
Becker Road (MP 138)	Between Turnpike southbound ramps and the Turnpike	Becker Road and Turnpike southbound ramps	April 2016
	Northbound ramps	Becker Road and Turnpike northbound ramps	

Table 3.2 (continued)
Data Collection Locations

Interchange/Cross-Street	Hose Count Location	Intersection Count Location	Count Date
S.R. 714 (MP 133)	Turnpike northbound off-ramp to S.R. 714	S.R. 714 and S.W. High Meadow Avenue	April 2016
	Turnpike southbound on-ramp from S.R. 714		
I-95 (MP 130)	Between S.W. Kanner Highway and High Meadow Avenue	Not Applicable	April 2016
	northbound off-ramp to High Meadow Avenue		
	northbound on-ramp from High Meadow Avenue		
	southbound off-ramp to High Meadow Avenue		
	southbound on-ramp from High Meadow Avenue		
Kanner Highway (MP 129)	Not Applicable	S.W. Locks Road	April 2017
		S.W. Jack James Drive	
		I-95 southbound ramps	
		I-95 northbound ramps	

Existing traffic data and traffic operational analyses are provided in this section.

4.1 EXISTING TRAFFIC DATA

In order to calculate the existing (2016) AADT volumes, an analysis of the three-day traffic counts was conducted. Three-day averages were adjusted to account for seasonal variations and axle corrections to develop AADT volumes. The 2016 AADT volumes are shown in **Table 4.1**. The daily traffic for the Turnpike mainline ranges from 32,300 vpd to 51,600 vpd. Traffic counts at the Fort Pierce/Port St. Lucie Service Plaza were considered as controlling point and mainline volumes were balanced accordingly with the ramps data. Finally, the cross-street peak hour volumes were balanced and adjusted to ensure the intersection turning movements balanced with the ramp approach volumes.

Table 4.1
Year 2016 AADT

Milepost - Location	Turnpike Profile	AADT		
		SB	NB	2-Way AADT
		16,500	**15,800**	**32,300**
152 - Fort Pierce (S.R. 70)		3,800	3,300	7,100
		7,700	9,100	16,800
144 - Fort Pierce/Port St. Lucie Service Plaza		**20,400**	**21,600**	**42,000**
142 - Port St. Lucie Boulevard		1,900	2,100	4,000
		5,600	5,500	11,100
		24,100	**25,000**	**49,100**
138 - Becker Road		300	700	1,000
		1,100	2,400	3,500
		24,900	**26,700**	**51,600**
133 - Stuart (Martin Downs Boulevard/S.R. 714)		6,400	4,700	11,100
		1,700	2,300	4,000
		20,200	**24,300**	**44,500**
116 - Jupiter (Indiantown Road)				

2,220 = Mainline volume 2,220 = Ramp volume

The study area AM and PM peak hour volumes were calculated using data for the four highest consecutive 15-minute periods in the morning and evening at each count location. Seasonal adjustment factors were applied accordingly. An annual growth rate of 3% was applied where

necessary to develop a 2016 peak hour traffic profile. The traffic data were combined and adjusted for continuity of flow. **Figure 4.1** summarizes the final 2016 AM and PM peak hour volumes.

4.2 EXISTING OPERATIONAL PERFORMANCE

This section provides a summary of traffic performance results for existing conditions.

4.2.1 Freeway Segment Analysis

The 2016 AM and PM peak hour traffic volumes were evaluated in each direction for freeway segments: basic and merge/diverge influence areas. HCS results are summarized in **Table 4.2**. All of the Turnpike segments currently operate at LOS D or better.

4.2.2 Ramp Capacity Analysis

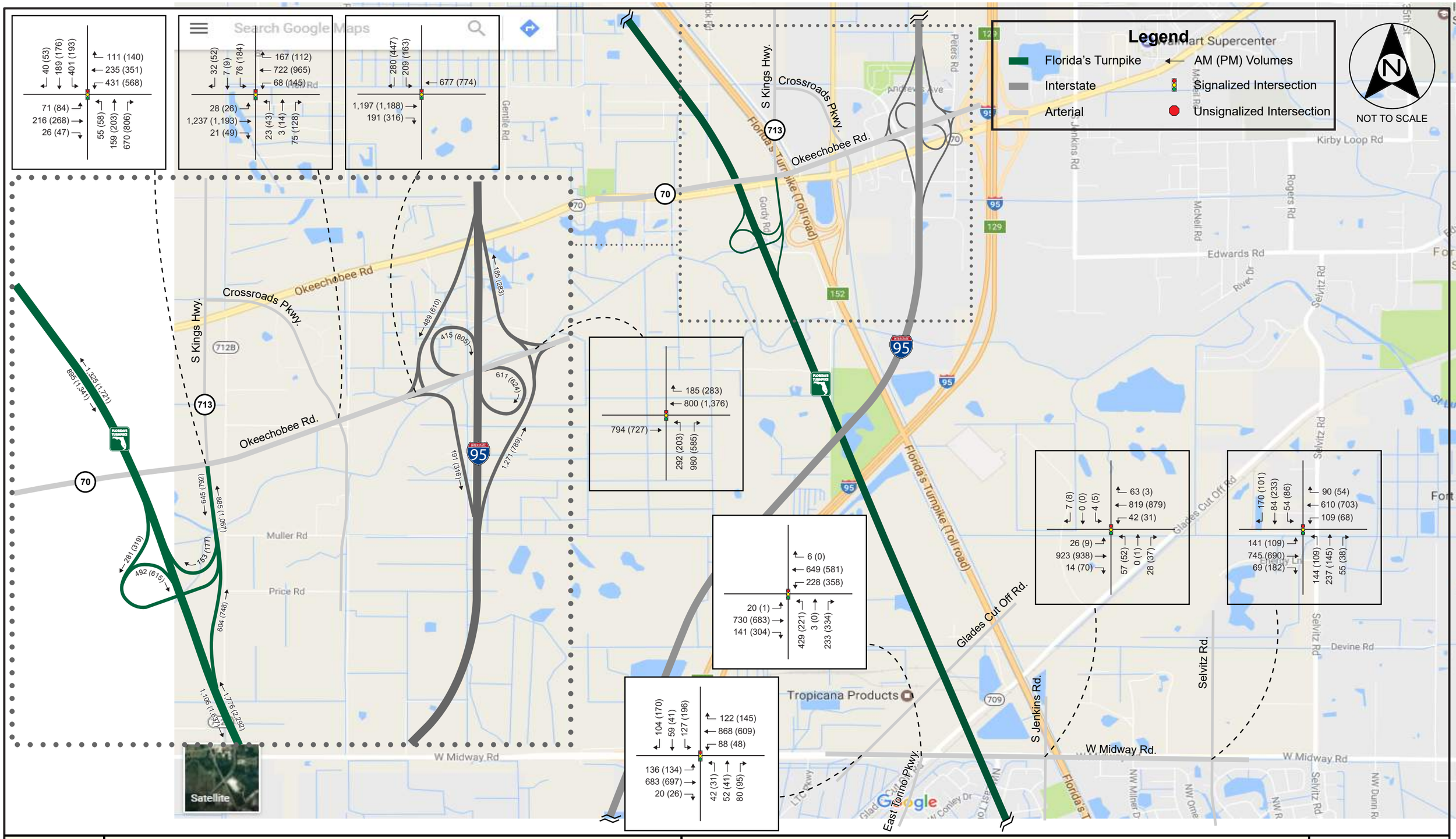
Capacity on the ramp roadways was assessed by comparing it with existing demand. The ramp Volume-to-Capacity (V/C) analysis is summarized in **Table 4.3**. Results show that all of the ramp roadways within the study area are currently operating under capacity (V/C < 1.0).

4.2.3 Intersection Analysis

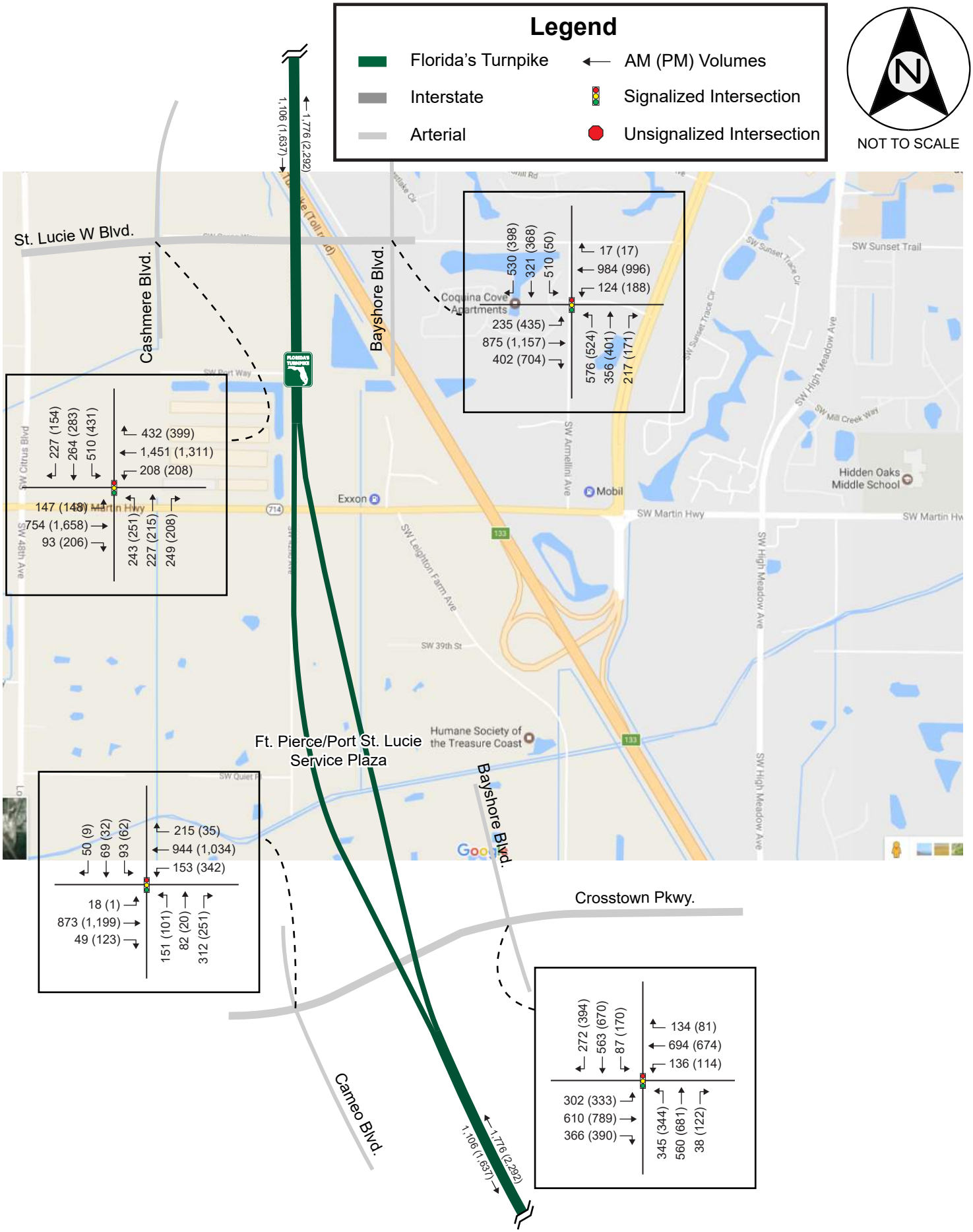
This section will be completed in a later version of this document.

4.2.4 Microsimulation Evaluation

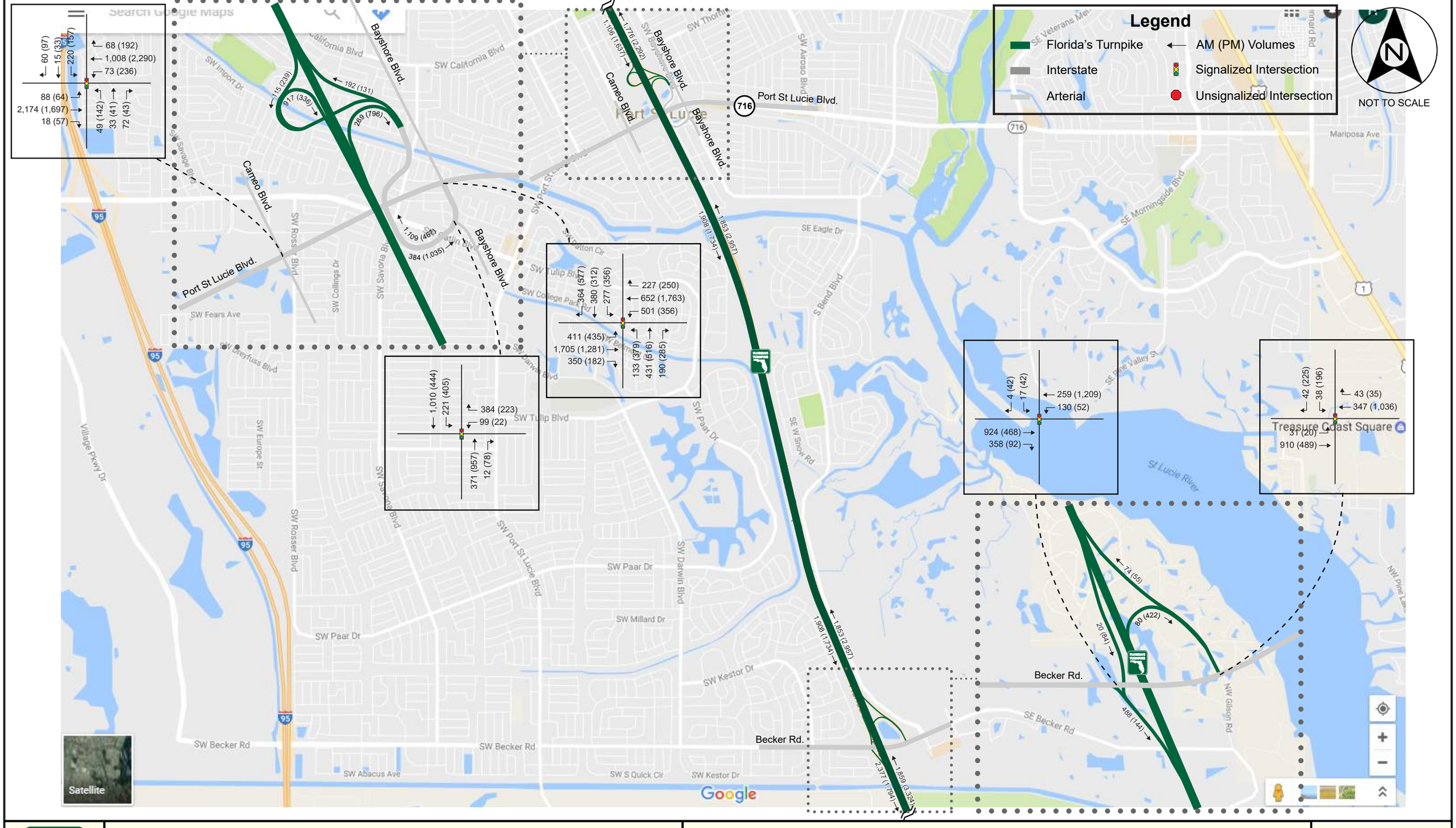
This section will be completed in a later version of this document.



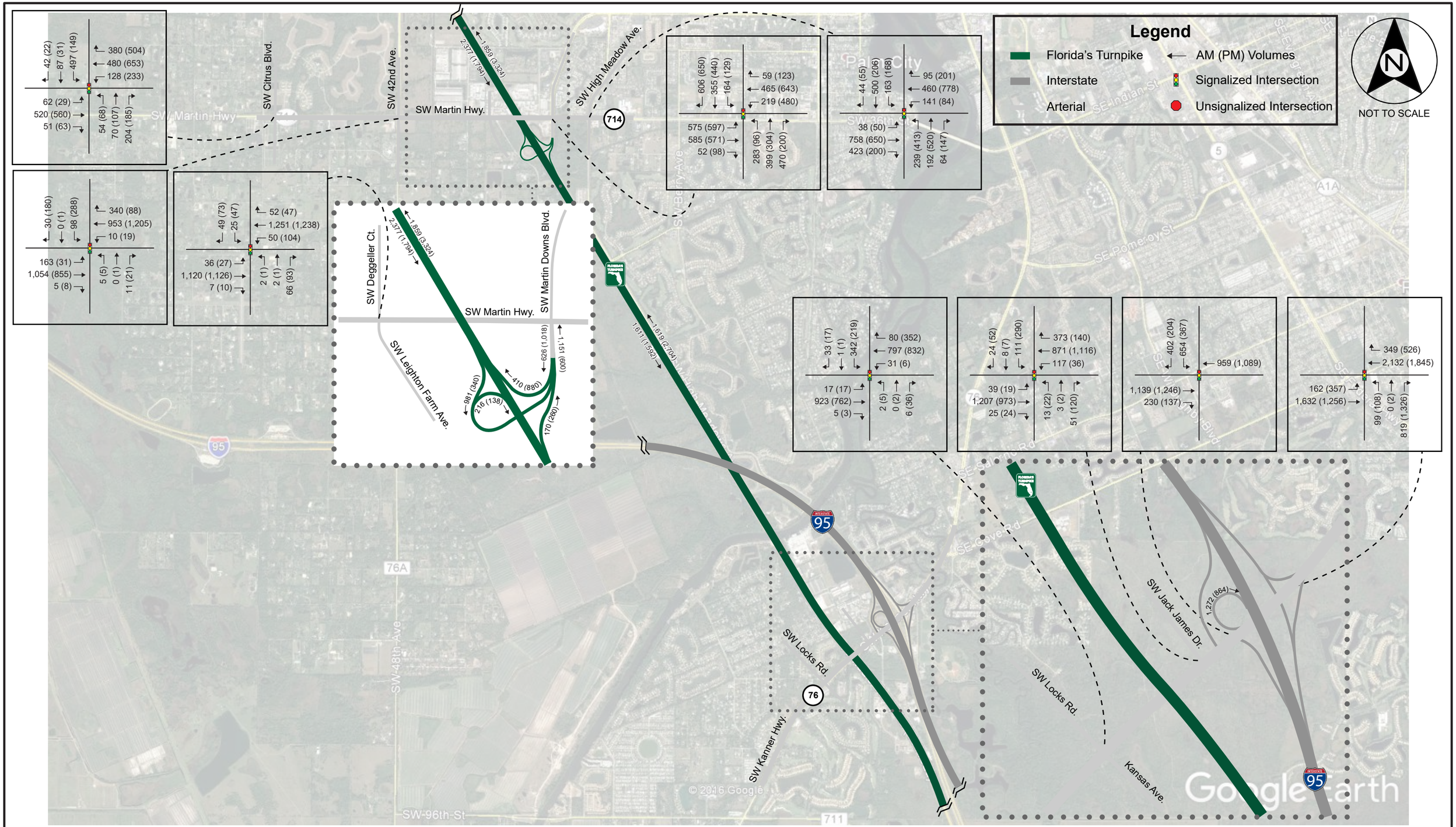
FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	S.R. 70 / Okeechobee Road to West Midway Road Existing Year 2016 AM (PM) Peak Hour Volumes



FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	St. Lucie West Boulevard to Crosstown Parkway Existing Year 2016 AM (PM) Peak Hour Volumes



FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	Port St. Lucie Boulevard to Becker Road Existing Year 2016 AM (PM) Peak Hour Volumes



FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	S.R. 714 / S.W. Martin Highway to S.R. 76 / S.W. Kanner Highway Existing Year 2016 AM (PM) Peak Hour Volumes

Table 4.2
Existing (2016) Peak Hour HCS Freeway Segment Level of Service

Segment	Segment Type	Lanes	Volume (vph)		LOS/Density	
			AM	PM	AM	PM
Turnpike - Southbound						
Upstream of S.R. 70 off-ramp	Basic	2	895	1,341	A/8	B/12
Upstream of S.R. 70 off-ramp	Diverge	2	895	1,341	A/6	B/11
S.R. 70 off-ramp to on-ramp	Basic	2	614	1,022	A/5	A/9
S.R. 70 on-ramp to Port St. Lucie Blvd off-ramp	Merge	2	1,106	1,637	A/7	B/12
S.R. 70 on-ramp to Port St. Lucie Blvd off-ramp	Basic	2	1,106	1,637	A/10	B/14
S.R. 70 on-ramp to Port St. Lucie Blvd off-ramp	Diverge	2	1,106	1,637	A/9	B/15
Port St. Lucie Blvd off-ramp to on-ramp	Basic	2	991	1,398	A/9	B/12
Port St. Lucie Blvd on-ramp to Becker Rd off-ramp	Merge	2	1,908	1,734	B/20	B/18
Port St. Lucie Blvd on-ramp to Becker Rd off-ramp	Basic	2	1,908	1,734	B/16	B/15
Port St. Lucie Blvd on-ramp to Becker Rd off-ramp	Diverge	2	1,908	1,734	B/18	B/16
Becker Rd off-ramp to on-ramp	Basic	2	1,888	1,650	B/16	B/14
Becker Rd on-ramp to S.R. 714 off-ramp	Merge	2	2,377	1,794	C/23	B/18
Becker Rd on-ramp to S.R. 714 off-ramp	Basic	2	2,377	1,794	C/21	B/15
Becker Rd on-ramp to S.R. 714 off-ramp	Diverge	2	2,377	1,794	D/28	C/22
S.R. 714 off-ramp to on-ramp	Basic	2	1,396	1,454	B/12	B/12
Downstream of S.R. 714 on-ramp	Merge	2	1,611	1,592	B/14	B/14
Downstream of S.R. 714 on-ramp	Basic	2	1,611	1,592	B/14	B/14
Turnpike - Northbound						
Upstream of S.R. 714 off-ramp	Basic	2	1,619	2,704	B/14	C/25
Upstream of S.R. 714 off-ramp	Diverge	2	1,619	2,704	B/19	D/31
S.R. 714 off-ramp to on-ramp	Basic	2	1,449	2,444	B/12	C/22
S.R. 714 on-ramp to Becker Rd off-ramp	Merge	2	1,859	3,324	B/19	D/34
S.R. 714 on-ramp to Becker Rd off-ramp	Basic	2	1,859	3,324	B/16	D/35
S.R. 714 on-ramp to Becker Rd off-ramp	Diverge	2	1,859	3,324	B/15	D/31
Becker Rd off-ramp to on-ramp	Basic	2	1,779	2,902	B/15	D/28
Becker Rd on-ramp to Port St. Lucie Blvd off-ramp	Merge	2	1,853	2,957	B/17	D/29
Becker Rd on-ramp to Port St. Lucie Blvd off-ramp	Basic	2	1,853	2,957	B/16	D/29
Becker Rd on-ramp to Port St. Lucie Blvd off-ramp	Diverge	2	1,853	2,957	B/15	C/27
Port St. Lucie Blvd off-ramp to on-ramp	Basic	2	1,584	2,161	B/14	C/19
Port St. Lucie Blvd on-ramp to S.R. 70 off-ramp	Merge	2	1,776	2,292	B/20	C/25
Port St. Lucie Blvd on-ramp to S.R. 70 off-ramp	Basic	2	1,776	2,292	B/15	C/20
Port St. Lucie Blvd on-ramp to S.R. 70 off-ramp	Diverge	2	1,776	2,292	B/17	C/23
S.R. 70 off-ramp to on-ramp	Basic	2	1,172	1,544	A/10	B/13
Downstream of S.R. 70 on-ramp	Merge	2	1,325	1,721	A/10	B/14
Downstream of S.R. 70 on-ramp	Basic	2	1,325	1,721	B/11	B/15

Table 4.3
Existing (2016) Peak Hour HCS Ramp Capacity Analysis

Interchange	Ramp	Lanes	Volume (vph)		Capacity (vph)	V/C	
			AM	PM		AM	PM
Fort Pierce (S.R. 70)	Southbound off-ramp	1	281	319	1,530	0.2	0.2
	Northbound on-ramp	1	153	177	1,490	0.1	0.1
	Southbound on-ramp	1	492	615	1,490	0.3	0.4
	Northbound off-ramp	1	604	748	1,530	0.4	0.5
Port St. Lucie Boulevard	Southbound off-ramp	1	115	239	1,530	0.1	0.2
	Northbound on-ramp	1	192	131	1,530	0.1	0.1
	Southbound on-ramp	1	917	336	1,490	0.6	0.2
	Northbound off-ramp	1	269	796	1,490	0.2	0.5
Becker Road	Southbound off-ramp	1	20	84	1,530	0.0	0.1
	Northbound on-ramp	1	74	55	1,530	0.0	0.0
	Southbound on-ramp	1	488	144	1,530	0.3	0.1
	Northbound off-ramp	1	80	422	1,490	0.1	0.3
Stuart (Martin Downs Boulevard/S.R. 714)	Southbound off-ramp	1	981	340	1,530	0.6	0.2
	Northbound on-ramp	1	410	880	1,490	0.3	0.6
	Southbound on-ramp	1	216	138	1,490	0.1	0.1
	Northbound off-ramp	1	170	260	1,530	0.1	0.2

5.1 TRAFFIC FORECASTS

The Turnpike System Model (TSM) and the Treasure Coast Regional Planning Model (TCRPM) were used for this study. The TSM was primarily used in the screening evaluation of potential interchange locations. The TCRPM, an Activity Based Model (ABM), was then used to develop future traffic for the No-Build conditions and the proposed interchanges. The TCRPM used by FDOT District 4 in the development of the traffic forecasts for the proposed Midway Road Interchange at MP 150 was first reviewed. This model was taken as benchmark and additional validation efforts were performed to develop a 2010 base year.

The TCRPM model forecast year was 2040 but was updated to create 2025 and 2045 scenarios, corresponding to the opening and design analysis years for the PD&E study, respectively. Annual Average Daily Traffic (AADT) forecasts from the model were adjusted following the National Cooperative Highway Research Program (NCHRP) 255 and 765 methodologies. Projections from *FY 2016 Turnpike Annual Traffic Trends Draft Report* were used to check reasonableness and tweaks were made to arrive at a final profile. Traffic data for the 2035 interim year were developed through interpolation.

The AADT forecasts were converted to Directional Design Hourly Volumes (DDHV) by applying the appropriate K and D factors to the AADTs. The K factor is the proportion of AADT occurring during the selected design hour. The D factor is the proportion of traffic in the design hour traveling in the peak direction. Consistent with the FDOT districts, the Turnpike has developed standard K factors for use in planning and design applications. A K factor of 10.5 and a D of 60.0 percent were utilized for the mainline. The volumes were adjusted to ensure accuracy and continuity of flow.

The mainline and ramp AADTs and the corresponding DDHVs for years 2025, 2035, and 2045 are provided in **Tables 5.1** through **5.3** for the No-Build, Build conditions without Kanner Highway, and Build with Kanner Highway. The bold values represent the mainline volumes and the non-bold values represent ramp volumes. Both No-Build and Build assumed build mainline conditions.

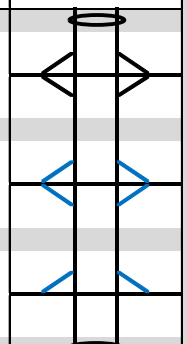
Future year turn movement volumes for ramp terminal intersections were developed using the projected ramp DDHVs and existing turn proportions. Cross-street through movements and adjacent intersections traffic were developed using growth rates estimated from the TCRPM and verified using historical data. The 2045 design year peak hour volumes are presented in **Figures 5.1** through **5.3** for the No-Build, Build conditions without Kanner Highway, and Build with Kanner Highway.

Table 5.1
Mainline and Ramp Forecasts for No Build

Location	Turnpike Profile	2025					2035					2045				
		AADT	AM - DDHV		PM - DDHV		AADT	AM - DDHV		PM - DDHV		AADT	AM - DDHV		PM - DDHV	
			SB	NB	SB	NB		SB	NB	SB	NB		SB	NB	SB	NB
184 - Fort Drum Service Area		39,900	2,100	1,660	1,660	2,100	50,100	2,660	2,130	2,130	2,660	60,400	3,230	2,590	2,590	3,230
152 - Fort Pierce (S.R. 70)		7,700	650	350	350	650	9,000	760	410	410	760	10,300	870	470	470	870
		17,100	1,220	1,000	1,000	1,220	20,400	1,460	1,190	1,190	1,460	23,700	1,690	1,390	1,390	1,690
		49,300	2,670	2,310	2,310	2,670	61,500	3,360	2,910	2,910	3,360	73,800	4,050	3,510	3,510	4,050
150 - Midway Road																
		49,300	2,670	2,310	2,310	2,670	61,500	3,360	2,910	2,910	3,360	73,800	4,050	3,510	3,510	4,050
145 - S.W. St. Lucie Boulevard																
144 - Fort Pierce/Port St. Lucie Service Area		49,300	2,670	2,310	2,310	2,670	61,500	3,360	2,910	2,910	3,360	73,800	4,050	3,510	3,510	4,050
143 - Crosstown Parkway																
		49,300	2,670	2,310	2,310	2,670	61,500	3,360	2,910	2,910	3,360	73,800	4,050	3,510	3,510	4,050
142 - Port St. Lucie (Port St. Lucie Blvd.)		5,500	210	500	500	210	7,300	280	660	660	280	9,100	350	830	830	350
		12,700	1,160	500	500	1,160	14,600	1,330	570	570	1,330	16,400	1,490	640	640	1,490
		56,500	3,620	2,310	2,310	3,620	68,800	4,410	2,820	2,820	4,410	81,100	5,190	3,320	3,320	5,190
138 - Becker Road		1,600	60	150	150	60	3,600	140	330	330	140	5,500	210	500	500	210
		7,100	650	280	280	650	9,700	880	380	380	880	12,300	1,120	480	480	1,120
		62,000	4,210	2,440	2,440	4,210	74,900	5,150	2,870	2,870	5,150	87,900	6,100	3,300	3,300	6,100
133 - S.W. Martin Highway (S.R. 714)		12,800	1,210	520	520	1,210	18,300	1,730	740	740	1,730	23,800	2,250	960	960	2,250
		5,100	410	230	230	410	9,200	740	420	420	740	13,200	1,060	600	600	1,060
		54,300	3,410	2,150	2,150	3,410	65,800	4,160	2,550	2,550	4,160	77,300	4,910	2,940	2,940	4,910
129 - S.W. Kanner Highway																
		54,300	3,410	2,150	2,150	3,410	65,800	4,160	2,550	2,550	4,160	77,300	4,910	2,940	2,940	4,910
124 - I-95																
		54,300	3,410	2,150	2,150	3,410	65,800	4,160	2,550	2,550	4,160	77,300	4,910	2,940	2,940	4,910

Note: Values in RED indicate PEAK direction and values in BLUE indicate OFF-PEAK direction

Table 5.2
Mainline and Ramp Forecasts for Build without Kanner Highway

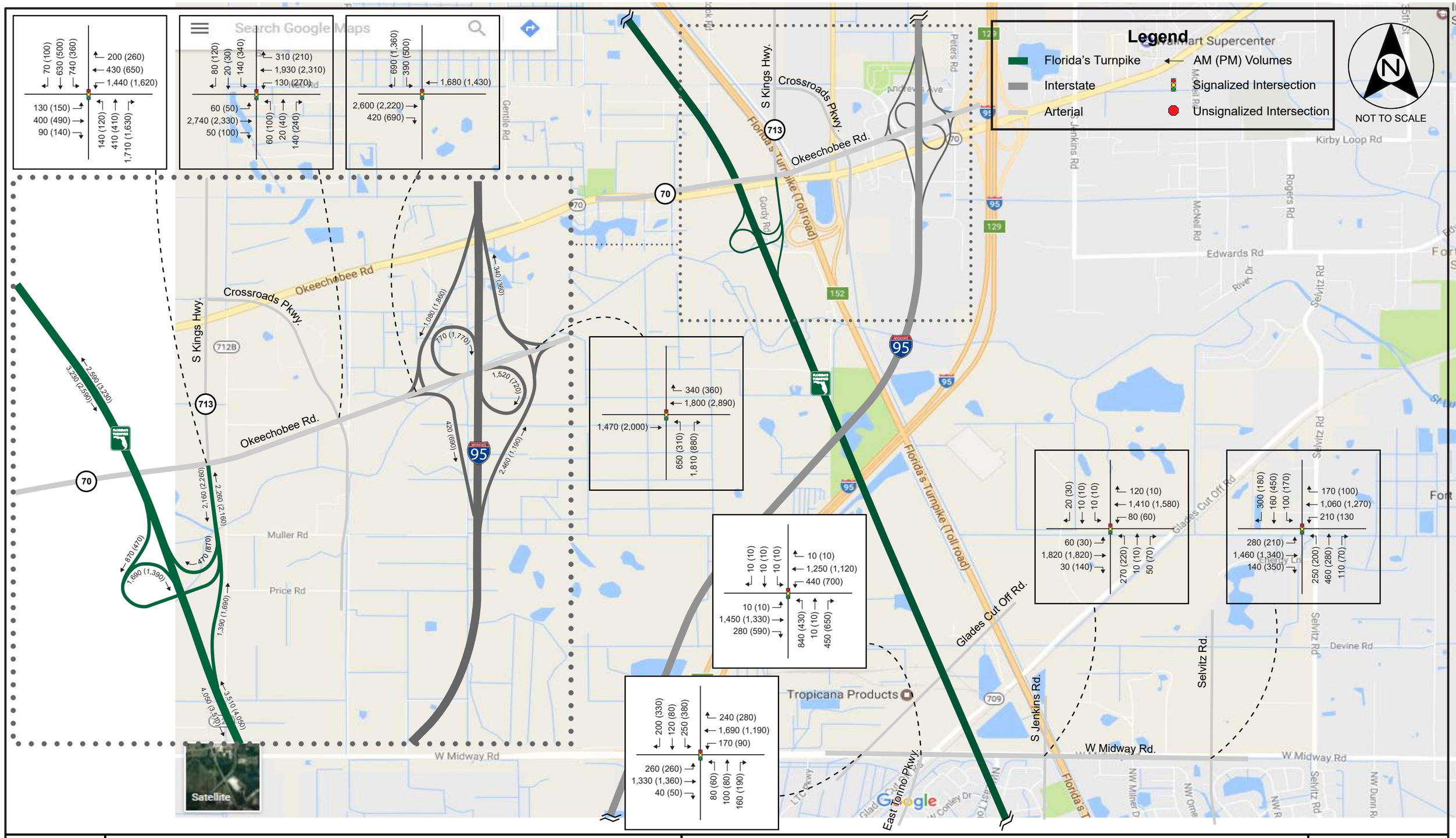
Location	Turnpike Profile	2025					2035					2045				
		AADT	AM - DDHV		PM - DDHV		AADT	AM - DDHV		PM - DDHV		AADT	AM - DDHV		PM - DDHV	
			SB	NB	SB	NB		SB	NB	SB	NB		SB	NB	SB	NB
184 - Fort Drum Service Area		**39,800**	**1,930**	**1,540**	**1,540**	**1,930**	**50,100**	**2,460**	**1,980**	**1,980**	**2,460**	**60,400**	**3,310**	**2,260**	**2,260**	**3,310**
152 - Fort Pierce (S.R. 70)		4,500	380	200	200	380	5,300	450	240	240	450	6,000	510	270	270	510
		15,100	1,080	880	880	1,080	18,000	1,290	1,050	1,050	1,290	20,900	1,490	1,220	1,220	1,490
		50,400	**2,630**	**2,220**	**2,220**	**2,630**	**62,800**	**3,300**	**2,790**	**2,790**	**3,300**	**75,300**	**4,290**	**3,210**	**3,210**	**4,290**
150 - Midway Road		3,700	310	170	170	310	4,400	370	200	200	370	5,100	430	230	230	430
		4,000	290	230	230	290	5,000	360	290	290	360	5,900	420	350	350	420
		50,700	**2,610**	**2,280**	**2,280**	**2,610**	**63,400**	**3,290**	**2,880**	**2,880**	**3,290**	**76,100**	**4,280**	**3,330**	**3,330**	**4,280**
145 - S.W. St. Lucie Boulevard		2,300	210	90	90	210	2,900	260	110	110	260	3,400	310	130	130	310
144 - Fort Pierce/Port St. Lucie Service Area		**48,400**	**2,610**	**2,280**	**2,280**	**2,610**	**60,500**	**3,290**	**2,880**	**2,880**	**3,290**	**72,700**	**3,970**	**3,460**	**3,460**	**3,970**
143 - Crosstown Parkway		6,000	550	230	230	550	7,400	670	290	290	670	8,700	790	340	340	790
		54,400	**3,160**	**2,510**	**2,510**	**3,160**	**67,900**	**3,960**	**3,170**	**3,170**	**3,960**	**81,400**	**4,760**	**3,800**	**3,800**	**4,760**
142 - Port St. Lucie (Port St. Lucie Blvd.)		5,400	210	490	490	210	7,200	280	660	660	280	8,900	350	810	810	350
		6,800	620	270	270	620	7,800	710	300	300	710	8,700	790	340	340	790
		55,800	**3,570**	**2,290**	**2,290**	**3,570**	**68,500**	**4,390**	**2,810**	**2,810**	**4,390**	**81,200**	**5,200**	**3,330**	**3,330**	**5,200**
138 - Becker Road		1,800	70	160	160	70	4,000	160	360	360	160	6,200	240	560	560	240
		6,500	590	250	250	590	8,800	800	340	340	800	11,100	1,010	430	430	1,010
		60,500	**4,090**	**2,380**	**2,380**	**4,090**	**73,300**	**5,030**	**2,790**	**2,790**	**5,030**	**86,100**	**5,970**	**3,200**	**3,200**	**5,970**
133 - S.W. Martin Highway (S.R. 714)		13,400	1,270	540	540	1,270	19,300	1,820	780	780	1,820	25,100	2,370	1,020	1,020	2,370
		4,000	320	180	180	320	7,200	580	330	330	580	10,400	840	470	470	840
		51,100	**3,140**	**2,020**	**2,020**	**3,140**	**61,200**	**3,790**	**2,340**	**2,340**	**3,790**	**71,400**	**4,440**	**2,650**	**2,650**	**4,440**
129 - S.W. Kanner Highway																
		51,100	**3,140**	**2,020**	**2,020**	**3,140**	**61,200**	**3,790**	**2,340**	**2,340**	**3,790**	**71,400**	**4,440**	**2,650**	**2,650**	**4,440**
124 - I-95		11,600	940	530	530	940	14,800	1,190	670	670	1,190	17,900	1,440	810	810	1,440
		62,700	**4,080**	**2,550**	**2,550**	**4,080**	**76,000**	**4,980**	**3,010**	**3,010**	**4,980**	**89,300**	**5,880**	**3,460**	**3,460**	**5,880**

Note: Values in RED indicate PEAK direction and values in BLUE indicate OFF-PEAK direction

Table 5.3
Mainline and Ramp Forecasts for Build with Kanner Highway

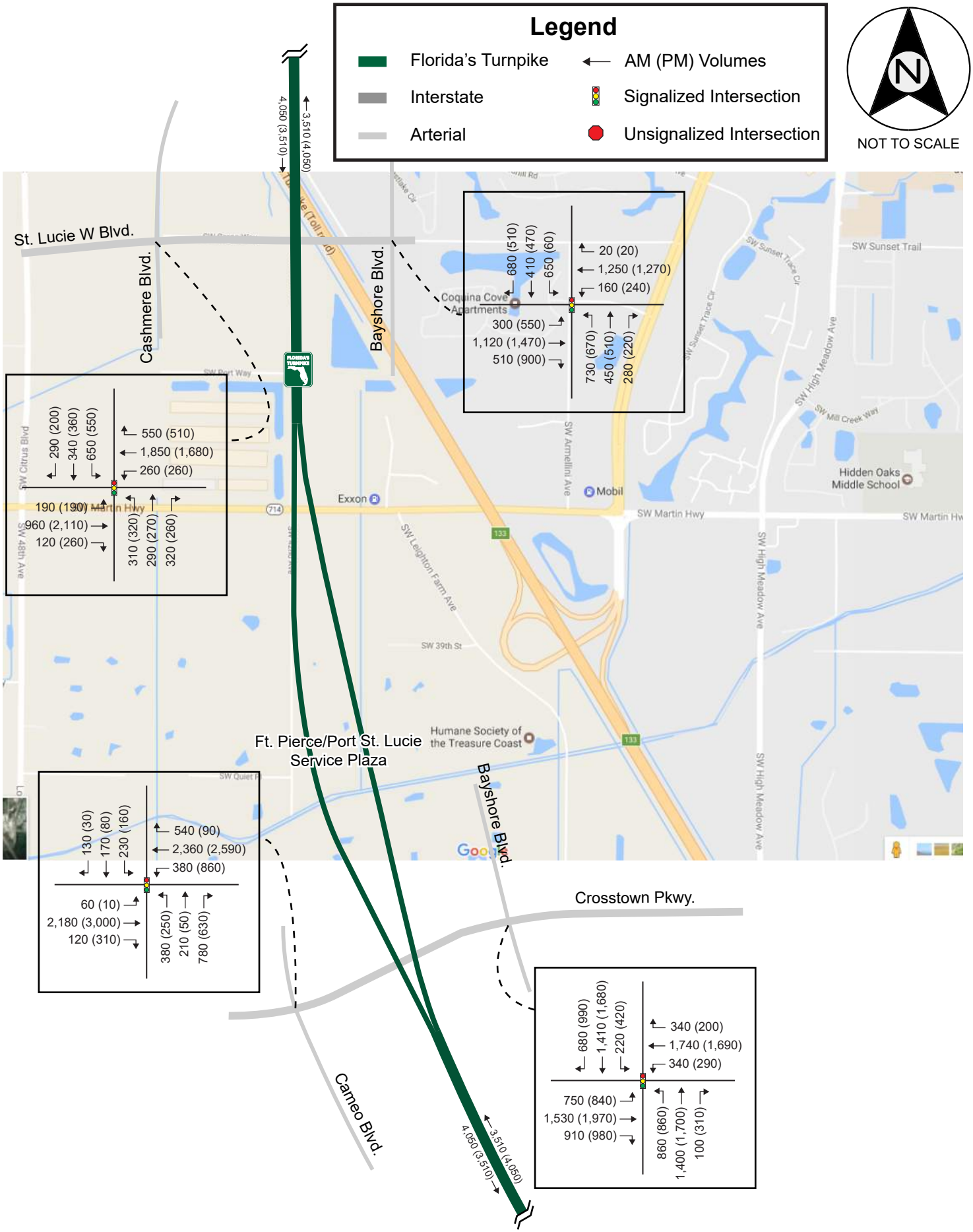
Location	Turnpike Profile	2025					2035					2045				
		AADT	AM - DDHV		PM - DDHV		AADT	AM - DDHV		PM - DDHV		AADT	AM - DDHV		PM - DDHV	
			SB	NB	SB	NB		SB	NB	SB	NB		SB	NB	SB	NB
184 - Fort Drum Service Area		**39,800**	**2,130**	**1,450**	**1,450**	**2,130**	**50,200**	**2,710**	**1,860**	**1,860**	**2,710**	**60,400**	**3,290**	**2,250**	**2,250**	**3,290**
152 - Fort Pierce (S.R. 70)		4,500	380	200	200	380	5,300	450	240	240	450	6,000	510	270	270	510
		15,100	1,080	880	880	1,080	18,000	1,290	1,050	1,050	1,290	20,900	1,490	1,220	1,220	1,490
		50,400	**2,830**	**2,130**	**2,130**	**2,830**	**62,900**	**3,550**	**2,670**	**2,670**	**3,550**	**75,300**	**4,270**	**3,200**	**3,200**	**4,270**
150 - Midway Road		3,700	310	170	170	310	4,400	370	200	200	370	5,100	430	230	230	430
		4,000	290	230	230	290	5,000	360	290	290	360	5,900	420	350	350	420
		50,700	**2,810**	**2,190**	**2,190**	**2,810**	**63,500**	**3,540**	**2,760**	**2,760**	**3,540**	**76,100**	**4,260**	**3,320**	**3,320**	**4,260**
145 - S.W. St. Lucie Boulevard		2,300	210	90	90	210	2,900	260	110	110	260	3,400	310	130	130	310
144 - Fort Pierce/Port St. Lucie Service Area		**48,400**	**2,600**	**2,280**	**2,280**	**2,600**	**60,600**	**3,280**	**2,870**	**2,870**	**3,280**	**72,700**	**3,950**	**3,450**	**3,450**	**3,950**
143 - Crosstown Parkway		6,000	550	230	230	550	7,400	670	290	290	670	8,700	790	340	340	790
		54,400	**3,150**	**2,510**	**2,510**	**3,150**	**68,000**	**3,950**	**3,160**	**3,160**	**3,950**	**81,400**	**4,740**	**3,790**	**3,790**	**4,740**
142 - Port St. Lucie (Port St. Lucie Blvd.)		5,400	210	490	490	210	7,200	280	660	660	280	8,900	350	810	810	350
		7,400	670	290	290	670	8,400	760	330	330	760	9,400	860	370	370	860
		56,400	**3,610**	**2,310**	**2,310**	**3,610**	**69,200**	**4,430**	**2,830**	**2,830**	**4,430**	**81,900**	**5,250**	**3,350**	**3,350**	**5,250**
138 - Becker Road		1,800	70	160	160	70	4,000	160	360	360	160	6,200	240	560	560	240
		6,600	600	260	260	600	8,900	810	350	350	810	11,200	1,020	440	440	1,020
		61,200	**4,140**	**2,410**	**2,410**	**4,140**	**74,100**	**5,080**	**2,820**	**2,820**	**5,080**	**86,900**	**6,030**	**3,230**	**3,230**	**6,030**
133 - S.W. Martin Highway (S.R. 714)		8,800	830	360	360	830	14,300	1,350	580	580	1,350	19,800	1,870	800	800	1,870
		3,800	310	170	170	310	6,900	560	310	310	560	9,900	800	450	450	800
		56,200	**3,620**	**2,220**	**2,220**	**3,620**	**66,700**	**4,290**	**2,550**	**2,550**	**4,290**	**77,000**	**4,960**	**2,880**	**2,880**	**4,960**
129 - S.W. Kanner Highway		5,900	560	240	240	560	7,800	740	320	320	740	9,700	920	390	390	920
		2,500	200	110	110	200	3,500	280	160	160	280	4,500	360	200	200	360
		52,800	**3,260**	**2,090**	**2,090**	**3,260**	**62,400**	**3,830**	**2,390**	**2,390**	**3,830**	**71,800**	**4,400**	**2,690**	**2,690**	**4,400**
124 - I-95		9,600	770	440	440	770	12,100	980	550	550	980	14,600	1,180	660	660	1,180
		62,400	**4,030**	**2,530**	**2,530**	**4,030**	**74,500**	**4,810**	**2,940**	**2,940**	**4,810**	**86,400**	**5,580**	**3,350**	**3,350**	**5,580**

Note: Values in RED indicate PEAK direction and values in BLUE indicate OFF-PEAK direction

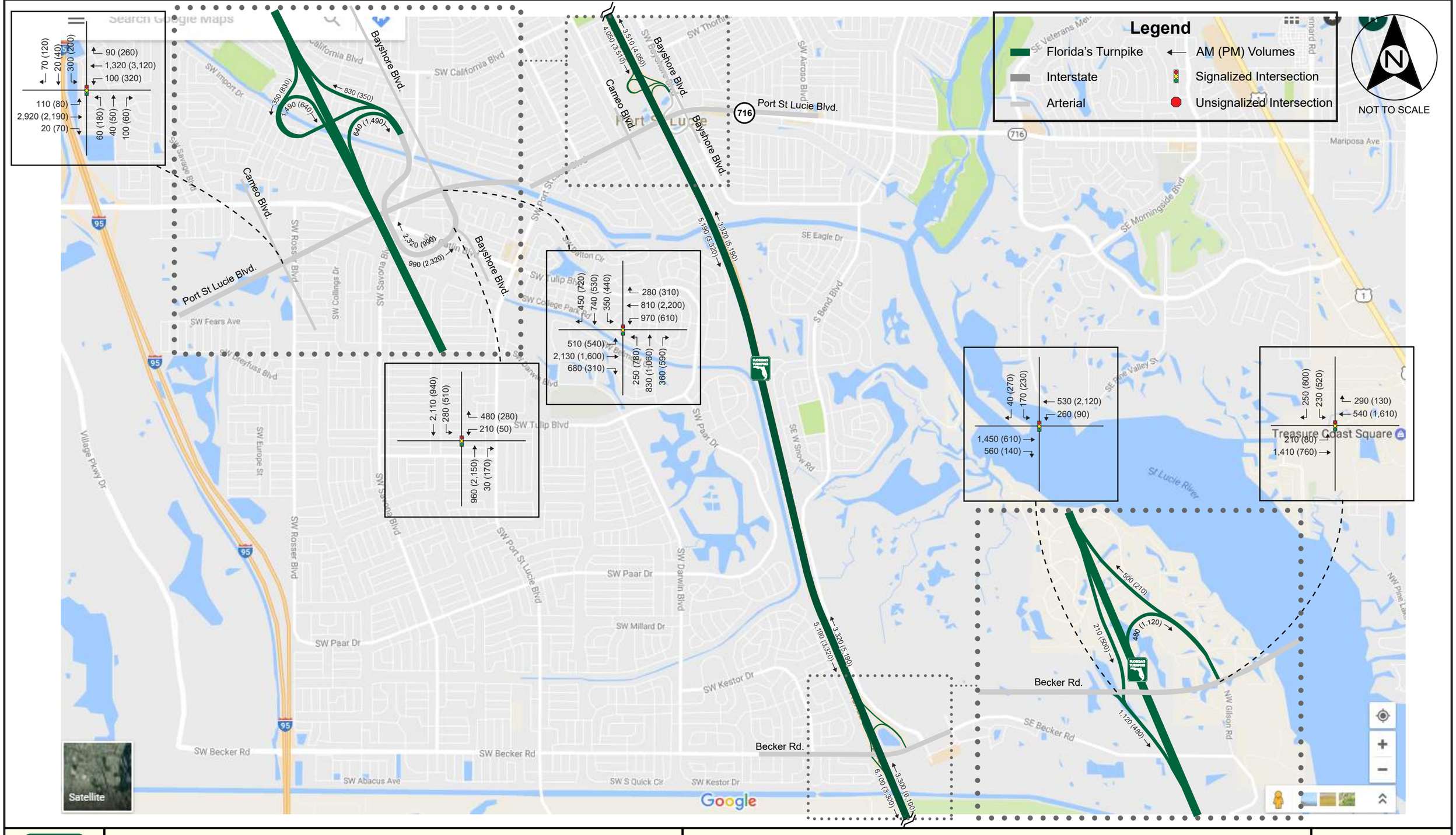


FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	S.R. 70 / Okeechobee Road to West Midway Road 2045 No Build AM (PM) Peak Hour Volumes

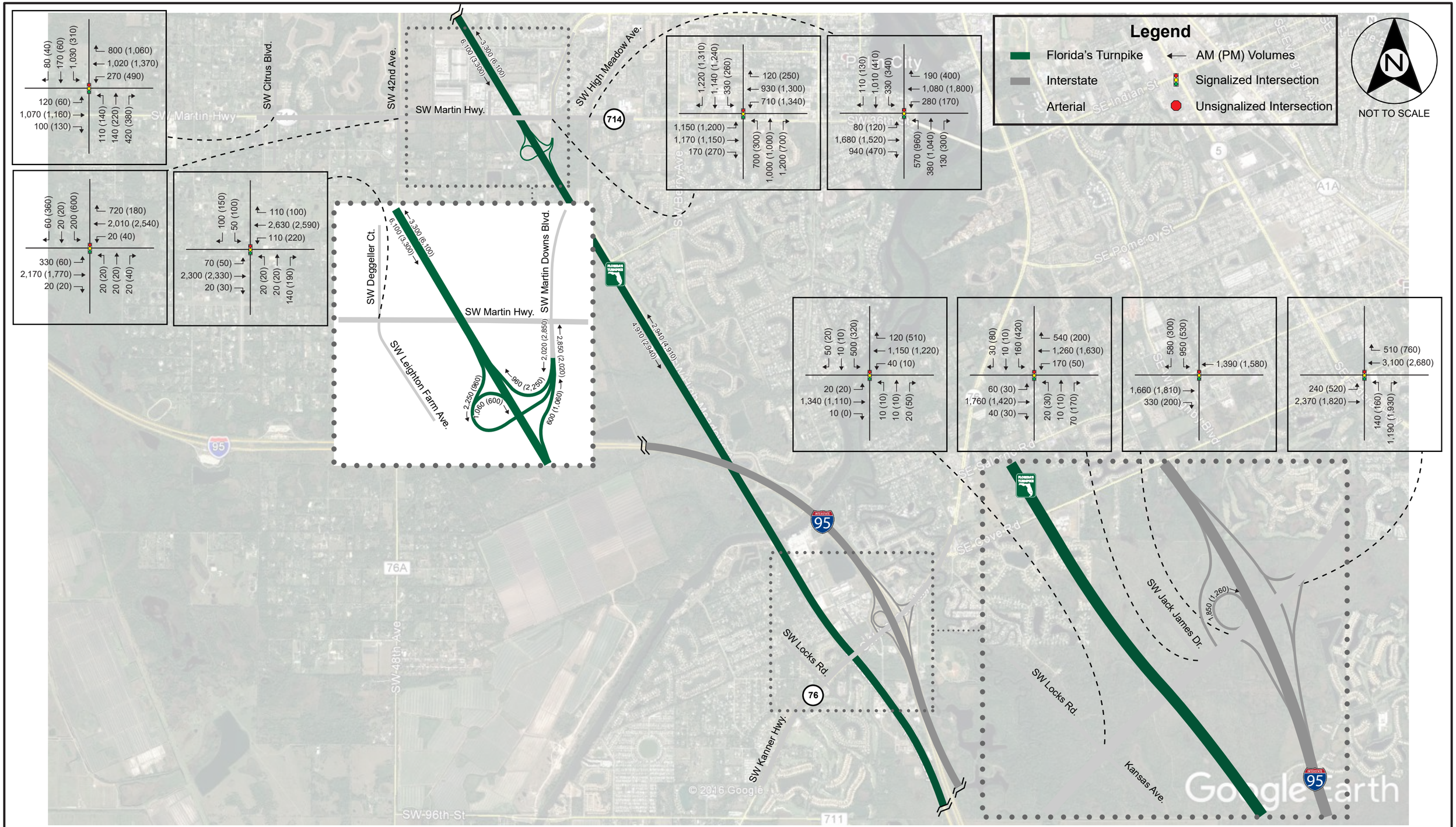
Figure 5.1
Page 1 of 4



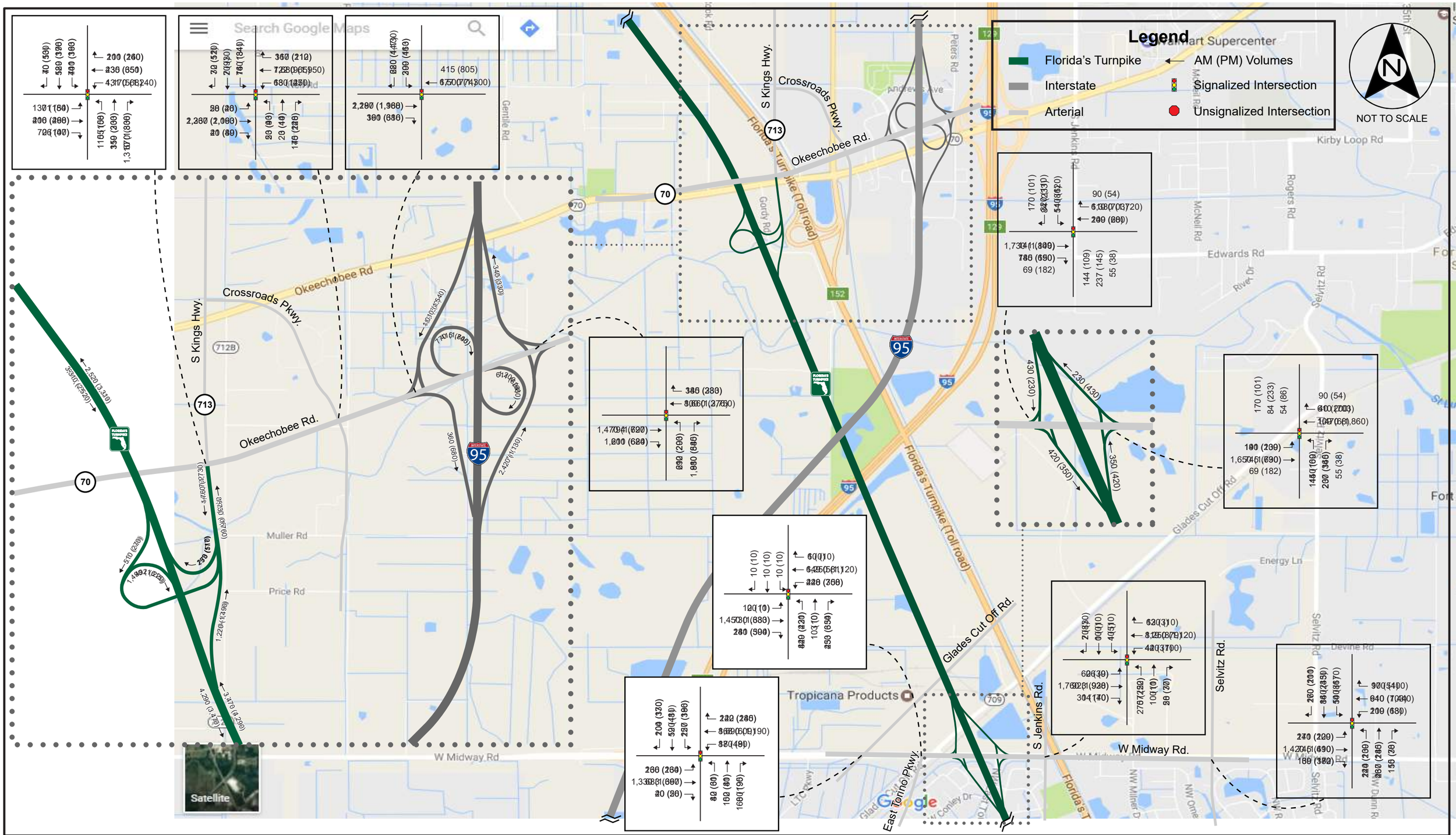
FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	St. Lucie West Boulevard to Crosstown Parkway 2045 No Build AM (PM) Peak Hour Volumes	Figure 5.1 Page 2 of 4



FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	Port St. Lucie Boulevard to Becker Road 2045 No Build AM (PM) Peak Hour Volumes	Figure 5.1 Page 3 of 4

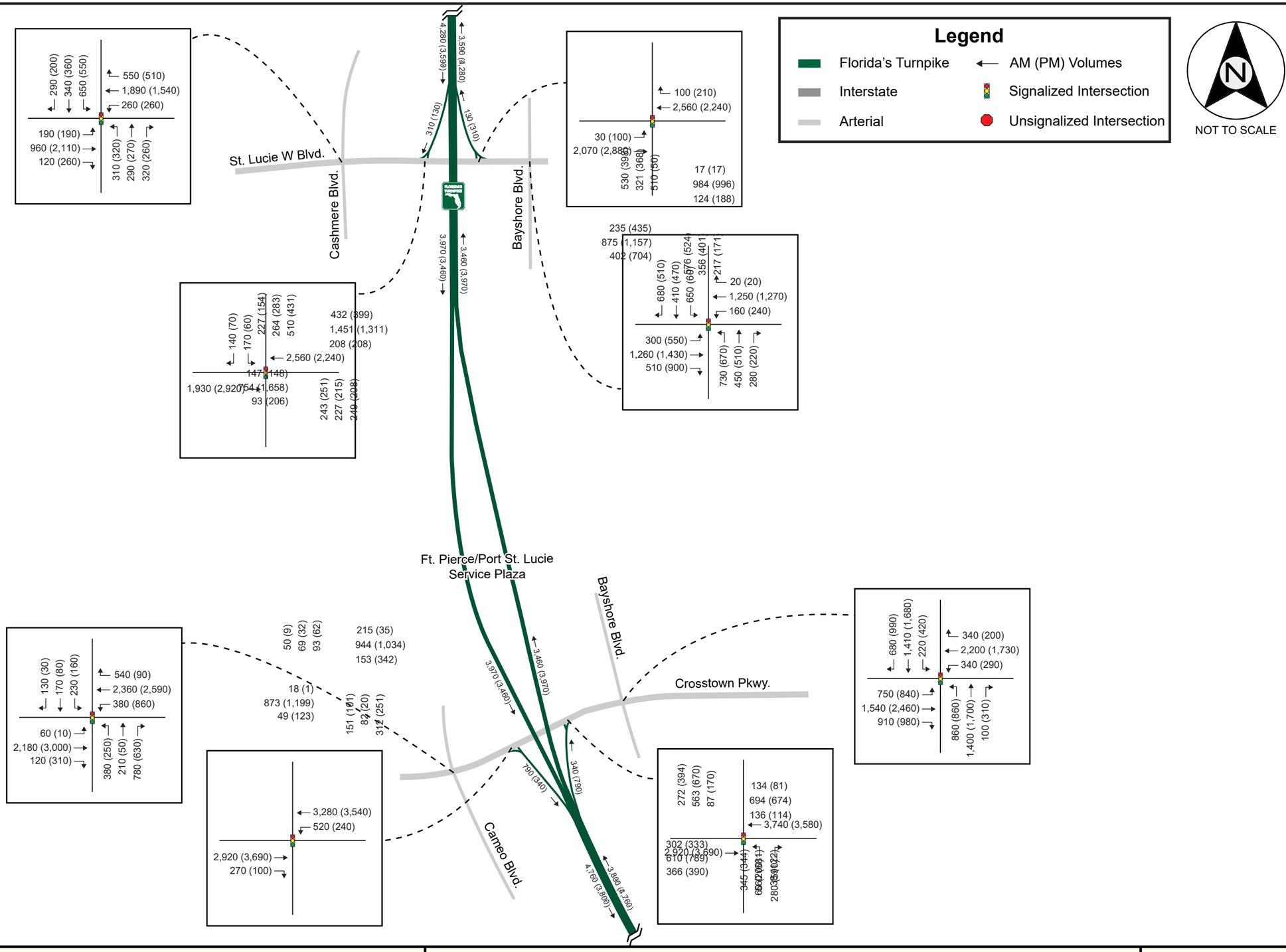


FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	S.R. 714 / S.W. Martin Highway to S.R. 76 / S.W. Kanner Highway 2045 No Build AM (PM) Peak Hour Volumes	Figure 5.1 Page 4 of 4

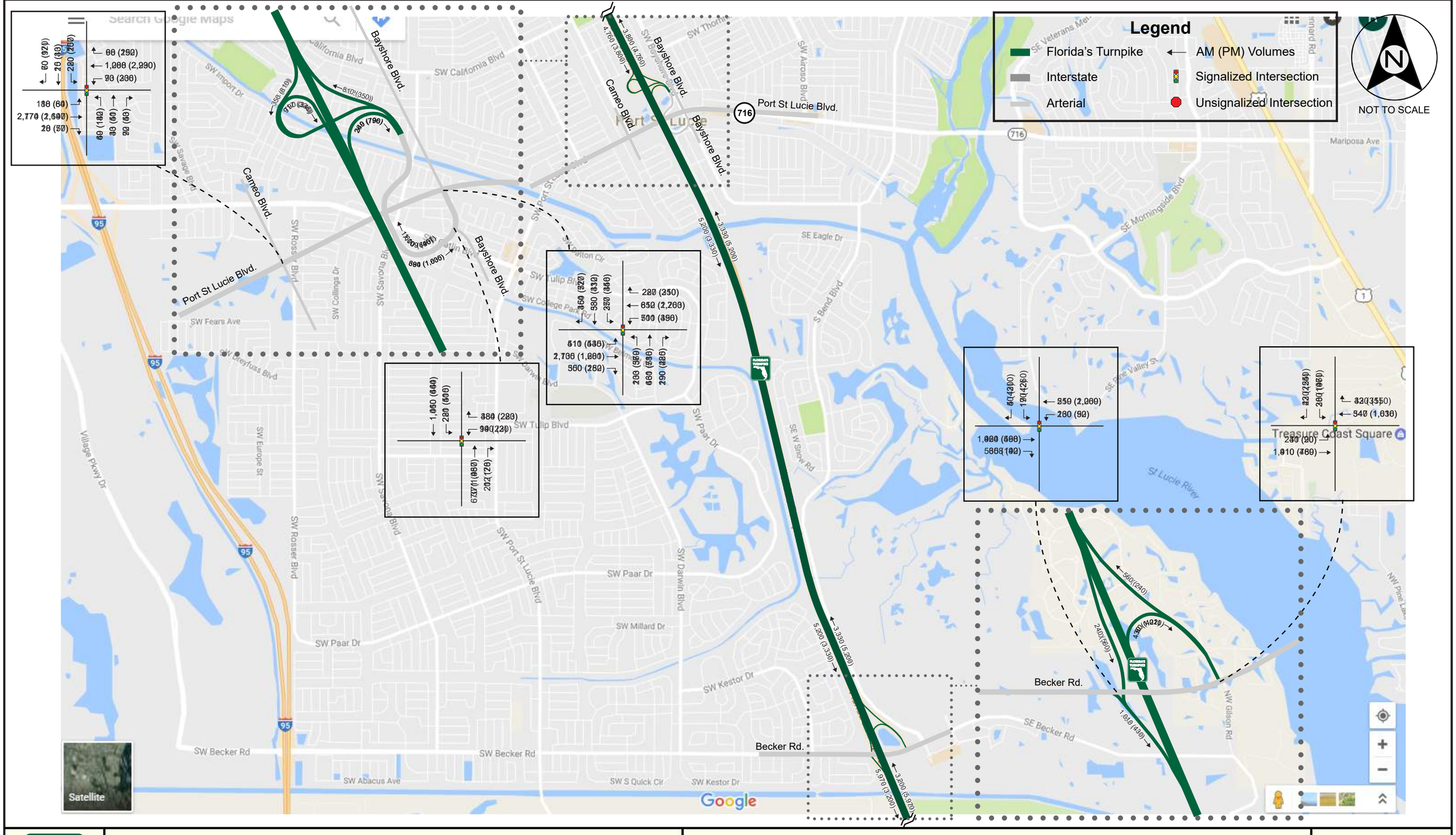


FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	S.R. 70 / Okeechobee Road to West Midway Road 2045 Build without Kanner Highway AM (PM) Peak Hour Volumes

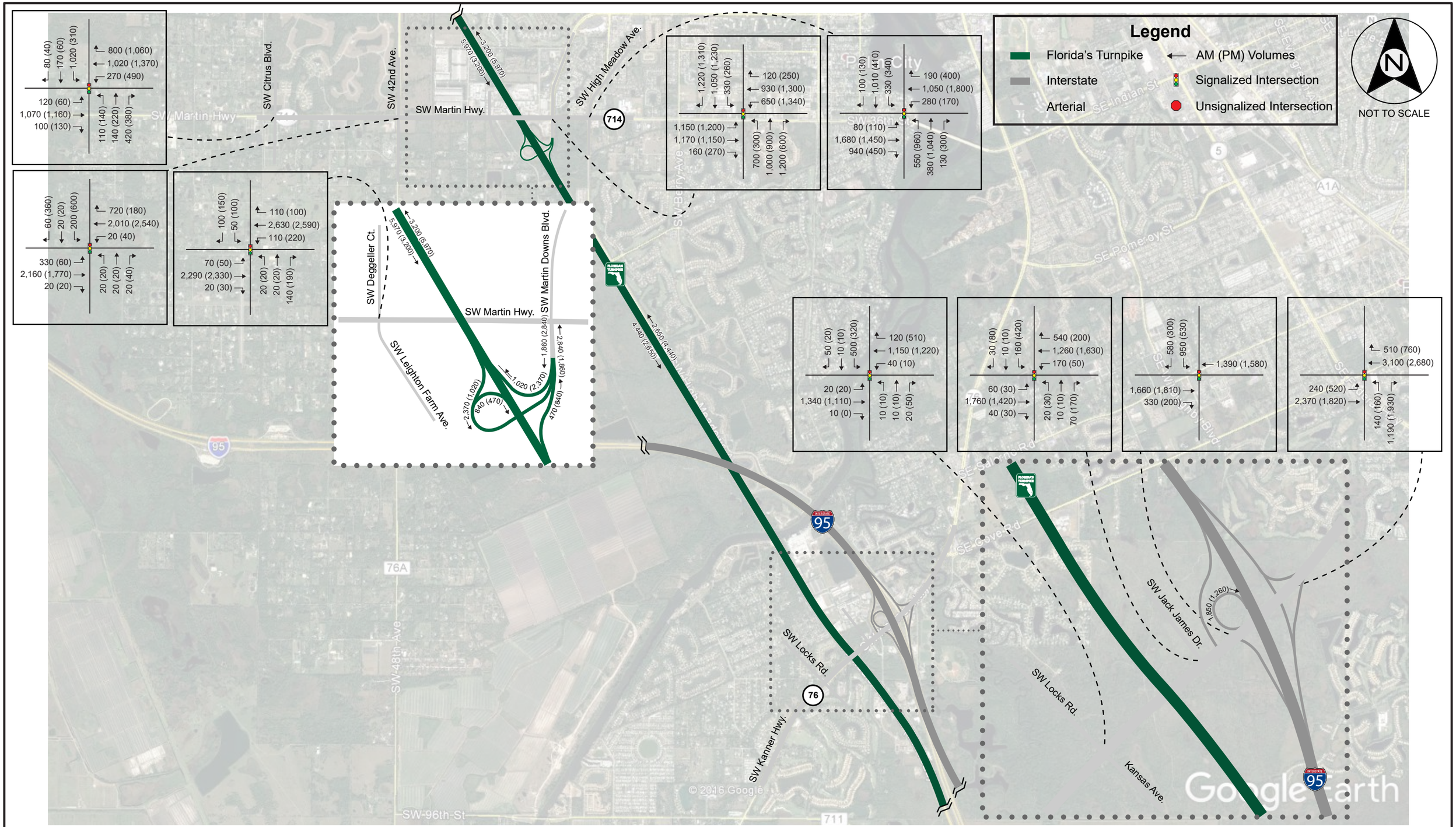
Figure 5.2
Page 1 of 4



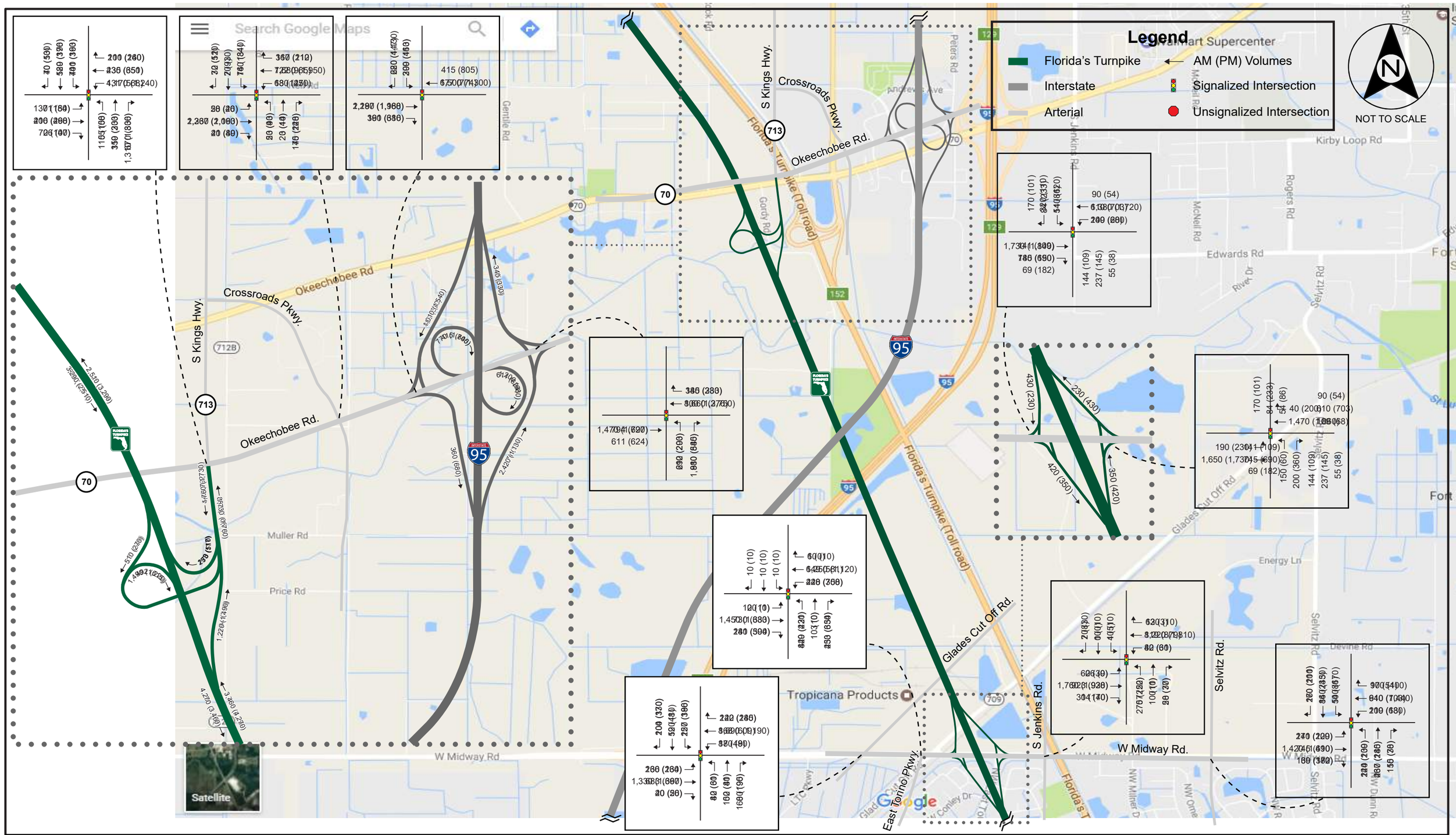
FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	St. Lucie West Boulevard to Crosstown Parkway 2045 Build without Kanner Highway AM (PM) Peak Hour Volumes



FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	Port St. Lucie Boulevard to Becker Road 2045 Build without Kanner Highway AM (PM) Peak Hour Volumes	Figure 5.2 Page 3 of 4

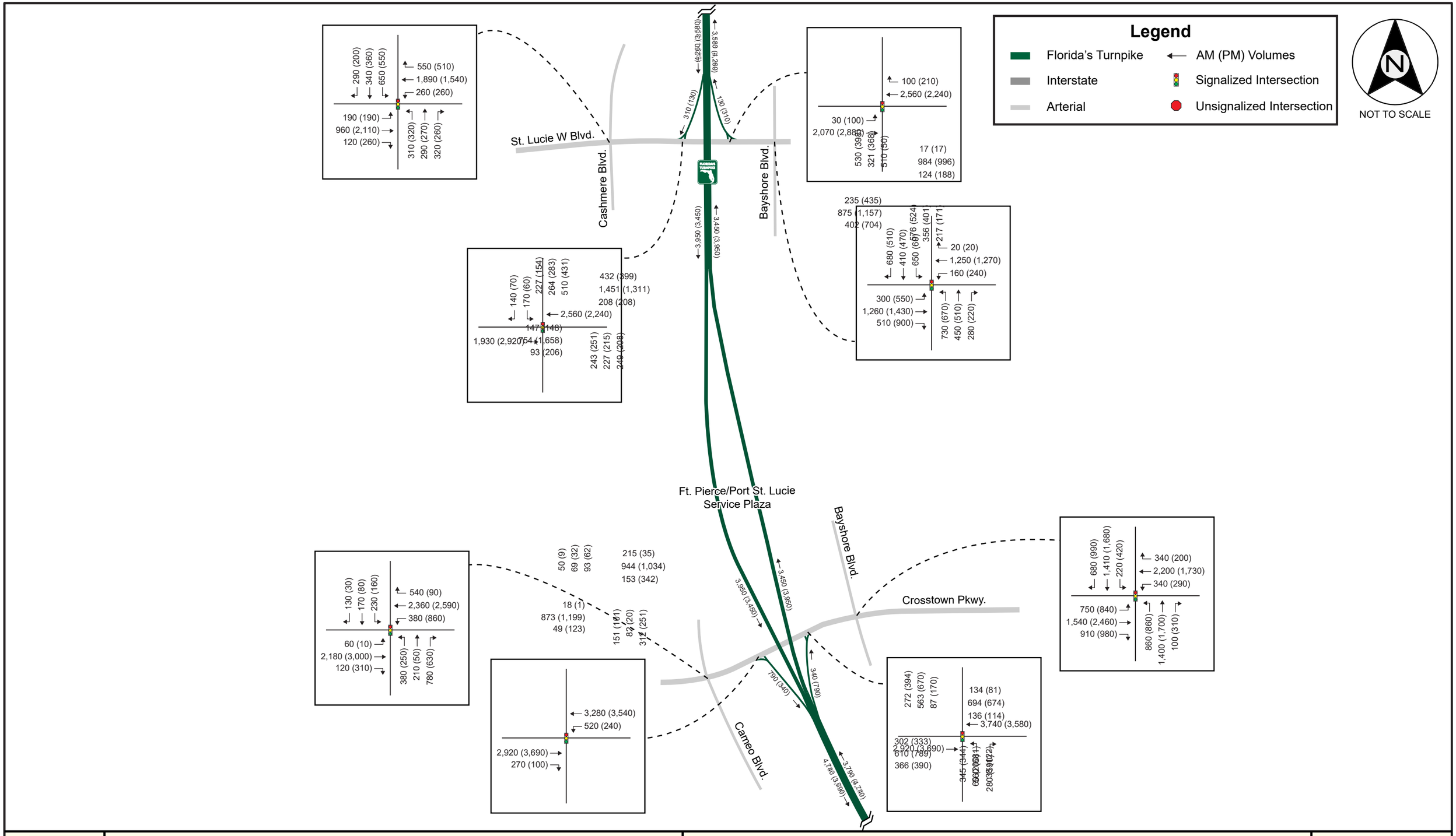


FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	S.R. 714 / S.W. Martin Highway to S.R. 76 / S.W. Kanner Highway 2045 Build without Kanner Highway AM (PM) Peak Hour Volumes	Figure 5.2 Page 4 of 4

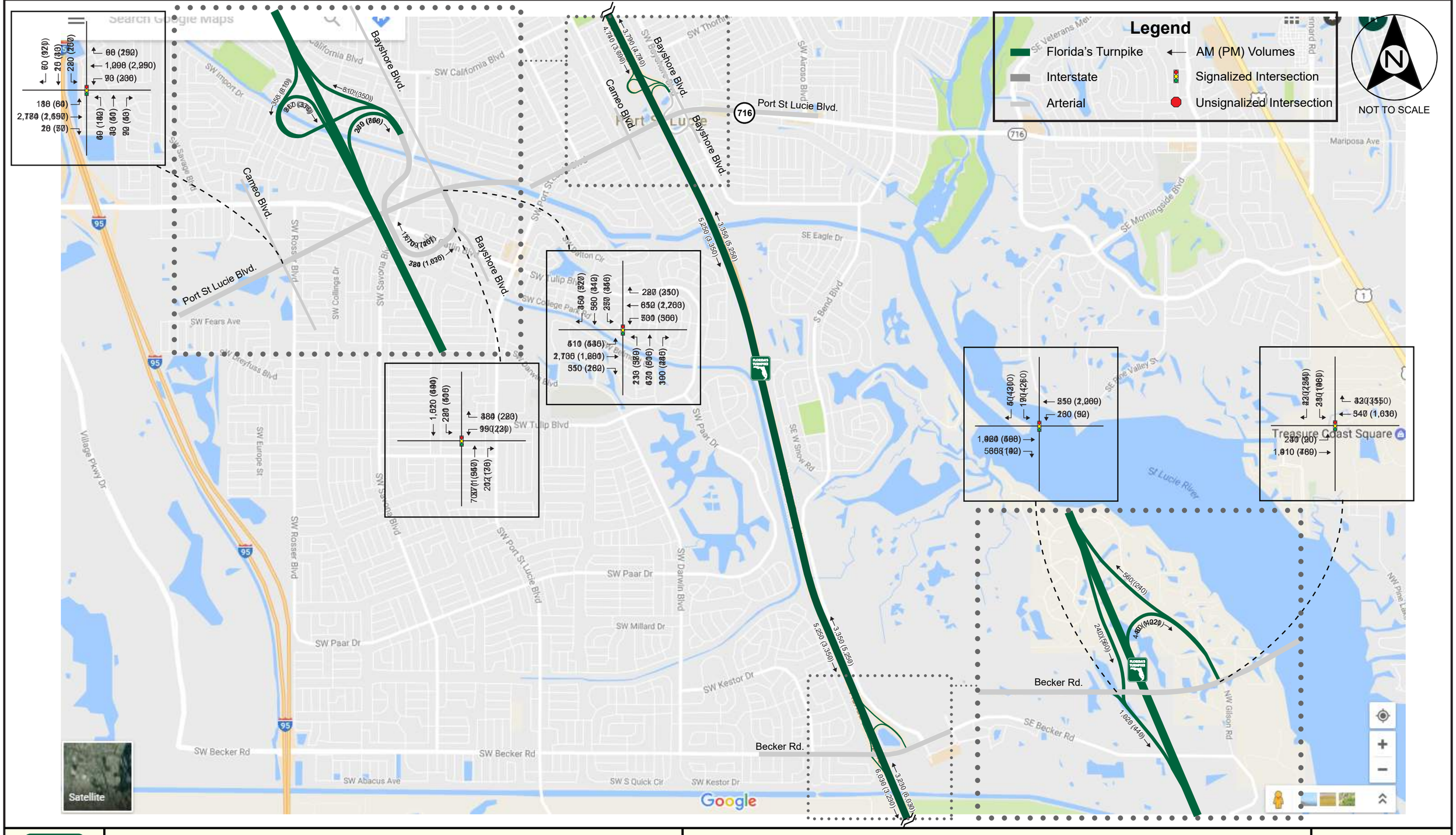


FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	S.R. 70 / Okeechobee Road to West Midway Road 2045 Build with Kanner Highway AM (PM) Peak Hour Volumes

Figure
5.3
Page 1 of 4



FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	St. Lucie West Boulevard to Crosstown Parkway 2045 Build with Kanner Highway AM (PM) Peak Hour Volumes	Figure 5.3 Page 2 of 4


Legend
Florida's Turnpike
Interstate
Arterial
AM (PM) Volumes
Signalized Intersection
Unsignalized Intersection
NOT TO SCALE
Baseline Rd
Baseline Rd
Port St Lucie Blvd.
Port St Lucie Blvd.
Port St Lucie Blvd.
Cameo Blvd.
Cameo Blvd.
Baseline Rd
Baseline Rd
Baseline Rd

Legend

- Florida's Turnpike
- Interstate
- Arterial
- AM (PM) Volumes
- Signalized Intersection
- Unsignalized Intersection

NOT TO SCALE

SW Martin Hwy.
SW Citrus Blvd.
SW 42nd Ave.
SW High Meadow Ave.
SW Deggeller Ct.
SW Martin Downs Blvd.
SW Leighton Farm Ave.
SW Locks Rd.
SW Kanner Hwy.
SW Jack James Dr.
Kansas Ave.
SW 48th Ave
SW 96th St
SE Indian St
SE Pomeroy St
SE Salerno Rd
SE Cove Rd
SW 36th St
SW Berry Ave
Port City
714
76
76A
711
95
5
A1A

80 (40) / 170 (60) / 1,010 (300) → 780 (1,060) / 990 (1,370) / 260 (490)
120 (60) / 1,060 (1,140) / 100 (130) → 110 (140) / 140 (220) / 420 (380)

60 (360) / 20 (20) / 200 (590) → 690 (180) / 1,950 (2,540) / 20 (40)
330 (60) / 2,140 (1,740) / 20 (20) → 20 (20) / 20 (20) / 20 (40)

100 (150) / 50 (90) → 110 (100) / 2,540 (2,590) / 100 (220)
70 (50) / 2,270 (2,290) / 20 (30) → 20 (20) / 20 (20) / 130 (190)

6,030 (3,230) / 3,230 (6,030)

1,220 (1,310) / 910 (1,010) / 330 (260) → 120 (250) / 930 (1,300) / 560 (1,090)
1,150 (1,200) / 1,170 (1,150) / 130 (220) → 600 (300) / 800 (800) / 900 (500)

100 (120) / 1,010 (410) / 330 (340) → 190 (400) / 990 (1,650) / 280 (170)
70 (110) / 1,500 (1,380) / 830 (420) → 520 (870) / 380 (1,040) / 130 (300)

2,880 (4,960) / 4,960 (2,880)

1,600 (2,320) / 2,320 (1,600)
1,870 (800) / 800 (450) / 800 (1,870) / 450 (800)

50 (20) / 10 (10) / 500 (320) → 120 (510) / 710 (290) / 40 (10)
20 (20) / 1,340 (1,110) / 10 (0) → 10 (10) / 10 (10) / 20 (50)

30 (80) / 10 (10) / 160 (420) → 540 (200) / 1,260 (1,630) / 170 (50)
60 (30) / 2,570 (1,980) / 40 (30) → 20 (30) / 10 (10) / 70 (170)

580 (300) / 950 (530) → 1,390 (1,580)
2,470 (2,370) / 330 (200) →

510 (760) / 3,100 (2,680)
240 (520) / 3,180 (2,380) → 140 (160) / 1,190 (1,930)

380 (920) / 920 (960) / 1,850 (1,260) / 200 (360) / 360 (200)

90 (50) / 830 (340) → 780 (760) / 320 (180)
1,820 (1,460) / 40 (20) →

350 (830) / 960 (910)
40 (90) / 2,610 (1,710) → 140 (30) / 60 (330)

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FLORIDA'S TURNPIKE	Florida's Turnpike PD&E Study from MP 116 to MP 152 Project Traffic Forecast Memorandum	S.R. 714 / S.W. Martin Highway to S.R. 76 / S.W. Kanner Highway 2045 Build with Kanner Highway AM (PM) Peak Hour Volumes

5.2 MAINLINE AND RAMPS LANE REQUIREMENTS

Future lane requirements were evaluated to provide an estimated timeline for the onset of capacity deficiencies along the mainline and ramp roadways. Freeway mainline and ramp Level of Service (LOS) thresholds were based on the FDOT System Planning Office *Estimation of Capacities on Florida Freeways Report*, dated September 2014 and prepared by the Transportation Research Center, University of Florida. The FDOT thresholds were adjusted for local conditions. **Tables 5.4** through **5.6** show the color-coded lane requirements corresponding to LOS D constraints for the mainline and LOS E for the ramp roadways for No-Build, Build conditions without Kanner Highway, and Build with Kanner Highway. Both No-Build and Build assumed build mainline conditions.

Under No-Build conditions, 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 Port St. Lucie Boulevard and Becker Road, and by year 2025 south of Becker Road, as shown in **Table 5.4**. Four lanes will be required between Becker Road and S.W. Martin Highway by year 2033. **Table 5.4** also shows that at the S.W. Martin Highway interchange, the southbound off-ramp will require two lanes by year 2039 and the northbound on-ramp will require two lanes by year 2037. Single-lane ramps will provide acceptable operations at other locations beyond the design year (2045).

Under Build conditions without Kanner Highway (**Table 5.5**), the Turnpike mainline will require three lanes within the study area between years 2027 and 2036, except for the segments between Becker Road and S.W. Martin Highway and to the south of I-95 which will require four lanes by year 2035. At the S.W. Martin Highway interchange, the southbound off-ramp will require two lanes by year 2036 and the northbound on-ramp will require two lanes by year 2035. Single-lane ramps will provide acceptable operations at other locations beyond the design year (2045).

Under Build conditions with Kanner Highway, the Turnpike mainline will require three lanes within the study area between years 2026 and 2036, as shown in **Table 5.6**. Four lanes will be required by year 2034 from Becker Road to S.W. Martin Highway, by year 2045 from S.W. Martin Highway to Kanner Highway, and by year 2037 south of the I-95 interchange. At the S.W. Martin Highway interchange, the southbound off-ramp will require two lanes by year 2045 and the northbound on-ramp will require two lanes by year 2044. Single-lane ramps will provide acceptable operations at other locations beyond the design year (2045).

Table 5.4
Lane Requirements by Year for No Build

Mainline Maximum Service Volume (LOS D) and Ramp LOS E
DDHV - Worst Case AM or PM Peak Hour

Location	Turnpike Profile		Model	Interpolated Volumes																		Model
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
184 - Fort Drum Service Area			2,100	2,160	2,210	2,270	2,320	2,380	2,440	2,490	2,550	2,600	2,660	2,720	2,780	2,830	2,890	2,950	3,010	3,060	3,120	3,170	3,230
		SB Off	650	660	670	680	690	710	720	730	740	750	760	770	780	800	810	820	830	840	850	860	870
152 - Fort Pierce (S.R. 70)		NB On	650	660	670	680	690	710	720	730	740	750	760	770	780	800	810	820	830	840	850	860	870
		SB On	1,220	1,240	1,270	1,290	1,320	1,340	1,360	1,390	1,410	1,440	1,460	1,480	1,510	1,530	1,560	1,580	1,600	1,620	1,650	1,670	1,690
		NB Off	1,220	1,240	1,270	1,290	1,320	1,340	1,360	1,390	1,410	1,440	1,460	1,480	1,510	1,530	1,560	1,580	1,600	1,620	1,650	1,670	1,690
			2,670	2,740	2,810	2,880	2,950	3,020	3,080	3,150	3,220	3,290	3,360	3,430	3,500	3,570	3,640	3,710	3,780	3,850	3,910	3,980	4,050
150 - Midway Road																							
			2,670	2,740	2,810	2,880	2,950	3,020	3,080	3,150	3,220	3,290	3,360	3,430	3,500	3,570	3,640	3,710	3,780	3,850	3,910	3,980	4,050
145 - S.W. St. Lucie Boulevard																							
144 - Fort Pierce/Port St. Lucie Service Area			2,670	2,740	2,810	2,880	2,950	3,020	3,080	3,150	3,220	3,290	3,360	3,430	3,500	3,570	3,640	3,710	3,780	3,850	3,910	3,980	4,050
143 - Crosstown Parkway																							
			2,670	2,740	2,810	2,880	2,950	3,020	3,080	3,150	3,220	3,290	3,360	3,430	3,500	3,570	3,640	3,710	3,780	3,850	3,910	3,980	4,050
142 - Port St. Lucie (Port St. Lucie Blvd.)			500	520	530	550	560	580	600	610	630	640	660	680	700	710	730	750	770	780	800	810	830
			1,160	1,180	1,190	1,210	1,230	1,250	1,260	1,280	1,300	1,310	1,330	1,350	1,360	1,380	1,390	1,410	1,430	1,440	1,460	1,470	1,490
			3,620	3,700	3,780	3,860	3,940	4,020	4,090	4,170	4,250	4,330	4,410	4,490	4,570	4,640	4,720	4,800	4,880	4,960	5,030	5,110	5,190
138 - Becker Road			150	170	190	200	220	240	260	280	290	310	330	350	370	380	400	420	440	450	470	480	500
		SB On	650	670	700	720	740	770	790	810	830	860	880	900	930	950	980	1,000	1,020	1,050	1,070	1,100	1,120
		NB Off	650	670	700	720	740	770	790	810	830	860	880	900	930	950	980	1,000	1,020	1,050	1,070	1,100	1,120
			4,210	4,300	4,400	4,490	4,590	4,680	4,770	4,870	4,960	5,060	5,150	5,240	5,340	5,430	5,530	5,620	5,720	5,810	5,910	6,000	6,100
		SB Off	1,210	1,260	1,310	1,370	1,420	1,470	1,520	1,570	1,630	1,680	1,730	1,760	1,790	1,810	1,840	1,870	1,950	2,020	2,100	2,170	2,250
133 - S.W. Martin Highway (S.R. 714)		NB On	1,210	1,260	1,310	1,370	1,420	1,470	1,520	1,570	1,630	1,680	1,730	1,760	1,790	1,810	1,840	1,870	1,950	2,020	2,100	2,170	2,250
		SB On	410	440	480	510	540	580	610	640	670	710	740	780	820	860	900	940	960	990	1,010	1,040	1,060
		NB Off	410	440	480	510	540	580	610	640	670	710	740	780	820	860	900	940	960	990	1,010	1,040	1,060
			3,410	3,490	3,560	3,640	3,710	3,790	3,860	3,940	4,010	4,090	4,160	4,270	4,370	4,480	4,580	4,690	4,730	4,780	4,820	4,870	4,910
129 - S.W. Kanner Highway																							
			3,410	3,490	3,560	3,640	3,710	3,790	3,860	3,940	4,010	4,090	4,160	4,270	4,370	4,480	4,580	4,690	4,730	4,780	4,820	4,870	4,910
124 - I-95																							
			3,410	3,490	3,560	3,640	3,710	3,790	3,860	3,940	4,010	4,090	4,160	4,270	4,370	4,480	4,580	4,690	4,730	4,780	4,820	4,870	4,910

Inputs	
Truck % (t_f)	7.0%
Free Flow Speed (mph)	75
Peak Hour Factor (PHF)	0.95

Freeway LOS Thresholds	
Lanes	LOS D
2	3,300
3	4,950
4	6,600
5	8,250
6	9,900

Ramp Capacity by Number of Lanes	
1	1,830
2	3,660
3	5,490

Speed - 40 to 50 MPH

Ramp Capacity by Number of Lanes	
1	1,780
2	3,560

Speed 25 MPH

Table 5.5
Lane Requirements by Year for Build without Kanner Highway

Mainline Maximum Service Volume (LOS D) and Ramp LOS E
DDHV - Worst Case AM or PM Peak Hour

Location	Turnpike Profile		Model	Interpolated Volumes																		Model
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
184 - Fort Drum Service Area			1,930	1,980	2,040	2,090	2,140	2,200	2,250	2,300	2,350	2,410	2,460	2,510	2,570	2,620	2,680	2,730	2,850	2,960	3,080	3,190	3,310
		SB Off	380	390	390	400	410	420	420	430	440	440	450	460	460	470	470	480	490	490	500	500	510
152 - Fort Pierce (S.R. 70)		NB On	380	390	390	400	410	420	420	430	440	440	450	460	460	470	470	480	490	490	500	500	510
		SB On	1,080	1,100	1,120	1,140	1,160	1,190	1,210	1,230	1,250	1,270	1,290	1,310	1,330	1,350	1,370	1,390	1,410	1,430	1,450	1,470	1,490
		NB Off	1,080	1,100	1,120	1,140	1,160	1,190	1,210	1,230	1,250	1,270	1,290	1,310	1,330	1,350	1,370	1,390	1,410	1,430	1,450	1,470	1,490
			2,630	2,700	2,760	2,830	2,900	2,970	3,030	3,100	3,170	3,230	3,300	3,370	3,440	3,500	3,570	3,640	3,770	3,900	4,030	4,160	4,290
150 - Midway Road			310	320	320	330	330	340	350	350	360	360	370	380	390	390	400	410	410	420	420	430	430
			290	300	300	310	320	330	330	340	350	350	360	370	370	380	380	390	400	400	410	410	420
			2,610	2,680	2,750	2,810	2,880	2,950	3,020	3,090	3,150	3,220	3,290	3,360	3,420	3,490	3,550	3,620	3,750	3,880	4,020	4,150	4,280
145 - S.W. St. Lucie Boulevard			210	220	220	230	230	240	240	250	250	260	260	270	270	280	280	290	290	300	300	310	310
144 - Fort Pierce/Port St. Lucie Service Area			2,610	2,680	2,750	2,810	2,880	2,950	3,020	3,090	3,150	3,220	3,290	3,360	3,420	3,490	3,550	3,620	3,690	3,760	3,830	3,900	3,970
143 - Crosstown Parkway			550	560	570	590	600	610	620	630	650	660	670	680	700	710	730	740	750	760	770	780	790
			3,160	3,240	3,320	3,400	3,480	3,560	3,640	3,720	3,800	3,880	3,960	4,040	4,120	4,200	4,280	4,360	4,440	4,520	4,600	4,680	4,760
142 - Port St. Lucie (Port St. Lucie Blvd.)			490	510	520	540	560	580	590	610	630	640	660	680	690	710	720	740	750	770	780	800	810
			620	630	640	650	660	670	670	680	690	700	710	720	730	740	750	760	770	770	780	780	790
			3,570	3,650	3,730	3,820	3,900	3,980	4,060	4,140	4,230	4,310	4,390	4,470	4,550	4,640	4,720	4,800	4,880	4,960	5,040	5,120	5,200
138 - Becker Road			160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	500	520	540	560
		SB On	590	610	630	650	670	700	720	740	760	780	800	820	840	870	890	910	930	950	970	990	1,010
		NB Off	590	610	630	650	670	700	720	740	760	780	800	820	840	870	890	910	930	950	970	990	1,010
			4,090	4,180	4,280	4,370	4,470	4,560	4,650	4,750	4,840	4,940	5,030	5,130	5,220	5,320	5,410	5,510	5,600	5,690	5,790	5,880	5,970
		SB Off	1,270	1,330	1,380	1,440	1,490	1,550	1,600	1,660	1,710	1,770	1,820	1,880	1,930	1,990	2,040	2,100	2,150	2,210	2,260	2,320	2,370
133 - S.W. Martin Highway (S.R. 714)		NB On	1,270	1,330	1,380	1,440	1,490	1,550	1,600	1,660	1,710	1,770	1,820	1,880	1,930	1,990	2,040	2,100	2,150	2,210	2,260	2,320	2,370
		SB On	320	350	370	400	420	450	480	500	530	550	580	610	630	660	680	710	740	760	790	810	840
		NB Off	320	350	370	400	420	450	480	500	530	550	580	610	630	660	680	710	740	760	790	810	840
			3,140	3,210	3,270	3,340	3,400	3,470	3,530	3,600	3,660	3,730	3,790	3,860	3,920	3,990	4,050	4,120	4,180	4,250	4,310	4,380	4,440
129 - S.W. Kanner Highway																							
			3,140	3,210	3,270	3,340	3,400	3,470	3,530	3,600	3,660	3,730	3,790	3,860	3,920	3,990	4,050	4,120	4,180	4,250	4,310	4,380	4,440
124 - I-95			940	970	990	1,020	1,040	1,070	1,090	1,120	1,140	1,170	1,190	1,220	1,240	1,270	1,290	1,320	1,340	1,370	1,390	1,420	1,440
			4,080	4,170	4,260	4,350	4,440	4,530	4,620	4,710	4,800	4,890	4,980	5,070	5,160	5,260	5,350	5,440	5,530	5,620	5,700	5,790	5,880

Inputs	
Truck % (t_f)	7.0%
Free Flow Speed (mph)	75
Peak Hour Factor (PHF)	0.95

Freeway LOS Thresholds	
Lanes	LOS D
2	3,300
3	4,950
4	6,600
5	8,250
6	9,900

Ramp Capacity by Number of Lanes	
1	1,830
2	3,660
3	5,490

Speed - 40 to 50 MPH

Ramp Capacity by Number of Lanes	
1	1,780
2	3,560

Speed 25 MPH

Table 5.6
Lane Requirements by Year for Build with Kanner Highway

Mainline Maximum Service Volume (LOS D) and Ramp LOS E
DDHV - Worst Case AM or PM Peak Hour

Location	Turnpike Profile	Model	Interpolated Volumes																			Model
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
184 - Fort Drum Service Area		2,130	2,190	2,250	2,300	2,360	2,420	2,480	2,540	2,590	2,650	2,710	2,770	2,830	2,890	2,950	3,010	3,070	3,120	3,180	3,230	3,290
	SB Off	380	390	390	400	410	420	420	430	440	440	450	460	460	470	470	480	490	490	500	500	510
152 - Fort Pierce (S.R. 70)	NB On	380	390	390	400	410	420	420	430	440	440	450	460	460	470	470	480	490	490	500	500	510
	SB On	1,080	1,100	1,120	1,140	1,160	1,190	1,210	1,230	1,250	1,270	1,290	1,310	1,330	1,350	1,370	1,390	1,410	1,430	1,450	1,470	1,490
	NB Off	1,080	1,100	1,120	1,140	1,160	1,190	1,210	1,230	1,250	1,270	1,290	1,310	1,330	1,350	1,370	1,390	1,410	1,430	1,450	1,470	1,490
		2,830	2,900	2,970	3,050	3,120	3,190	3,260	3,330	3,410	3,480	3,550	3,620	3,700	3,770	3,850	3,920	3,990	4,060	4,130	4,200	4,270
150 - Midway Road		310	320	320	330	330	340	350	350	360	360	370	380	390	390	400	410	410	420	420	430	430
		290	300	300	310	320	330	330	340	350	350	360	370	370	380	380	390	400	400	410	410	420
		2,810	2,880	2,960	3,030	3,100	3,180	3,250	3,320	3,390	3,470	3,540	3,610	3,680	3,760	3,830	3,900	3,970	4,040	4,120	4,190	4,260
145 - S.W. St. Lucie Boulevard		210	220	220	230	230	240	240	250	250	260	260	270	270	280	280	290	290	300	300	310	310
144 - Fort Pierce/Port St. Lucie Service Area		2,600	2,670	2,740	2,800	2,870	2,940	3,010	3,080	3,140	3,210	3,280	3,350	3,410	3,480	3,540	3,610	3,680	3,750	3,810	3,880	3,950
143 - Crosstown Parkway		550	560	570	590	600	610	620	630	650	660	670	680	700	710	730	740	750	760	770	780	790
		3,150	3,230	3,310	3,390	3,470	3,550	3,630	3,710	3,790	3,870	3,950	4,030	4,110	4,190	4,270	4,350	4,430	4,510	4,580	4,660	4,740
142 - Port St. Lucie (Port St. Lucie Blvd.)		490	510	520	540	560	580	590	610	630	640	660	680	690	710	720	740	750	770	780	800	810
		670	680	690	700	710	720	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860
		3,610	3,690	3,770	3,860	3,940	4,020	4,100	4,180	4,270	4,350	4,430	4,510	4,590	4,680	4,760	4,840	4,920	5,000	5,090	5,170	5,250
138 - Becker Road		160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	500	520	540	560
	SB On	600	620	640	660	680	710	730	750	770	790	810	830	850	880	900	920	940	960	980	1,000	1,020
	NB Off	600	620	640	660	680	710	730	750	770	790	810	830	850	880	900	920	940	960	980	1,000	1,020
		4,140	4,230	4,330	4,420	4,520	4,610	4,700	4,800	4,890	4,990	5,080	5,180	5,270	5,370	5,460	5,560	5,650	5,750	5,840	5,940	6,030
	SB Off	830	880	930	990	1,040	1,090	1,140	1,190	1,250	1,300	1,350	1,400	1,460	1,510	1,570	1,620	1,670	1,720	1,770	1,820	1,870
133 - S.W. Martin Highway (S.R. 714)	NB On	830	880	930	990	1,040	1,090	1,140	1,190	1,250	1,300	1,350	1,400	1,460	1,510	1,570	1,620	1,670	1,720	1,770	1,820	1,870
	SB On	310	340	360	390	410	440	460	490	510	540	560	580	610	630	660	680	700	730	750	780	800
	NB Off	310	340	360	390	410	440	460	490	510	540	560	580	610	630	660	680	700	730	750	780	800
		3,620	3,690	3,750	3,820	3,890	3,960	4,020	4,090	4,160	4,220	4,290	4,360	4,420	4,490	4,550	4,620	4,690	4,760	4,820	4,890	4,960
129 - S.W. Kanner Highway		560	580	600	610	630	650	670	690	700	720	740	760	780	790	810	830	850	870	880	900	920
		200	210	220	220	230	240	250	260	260	270	280	290	300	300	310	320	330	340	340	350	360
		3,260	3,320	3,370	3,430	3,490	3,550	3,600	3,660	3,720	3,770	3,830	3,890	3,940	4,000	4,050	4,110	4,170	4,230	4,280	4,340	4,400
124 - I-95		770	790	810	830	850	880	900	920	940	960	980	1,000	1,020	1,040	1,060	1,080	1,100	1,120	1,140	1,160	1,180
		4,030	4,110	4,190	4,260	4,340	4,420	4,500	4,580	4,650	4,730	4,810	4,890	4,960	5,040	5,110	5,190	5,270	5,350	5,420	5,500	5,580

Inputs	
Truck % (t_T)	7.0%
Free Flow Speed (mph)	75
Peak Hour Factor (PHF)	0.95

Freeway LOS Thresholds	
Lanes	LOS D
2	3,300
3	4,950
4	6,600
5	8,250
6	9,900

Ramp Capacity by Number of Lanes	
1	1,830
2	3,660
3	5,490

Speed - 40 to 50 MPH

Ramp Capacity by Number of Lanes	
1	1,780
2	3,560

Speed 25 MPH

This section will be completed in a later version of this document.

APPENDIX D

Interchange Feasibility Technical Memorandum

Interchange Feasibility Technical Memorandum

Florida's Turnpike Enterprise

Florida's Turnpike (SR 91) Widening PD&E Study from North of SR 706 (Indiantown Road) to North of SR 70 (Okeechobee Road)

Palm Beach, Martin and St. Lucie Counties, Florida

Financial Project No. 423374-1-22-01

March 2020

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

TABLE OF CONTENTS

Section **Page**

1.0 INTRODUCTION 1-1

1.1 Project Description 1-1

1.2 Purpose and Need 1-3

2.0 INTERCHANGE ANALYSIS 2-1

2.1 Methodology 2-1

2.2 Tier 1 Alternatives 2-3

2.2.1 Evaluation for new full interchange at SW Kanner Highway 2-3

2.2.2 Evaluation for new partial interchange at St. Lucie West Boulevard 2-4

2.3 Tier 2 Alternatives 2-5

2.3.1 I-95 Direct Connection near Bridge Road (Partial Interchange) 2-6

2.3.2 Crosstown Parkway (Partial/Full Interchange) 2-6

2.3.3 W Midway Road (Full Interchange) 2-10

2.4 Tier 3 Alternatives 2-12

2.4.1 I-95 Direct Connection near Bridge Road (Partial Interchange) 2-12

2.4.2 Crosstown Parkway (Partial Interchange) 2-13

2.4.3 W Midway Road (Full Interchange) 2-15

2.5 Summary 2-16

List of Figures

Figure **Page**

Figure 1-1 Project Location Map 1-2

Figure 2-1 Proposed Interchange Locations 2-2

List of Tables

Table **Page**

Table 2-1 Interchange Alternatives Evaluation Matrix (Tier 1) 2-5

Table 2-2 Interchange Alternatives Evaluation Matrix (Tier 2) 2-11

Table 2-3 Interchange Alternatives Evaluation Matrix (Tier 3) 2-17

List of Appendices

Appendix A	Interchange Line Diagram Alternatives
Appendix B	Eliminated Interchange Alternatives Evaluation Matrix (Tiers 1 and 2)
Appendix C	Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation
Appendix D	Interchange Conceptual Design Alternatives
Appendix E	Preliminary Interchange Alternatives Evaluation Matrix (Tier 3)

1.0
INTRODUCTION

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. The project limits extend from north of State Road (SR) 706 (Indiantown Road) at Milepost (MP) 117 to north of SR 70 (Okeechobee Road) at MP 153.7, a distance of 36.7 miles. Refer to **Figure 1-1** – Project Location Map.

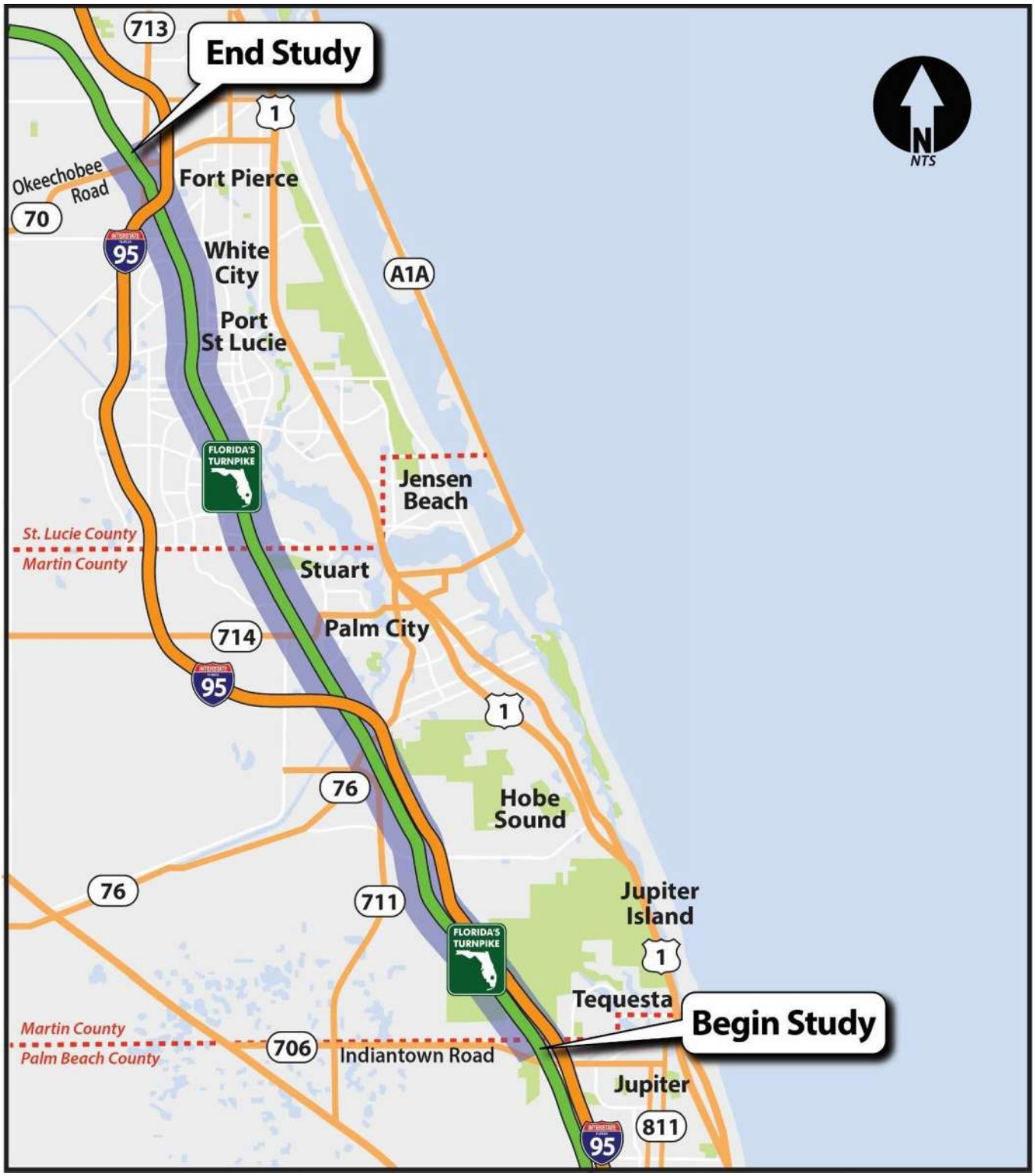
1.1 Project Description

The project consists of the widening of SR 91 from four to eight lanes by adding two general toll lanes in each direction. Currently, SR 91 is a four (4) lane limited access toll facility. Numerous bridge structures will be evaluated for widening or reconstruction 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 will also be evaluated as part of the PD&E study. The existing interchange at SR 706 (Indiantown Road) at Exit 116 is not included in this study. The existing interchange of SR 91 and SR 714 (SW Martin Highway) (Exit 133) is the only exit within Martin County. SR 91 has two existing interchanges in Port St. Lucie in St. Lucie County (one at Becker Road (Exit 138) and the other at SR 716 (Port St. Lucie Boulevard) (Exit 142)). The Port St. Lucie - Fort Pierce Service Plaza is at Exit 145. The northernmost existing interchange is at SR 70 (Okeechobee Road) (Exit 152) near Fort Pierce in St. Lucie County.

The potential new interchange access locations are a new I-95 direct connection interchange near Bridge Road (MP 125.5), SR 76 (SW Kanner Highway) (MP 130.4), Crosstown Parkway (MP 144.7), St. Lucie West Boulevard/NW Prima Vista Boulevard (MP 146.3), and W Midway Road (MP 150.4).

Figure 1-1
Project Location Map



1.2 Purpose and 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 will be evaluated as part of this study, as well as operational improvements to the existing interchanges. Particularly, this interchange feasibility technical memorandum will focus the analysis on the potential new interchange access locations only.

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

The primary purpose of the widening of 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 the Palm Beach, Martin and St. Lucie Counties. From April 1, 2018, the population in Palm Beach County is estimated to reach over 1.8 million by year 2045, which represents a 26.3% increase. Similarly, the population in St. Lucie County is expected to increase by 35.6% by year 2045 to nearly 410,000 while the population in Martin County is expected to increase by 22.7% by year 2045 to nearly 190,000. As the city and county populations increase, traffic will increase on area roadways as well. By the year 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%, according to data compiled for the Treasure Coast Regional Planning Model. St. Lucie County is projected to experience the largest gross gains in the workforce from the years 2010 to 2040. Key industries in the region set to experience the most growth include professional, health, retail, and construction.

Within the project limits, existing roadway segments along SR 91 are all currently operating at an acceptable Level of Service (LOS) D or better and existing ramp roadways are currently operating under capacity with volume-to-capacity ratios less than 1.0. In the future, four lanes of travel in each direction will be required on SR 91 between SW Martin Highway and Becker Road by year 2033. SR 91 will require three lanes of travel in each direction by year 2025 south of Becker Road, by year 2042 between Becker Road and Port St. Lucie Boulevard, and by year 2035 north of Port St. Lucie Boulevard.

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.

A total of 1,424 crashes were observed for the study area within the 2011-2015 study period, with 828 occurring along SR 91, 39 occurring on the two selected I-95 segments in the vicinity of SR 91, and 557 occurring at the study intersections. Among the total 1,424 crashes, 822 were property damage only crashes, 586 were injury related crashes, and 16 crashes involved at least one fatality.

Of the total crashes, 50.5 percent were due to front to rear, sideswipe, or angle collisions, 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.

Two existing roadway segments and six existing intersections were calculated to have crash ratios greater than 1.0, which indicates that these locations have crash rates that are higher than the statewide average for this facility type.

Additionally, SR 91 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 the study corridor are identified as "critical segments with highest vehicle queues." For Evacuation Levels B through E Operational Scenarios (with E being the highest level of evacuation), all the study area segments are identified as "critical segments with highest vehicle queues."

There are other potential impacts in the vicinity of the interchange areas which will need to be assessed further in the design phase. These impacts include landscaping and aesthetics. Since FTE has recently spent a significant amount of money on BOLD landscaping within the project study area, and the proposed improvements will most likely impact this vegetation, the design team should address landscaping impacts per FDOT Policy Topic 000-650-011c and FDM chapter 229. Also, the proposed ponds in the Pond Siting Report have been designed with an additional ten percent increase in pond area to accommodate the aesthetics per the Drainage Design Manual (Chapter 5.4.4.2), during final design.

2.0
INTERCHANGE ANALYSIS

The interchanges along the project corridor have been divided into two predominant categories: 1) existing interchange locations; and 2) potential new interchange locations. The purpose of this Interchange Feasibility Technical Memorandum is to focus the analysis on the potential new interchange locations only.

There are five potential new interchange locations along SR 91 under consideration. These locations are:

- I-95 Direct Connection near Bridge Road (MP 125.5), Martin County
- SR 76/SW Kanner Highway (MP 130.4), Martin County
- Crosstown Parkway (MP 144.7), St. Lucie County
- St. Lucie West Boulevard (MP 146.3), St. Lucie County
- W Midway Road (MP 150.4), St. Lucie County.

A map depicting the proposed interchange locations is provided in **Figure 2-1**.

2.1 Methodology

All alternatives are being analyzed based on specific criteria. There are three categories and sixteen design parameters being evaluated for each alternative analysis. The categories include: engineering; environmental and community; and cost considerations. There are 16 design parameters that include traffic operations, local road impacts, overall interchange performance, floodplain and wetland impacts, potential residential and business relocations, right-of-way and Florida Gas Transmission (FGT) impacts, right-of-way and construction costs, and benefit/cost (B/C) ratio just to name a few. The 16 design parameters are distributed among the three categories as follows: engineering (7 parameters); environmental and community (5 parameters); and cost (4 parameters). Refer to the Preliminary Interchange Alternatives Evaluation Matrix (Tier 3) in **Appendix E.**

Figure 2-1
Proposed Interchange Locations



2.2 Tier 1 Alternatives

A total of 22 potential interchange alternatives were evaluated for the five new interchange locations. The interchange alternatives considered at the five new interchange locations included:

- Four partial interchange alternatives at I-95 Direct Connection near Bridge Road (MP 125.5)
- Five full interchange alternatives at SW Kanner Highway (MP 130.4)
- Seven partial/full interchange alternatives at Crosstown Parkway (MP 144.7)
- Two partial interchange alternatives at St. Lucie West Boulevard (MP 146.3)
- Four full interchange alternatives at W Midway Road (MP 150.4).

Only 15 of the initial 22 alternatives were considered for further evaluation as Tier 2 Alternatives, with no new interchange alternatives being considered further for the proposed locations at SW Kanner Highway and St. Lucie West Boulevard. At these two locations, the PD&E study will continue dealing with each of them as crossroads with no direct connection to SR 91. The design intent is for the existing overpass bridges and roadway approaches at these two locations to be reconstructed with this project. Refer to the Interchange Line Diagram Alternatives in **Appendix A**.

2.2.1 Evaluation for new full interchange at SW Kanner Highway

An evaluation for five new full interchange alternatives was conducted for the proposed SW Kanner Highway location at MP 130.4. After vetting each alternative, all five interchange alternatives were eliminated from further consideration due to the following reasons:

- A total of four signalized intersections currently existing along SW Kanner Highway in less than 0.75 miles, including two existing signalized intersections at the interchange with I-95, as well as existing signalized intersections at SW Jack James Drive and SW Locks Road. With the additional signalization required for a new interchange with SR 91, the excessive signalization along SW Kanner Highway would not meet signalization spacing requirements and would complicate the traffic operations along SW Kanner Highway.
- Design options were evaluated to eliminate adding signalized intersection along SW Kanner Highway, however, the impacts to the local traffic would have been too circuitous.
- The larger amount of traffic that would be entering/exiting the less than 0.5-mile segment between the interchange at SR 91 and I-95 would negatively impact the operation of this critical segment.
- The residential developments along the west side of SR 91 inhibit the consideration of interchange alternatives to the west.
- The addition of a new interchange at this location is less needed with the addition of a new I-95 Direct Connection near Bridge Road interchange to the south of this location,

which provides access to/from SR 91, for traffic that would have likely used this interchange.

- The interchange alternatives being considered at this location create major impacts to the existing Florida Gas Transmission (FGT) easement along the east side of SR 91, resulting in substantial relocation costs.

2.2.2 Evaluation for new partial interchange at St. Lucie West Boulevard

An evaluation for two new partial interchange alternatives was conducted for the proposed St. Lucie West Boulevard location at MP 146.3. After vetting each alternative, both interchange alternatives were eliminated from further consideration due to the following reasons:

- Only one partial interchange alternative being considered at this location create major impacts to the existing FGT easement along the east side of SR 91, resulting in substantial relocation costs.
- Both partial interchange alternatives required proposed signals that would impact the traffic operation for the ramp connections and St. Lucie West Boulevard due to their proximity to each other.
- The potential addition of new interchanges on SR 91 to the north at W Midway Road and to the south at Crosstown Parkway create less traffic demand for an interchange connection to SR 91 at St. Lucie West Boulevard.

All interchange alternatives eliminated in Tier 1 are included in the Eliminated Interchange Alternatives Evaluation Matrix (Tiers 1 and 2) in **Appendix B.** The Tier 1 Interchange Alternatives Evaluation Matrix is shown in **Table 2-1.**

Table 2-1
Interchange Alternatives Evaluation Matrix (Tier 1)

Interchange Location	Tier 1	Interchange Location	Tier 1
I-95 Direct Connection near Bridge Road (MP 125.5)		**St. Lucie West Boulevard (MP 146.3)**	
Alternative 1 (P)	A	Alternative 1 (P)	X
Alternative 2 (P)	A	Alternative 2 (P)	X
Alternative 3 (P)	A	**W Midway Road (MP 150.4)**	
Alternative 4 (P)	A	Alternative 1 (F)	A
SW Kanner Highway (MP 130.4)		Alternative 2 (F)	A
Alternative 1 (F)	X	Alternative 3 (F)	A
Alternative 2 (F)	X	Alternative 4 (F)	A
Alternative 3 (F)	X	**Total Alternatives**	**22**
Alternative 4 (F)	X		
Alternative 5 (F)	X		
Crosstown Parkway (MP 144.7)			
Alternative 1 (P)	A		
Alternative 2 (P)	A		
Alternative 3 (P)	A		
Alternative 4 (P)	A		
Alternative 5 (F)	A		
Alternative 6 (F)	A		
Alternative 7 (F)	A		

A = Alternative Advanced
X = Alternative Eliminated
P = Partial Interchange
F = Full Interchange

Therefore, proceeding into the Tier 2 analysis, there are only three potential new interchange locations being considered: I-95 Direct Connection near Bridge Road, Crosstown Parkway and W Midway Road.

2.3 Tier 2 Alternatives

The remaining 15 interchange alternatives at the remaining three new interchange locations identified previously were carried forward into the Tier 2 analysis. These three new interchange locations include:

- Four partial interchange alternatives at I-95 Direct Connection near Bridge Road (MP 125.5)
- Seven partial/full interchange alternatives at Crosstown Parkway (MP 144.7)
- Four full interchange alternatives at W Midway Road (MP 150.4).

Refer to the Interchange Line Diagram Alternatives in **Appendix A**.

From these 15 alternatives, nine alternatives were eliminated from further evaluation, while only six alternatives were selected and carried forward into the Tier 3 analysis, accounting for two alternatives at each of the three new interchange locations. All interchange alternatives eliminated

in Tier 2 are briefly discussed below and are included in the Eliminated Interchange Alternatives Evaluation Matrix (Tiers 1 and 2) in **Appendix B**.

2.3.1 I-95 Direct Connection near Bridge Road (Partial Interchange)

A total of four new partial interchange alternatives were evaluated for the I-95 Direct Connection near Bridge Road interchange under the Tier 2 analysis. All four alternatives were vetted; however, only Alternatives 1 and 3 were selected and carried forward into the Tier 3 analysis. The other two interchange alternatives eliminated from further consideration are discussed below.

2.3.1.1 Alternative 2

Alternative 2 provides direct access between SR 91 and I-95 in both the northbound (NB) to northbound and southbound (SB) to southbound directions (NB SR 91 to NB I-95 and SB I-95 to SB SR 91). In this alternative, traffic from northbound SR 91 merges with the northbound on-ramp from Bridge Road onto northbound I-95. The I-95 southbound off-ramp is split to provide direct access to southbound SR 91 and an exit to Bridge Road.

Alternative 2 was eliminated from further consideration due to the substantial construction costs associated with the third-level bridge required for the NB SR 91 to NB I-95 connection.

2.3.1.2 Alternative 4

Alternative 4 provides direct access between SR 91 and I-95 in both the northbound to northbound and southbound to southbound directions (NB SR 91 to NB I-95 and SB I-95 to SB SR 91). In this alternative, traffic from northbound SR 91 merges with the northbound on-ramp from Bridge Road onto northbound I-95. The I-95 southbound off-ramp is split to provide direct access to southbound SR 91 and an exit to Bridge Road. The I-95 southbound off-ramp connects to southbound SR 91 directly north of Bridge Road.

Alternative 4 was eliminated from further consideration due to the substantial construction costs associated with the third-level bridge required for the NB SR 91 to NB I-95 connection, as well as a longer bridge on Bridge Road over SR 91 to accommodate the I-95 southbound off-ramp. This alternative also requires consecutive exits along southbound I-95 within a relatively short distance increasing traffic friction, which is undesirable.

2.3.2 Crosstown Parkway (Partial/Full Interchange)

A total of seven new partial/full interchange alternatives were evaluated for the Crosstown Parkway interchange under the Tier 2 analysis. All seven alternatives were vetted; however, only Alternatives 3 and 4 were selected and carried forward into the Tier 3 analysis. The other five interchange alternatives eliminated from further consideration are discussed below.

2.3.2.1 Alternative 1 (Partial Interchange)

Alternative 1 provides direct access to/from SR 91 to Crosstown Parkway via ramp connections to the outside of SR 91, immediately to the south of the Crosstown Parkway overpass bridge. These ramp connections will add new signals on the existing Crosstown Parkway bridge. Additionally, direct access is provided from southbound SR 91 to the Crosstown Parkway via the direct southbound ramp connection to SW Cameo Boulevard.

Alternative 1 was eliminated from further consideration due to the following reasons:

- Increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91.
- The proposed ramp connections to the existing Crosstown Parkway bridge over SR 91 would require complex, atypical structural modifications to the superstructure of the existing bridge.
- The replacement of this bridge is not recommended due to impacts that the required temporary traffic control would have on the surrounding community that utilizes the Crosstown Parkway daily (note that this bridge was recently upgraded).
- This alternative requires additional signalized intersections along the Crosstown Parkway, creating four signalized intersections within less than 0.5-mile total distance.
- Although access is provided to Crosstown Parkway from southbound SR 91, no return movement is provided from the Crosstown Parkway to northbound SR 91.
- Terminal ramps for southbound SR 91 are being placed at two different locations, which is undesirable.
- This alternative creates major impacts to the existing FGT easement along the east side of SR 91, resulting in substantial relocation costs.

2.3.2.2 Alternative 2 (Partial Interchange)

Alternative 2 provides direct access from northbound SR 91 to Crosstown Parkway via a ramp connection to the east side of SR 91, immediately to the south of the Crosstown Parkway overpass bridge. It also provides access to southbound SR 91 via a ramp connection from SW Cameo Boulevard that then parallels southbound SR 91, passing directly under the Crosstown Parkway bridge. Additionally, direct access is provided from southbound SR 91 to the Crosstown Parkway via the direct southbound ramp connection to SW Cameo Boulevard. New signalized intersections are required for the northbound SR 91 off-ramp connection to the existing Crosstown Parkway bridge and along SW Cameo Boulevard at the location of the southbound SR 91 on-ramp connection.

Alternative 2 was eliminated from further consideration due to the following reasons:

- Increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91.

- The proposed northbound SR 91 off-ramp connection to the existing Crosstown Parkway bridge over SR 91 would require complex, atypical structural modifications to the superstructure of the existing bridge.
- The replacement of this bridge is not recommended due to impacts that the required temporary traffic control would have on the surrounding community that utilizes the Crosstown Parkway daily (note that this bridge was recently upgraded).
- This alternative requires an additional signalized intersection along the Crosstown Parkway, creating three signalized intersections within less than 0.5-mile total distance.
- Although access is provided to Crosstown Parkway from southbound SR 91, no return movement is provided from the Crosstown Parkway to northbound SR 91.
- This alternative creates major impacts to the existing FGT easement along the east side of SR 91, resulting in substantial relocation costs.

2.3.2.3 Alternative 5 (Full Interchange)

Alternative 5 provides direct access to/from SR 91 to Crosstown Parkway via an elevated roadway section within the median, immediately to the south of the Crosstown Parkway overpass bridge. This elevated roadway section connects the northbound off- and southbound on-ramp lanes from the median inside lanes to the existing Crosstown Parkway overpass bridge, creating a signalized T-intersection. Additionally, direct access to and from the Crosstown Parkway is provided via the ramp connections to SW Cameo Boulevard.

Alternative 5 was eliminated from further consideration due to the following reasons:

- As evidenced by Alternatives 1 and 2 above, any alignment shift to the east would create major impacts to the existing FGT easement, resulting in substantial relocation costs. Therefore, improvements for this alternative all occur west of the right side of the northbound outside shoulder to avoid FGT impacts. However, this in turn causes increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91.
- The proposed ramp connections to the existing Crosstown Parkway bridge over SR 91 would require complex, atypical structural modifications to the superstructure of the existing bridge.
- The replacement of this bridge is not recommended due to impacts that the required temporary traffic control would have on the surrounding community that utilizes the Crosstown Parkway daily (note that this bridge was recently upgraded).
- This alternative requires an additional signalized intersection along the Crosstown Parkway, creating three signalized intersections within less than 0.5-mile total distance.
- The two proposed terminals of the four ramp connections are being placed at two different locations, which is undesirable.

- The proposed ramp connection from SW Cameo Boulevard to northbound SR 91 directly conflicts with the recently constructed truck parking facility at the north end of the Port St. Lucie – Fort Pierce Service Plaza.

2.3.2.4 Alternative 6 (Full Interchange)

Alternative 6 provides access to/from SR 91 immediately to the south of the Crosstown Parkway overpass bridge to Crosstown Parkway via a parallel northbound off- and a southbound on-loop ramp lane. These lanes pass under the Crosstown Parkway overpass bridge and connect to the northern leg of SW Cameo Boulevard, a local road, located to the west of SR 91. Additionally, direct access to and from the Crosstown Parkway is provided via the ramp connections to SW Cameo Boulevard.

Alternative 6 was eliminated from further consideration due to the following reasons:

- As evidenced by Alternatives 1 and 2 above, any alignment shift to the east would create major impacts to the existing FGT easement, resulting in substantial relocation costs. Therefore, improvements for this alternative all occur west of the right side of the northbound outside shoulder to avoid FGT impacts. However, this in turn causes increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91.
- The proposed ramp connection from SW Cameo Boulevard to northbound SR 91 partially conflicts with the recently constructed truck parking facility at the north end of the Port St. Lucie – Fort Pierce Service Plaza.
- The proposed signalized ramp connections along SW Cameo Boulevard will introduce significant additional traffic and impact the school bus route/access to St. Lucie West Centennial High School.
- The proposed ramp connections along SW Cameo Boulevard will impact the planned skate park proposed between SW Cameo Boulevard and southbound SR 91.
- This alternative requires a new signalized intersection along SW Cameo Boulevard, located 0.25 mile north of the existing signalized intersection at Crosstown Parkway.

2.3.2.5 Alternative 7 (Full Interchange)

Alternative 7 provides access to/from SR 91 immediately to the south of the Crosstown Parkway overpass bridge to Crosstown Parkway via a parallel northbound off- and a southbound on-loop ramp lane. These lanes pass under the Crosstown Parkway overpass bridge and connect to the northern leg of SW Cameo Boulevard, a local road, located to the west of SR 91. Additionally, direct access to and from the Crosstown Parkway is provided via the ramp connections to SW Cameo Boulevard, with the northbound on-ramp to SR 91 utilizing a viaduct along the east side of the Port St. Lucie – Fort Pierce Service Plaza.

Alternative 7 was eliminated from further consideration due to the following reasons:

- As evidenced by Alternatives 1 and 2 above, any alignment shift to the east would create major impacts to the existing FGT easement, resulting in substantial relocation costs. Therefore, improvements for this alternative all occur west of the right side of the northbound outside shoulder to avoid FGT impacts. However, this in turn causes increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91.
- The proposed SR 91 northbound on-ramp connection from SW Cameo Boulevard utilizes a viaduct that significantly impacts the entire operation of the Port St. Lucie – Fort Pierce Service Plaza.
- The proposed signalized ramp connections along SW Cameo Boulevard will introduce significant additional traffic and impact the school bus route/access to St. Lucie West Centennial High School.
- The proposed ramp connections along SW Cameo Boulevard will impact the planned skate park proposed between SW Cameo Boulevard and southbound SR 91.
- This alternative requires a new signalized intersection along SW Cameo Boulevard, located 0.25 mile north of the existing signalized intersection at Crosstown Parkway.

2.3.3 W Midway Road (Full Interchange)

A total of four new full interchange alternatives were evaluated for the W Midway Road interchange under the Tier 2 analysis. All four alternatives were vetted; however, only Alternatives 1 and 4 were selected and carried forward into the Tier 3 analysis. The other two interchange alternatives eliminated from further consideration are discussed below.

2.3.3.1 Alternative 2

Alternative 2 provides a partial cloverleaf in the southeast quadrant, allowing access to/from northbound SR 91 to W Midway Road. A partial cloverleaf is also provided in the northwest quadrant, allowing access to/from southbound SR 91 to W Midway Road. Signalized intersections are required where the ramps connect to W Midway Road.

Alternative 2 was eliminated from further consideration due to the proposed partial cloverleaf in the northwest quadrant creating a significant economic impact on the community by directly affecting/eliminating the Cemex plant.

2.3.3.2 Alternative 3

Alternative 3 provides direct access to/from SR 91 to W Midway Road via an elevated roadway section within the median, immediately to the south and north of the W Midway Road overpass bridge. This elevated roadway section connects the northbound off/on and southbound off/on ramp lanes from the median inside lanes to the proposed crossroad bridge, creating a full signalized intersection on the W Midway Road overpass bridge.

Alternative 3 was eliminated from further consideration due to the following reasons:

- The access to W Midway Road utilizing ramp connections generated from the median of SR 91 has the potential to impact the traffic operation along SR 91.
- Impacts of the ramp connections on the bridge, as well as the requirement of a signal on the bridge.

The interchange alternatives eliminated in the Tier 2 analysis are summarized in the Tier 2 Interchange Alternatives Evaluation Matrix shown below in **Table 2-2.**

Table 2-2
Interchange Alternatives Evaluation Matrix (Tier 2)

Interchange Location	Tier 1	Tier 2
I-95 Direct Connection near Bridge Road (MP 125.5)		
Alternative 1 (P)	A	A
Alternative 2 (P)	A	X
Alternative 3 (P)	A	A
Alternative 4 (P)	A	X
SW Kanner Highway (MP 130.4)		
Alternative 1 (F)	X	
Alternative 2 (F)	X	
Alternative 3 (F)	X	
Alternative 4 (F)	X	
Alternative 5 (F)	X	
Crosstown Parkway (MP 144.7)		
Alternative 1 (P)	A	X
Alternative 2 (P)	A	X
Alternative 3 (P)	A	A
Alternative 4 (P)	A	A
Alternative 5 (F)	A	X
Alternative 6 (F)	A	X
Alternative 7 (F)	A	X
St. Lucie West Boulevard (MP 146.3)		
Alternative 1 (P)	X	
Alternative 2 (P)	X	
W Midway Road (MP 150.4)		
Alternative 1 (F)	A	A
Alternative 2 (F)	A	X
Alternative 3 (F)	A	X
Alternative 4 (F)	A	A
Total Alternatives	**22**	**15**

A = Alternative Advanced
X = Alternative Eliminated
P = Partial Interchange
F = Full Interchange

2.4 Tier 3 Alternatives

There are only two potential remaining alternatives at each of the three new interchange locations. The conceptual design for all six potential alternatives was developed utilizing the traffic data provided in the excerpt of the *Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation*, included in **Appendix C**. The conceptual designs for these six alternatives are shown in the Interchange Conceptual Design Alternatives in **Appendix D**. The six potential alternatives are described and analyzed below. Each alternative was evaluated based on the criteria previously discussed.

2.4.1 I-95 Direct Connection near Bridge Road (Partial Interchange)

These interchange alternatives provide partial system to system direct access between SR 91 and I-95 in both the northbound to northbound and southbound to southbound directions (NB SR 91 to NB I-95 and SB I-95 to SB SR 91). These alternatives are designed so as not to impact future expansion of the I-95 Interchange at Bridge Road. Refer to the Interchange Line Diagram Alternatives in **Appendix A.**

2.4.1.1 Alternative 1

In this alternative, traffic from northbound SR 91 merges with the northbound on-ramp from Bridge Road onto northbound I-95. The I-95 southbound off-ramp is split to provide direct access to southbound SR 91 and an exit to Bridge Road. No weaving issues, ramp back-ups, or impacts to the adjacent intersections or interchanges are anticipated with this alternative. The I-95 southbound off-ramp to SR 91 southbound on-ramp has relatively flatter curves, resulting in minimal deceleration. There are 20.1 acres of right-of-way impacts at a cost of $1,675,000. Wetland impacts for this alternative total approximately 1.7 acres. The estimated construction cost is $52,920,000. The benefit/cost (B/C) ratio for this alternative is 5.4.

2.4.1.2 Alternative 3

In this alternative, the I-95 southbound off-ramp is split to provide direct access to southbound SR 91 and an exit to Bridge Road. The I-95 southbound off-ramp to southbound SR 91 primarily transverses westward to cross over SR 91 and continues southward crossing over Bridge Road before merging into SR 91. The northbound off-ramp from SR 91 to northbound I-95 is identical to that in Alternative 1. No weaving issues, ramp back-ups, or impacts to the adjacent intersections or interchanges are anticipated with this alternative. The I-95 southbound off-ramp to SR 91 southbound on-ramp has sharper curves than proposed in Alternative 1, resulting in more frequent deceleration and potential speed reduction. There are 35.5 acres of right-of-way impacts at a cost of $3,579,000. Wetland impacts for this alternative total approximately 2.1 acres. The estimated construction cost is $48,250,000. The B/C ratio for this alternative is 5.9.

2.4.1.3 Comparative Analysis:

The lane geometry and directional design hour volumes (DDHVs) for these alternatives are included in Attachment A of **Appendix C** (*excerpt of the Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation*). Tables 1 and 2 of **Appendix C** show the *Highway Capacity Software* (HCS) analysis results summary for the 2045 No-Build and Build Alternatives. To the north of Bridge Road, the Level of Service (LOS) is the same for both the No-Build and Build scenarios. South of Bridge Road, there are improvements where the LOS goes from F to D or better. With additional capacity on SR 91, the LOS is D or better.

Alternatives 1 and 3 are similar in several design and operation parameters. However, the key differences between them are the right-of-way impacts and associated cost, and the potential contamination impacts. Refer to the Preliminary Interchange Alternatives Evaluation Matrix (Tier 3) in **Appendix E**.

2.4.2 Crosstown Parkway (Partial Interchange)

Any alignment shift to the east of SR 91 would create major impacts to the existing FGT easement, resulting in substantial relocation costs. Therefore, improvements for Alternatives 3 and 4 below all occur west of the right side of the northbound outside shoulder to avoid FGT impacts.

2.4.2.1 Alternative 3

Alternative 3 provides access to/from SR 91 immediately to the south of the Crosstown Parkway overpass bridge to Crosstown Parkway via a parallel northbound off- and a southbound on-loop ramp lane. These lanes pass under the Crosstown Parkway overpass bridge and connect to the northern leg of SW Cameo Boulevard, a local road, located to the west of SR 91. The loop ramp accesses SR 91 from this local road to the west and south of the Port St. Lucie - Ft. Pierce Service Plaza. The southern terminus of the loop ramp will ingress/egress SR 91 from the left side (within the median), the area between the service plaza and just to the south of the Crosstown Parkway overpass bridge.

The access to the Crosstown Parkway will be provided via SW Cameo Boulevard. This alternative avoids a direct impact to the Crosstown Parkway, a major arterial, but requires a new signalized intersection along SW Cameo Boulevard, located 0.25 mile north of the existing signalized intersection at Crosstown Parkway. No weaving issues are anticipated, and longer ramps than those provided in Alternative 4 are included to avoid potential ramp back-ups onto the mainline. The longer ramps will provide vehicle storage during heavy traffic conditions and minimize potential impacts to SR 91 traffic. This alternative will maintain the existing signals and traffic operations on the Crosstown Parkway, and no further impacts to the adjacent interchanges are anticipated. There are 2.4 acres of right-of-way impacts at a cost of $1,223,000. Wetland impacts for this alternative total approximately 0.1 acres. This alternative avoids impacting access connection within the area identified for a future skate park in the northwest quadrant. The estimated construction cost is $21,360,000. The B/C ratio for this alternative is 2.0.

2.4.2.2 Alternative 4

Alternative 4 provides direct access to/from SR 91 to Crosstown Parkway via an elevated roadway section within the median, immediately to the south of the Crosstown Parkway overpass bridge. This elevated roadway section connects the northbound off- and southbound on-ramp lanes from the median inside lanes to the existing Crosstown Parkway overpass bridge, creating a T-intersection. This connection will add a new signal on the existing Crosstown Parkway bridge in between two existing and closely spaced signals which will have direct impacts on the Crosstown Parkway, a major 6-lane arterial.

No weaving issues are anticipated. However, there is the potential that under extreme traffic conditions, the northbound off-ramp traffic may queue back onto SR 91due to the shorter ramp length being proposed for Alternative 4. In addition, potential constructability issues may be expected when tying the new ramps to the existing bridge. There are 7.23 acres of right-of-way impacts at a cost of $7,052,000. Wetland impacts for this alternative total approximately 0.1 acres. The proposed limited access right-of-way in the northwest quadrant requires land alongside parcels identified for a future skate park. The proposed limited access right-of-way to the west of SR 91 is required due to the westward shift of the SR 91 southbound lanes to accommodate the proposed ramp connection within the median. The estimated construction cost is $19,920,000. The B/C ratio for this alternative is 2.4.

2.4.2.3 Comparative Analysis:

The lane geometry and DDHVs for these alternatives are included in Attachment E of **Appendix C** (*excerpt of the Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation*). Table 6 of **Appendix C** show the Synchro intersection analysis results summary for the 2045 No-Build and Build Alternatives.

At the SW Cameo Boulevard/Crosstown Parkway intersection, a LOS of D is observed in the AM and PM for both the No-Build and Build scenarios, except for Alternative 3 which operates at a LOS of E in the AM. The proposed T-intersection with the existing Crosstown Parkway overpass bridge will add a new signal on the bridge which will impact the existing signals and traffic operations on the Crosstown Parkway and will further degrade the LOS of the SW Bayshore Boulevard/Crosstown Parkway intersection. At this intersection, a LOS of E is observed in the AM and PM for both the No-Build and Build scenarios, except for Alternative 4 which operates at a LOS of F in the PM.

Alternative 4 provides direct access to the Crosstown Parkway while Alternative 3 has a more circuitous access via SW Cameo Boulevard, an arterial roadway located to the west of SR 91. However, Alternative 4 contains significant differences on a few design and operational parameters including: traffic operations, potential relocations, local road, park, and right-of-way impacts. The introduction of a new signal on the existing bridge in between two tightly spaced existing signals has direct impacts on the Crosstown Parkway traffic, a major local arterial. Also,

due to the shorter ramp length being proposed, there is the potential that traffic may queue back, creating issues for the SR 91 traffic. In addition, right-of-way impacts affect a high number of parcels, including parcels identified for a future skate park and six potential relocations. Also, the proposed ramp connections to the existing Crosstown Parkway bridge over SR 91 would require complex, atypical structural modifications to the superstructure of the existing bridge. Refer to the Preliminary Interchange Alternatives Evaluation Matrix (Tier 3) in **Appendix E**.

2.4.3 W Midway Road (Full Interchange)

2.4.3.1 Alternative 1

Alternative 1 is a tight urban diamond interchange (TUDI) with northbound and southbound on/off ramps to the east and west of SR 91, respectively. Like Alternative 4 below, it also provides direct access to W Midway Road. Due to the proximity of the two ramp terminal intersections, this alternative has a potential for traffic issues on W Midway Road, including ramp back-ups during peak hours. There are 11.6 acres of right-of-way impacts at a cost of $5,148,000. Wetland impacts for this alternative total approximately 6.9 acres. Impacts to the man-made ponds in the northeast quadrant are due to the construction of the proposed northbound on-ramp which will eliminate the existing wet ponds that will need to be replaced. There are three potential contamination sites with this alternative, and the proposed on-ramp in the southwest quadrant will require minimal land from parcels identified as a future park. The estimated construction cost is $25,890,000. The B/C ratio for this alternative is 0.2.

2.4.3.2 Alternative 4

Alternative 4 is a tight diamond on the west side of SR 91 similar to Alternative 1, and a partial cloverleaf in the southeast quadrant of SR 91 which provides direct access to W Midway Road. No local road or traffic impacts are anticipated on W Midway Road. There are 15.1 acres of right-of-way impacts at a cost of $6,517,000. Wetland impacts for this alternative total approximately 1.7 acres. There are three potential contamination sites with this alternative, and the proposed on-ramp in the southwest quadrant will require minimal land from parcels identified as a future park. The estimated construction cost is $28,070,000. The B/C ratio for this alternative is 0.2.

2.4.3.3 Comparative Analysis:

The lane geometry and DDHVs for these alternatives are included in Attachment F of **Appendix C** (*excerpt of the Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation*). The Synchro intersection analysis results summary for the 2045 No-Build and Build Alternatives is shown in Table 7 of **Appendix C**.

At the W Midway Road/Glades Cut Off Road intersection, a LOS of D is observed in the AM and PM for both the No-Build and Build scenarios. At the W Midway Road/NW E Torino Parkway intersection, a LOS of F is observed in the AM for both the No-Build and Build scenarios, except that Alternative 1 and 4 display the same slight reduction in delay. However, improvements are observed in the PM where the LOS goes from F in the No-Build scenario to a LOS of E in the PM

for Alternatives 1 and 4. At the W Midway Road/SB ramps intersection, Alternative 1 and 4 operate at a LOS of C and D in the AM respectively with the PM operating at a LOS of C for both. At the W Midway Road/NB ramps intersection, Alternative 1 and 4 operate at a LOS of D and C in the AM, respectively, with the PM operating at a LOS of D for both.

These two alternatives are similar in several design and impact parameters, including the direct access to W Midway Road, three potential contamination sites, and that the proposed on-ramp in the southwest quadrant will require the taking of land identified as a future park. However, Alternative 1 key differences are the traffic operations at the interchange junction, local road and wetland impacts. Potential traffic operational issues and impacts to W Midway Road may result from the proximity of the two signals at the ramp terminal intersections, including potential ramp back-ups during peak hours. In addition, the proposed northbound on-ramp will impact the existing wet ponds in the northeast quadrant requiring their replacement. Refer to the Preliminary Interchange Alternatives Evaluation Matrix (Tier 3) in **Appendix E**.

2.5 Summary

The six final alternatives from Tier 3 above were part of the 22 initial potential alternatives vetted in Tier 1. Of the 22 potential alternatives in Tier 1, only 15 potential alternatives were selected for further vetting into Tier 2. Under the Tier 2 analysis, the 15 potential alternatives from Tier 1, were systematically vetted and reduced to only six potential alternatives which were selected for further vetting in Tier 3. These six remaining alternatives were further vetted in Tier 3 and evaluated based on the sixteen design parameters previously discussed. Refer to the Preliminary Interchange Alternatives Evaluation Matrix (Tier 3) in **Appendix E.** These six alternatives correspond to two potential alternatives for each new interchange location. The three new interchange locations are:

- I-95 Direct Connection near Bridge Road (Partial Interchange)
- Crosstown Parkway (Partial Interchange)
- W Midway Road (Full Interchange).

The Tier 3 Interchange Alternatives Evaluation Matrix is shown in **Table 2-3**. These six remaining interchange alternatives will be taken to the Alternatives Public Meeting for public input. In the Preliminary Engineering Report (PER), these six concepts will have further comparative analysis before a recommendation is made.

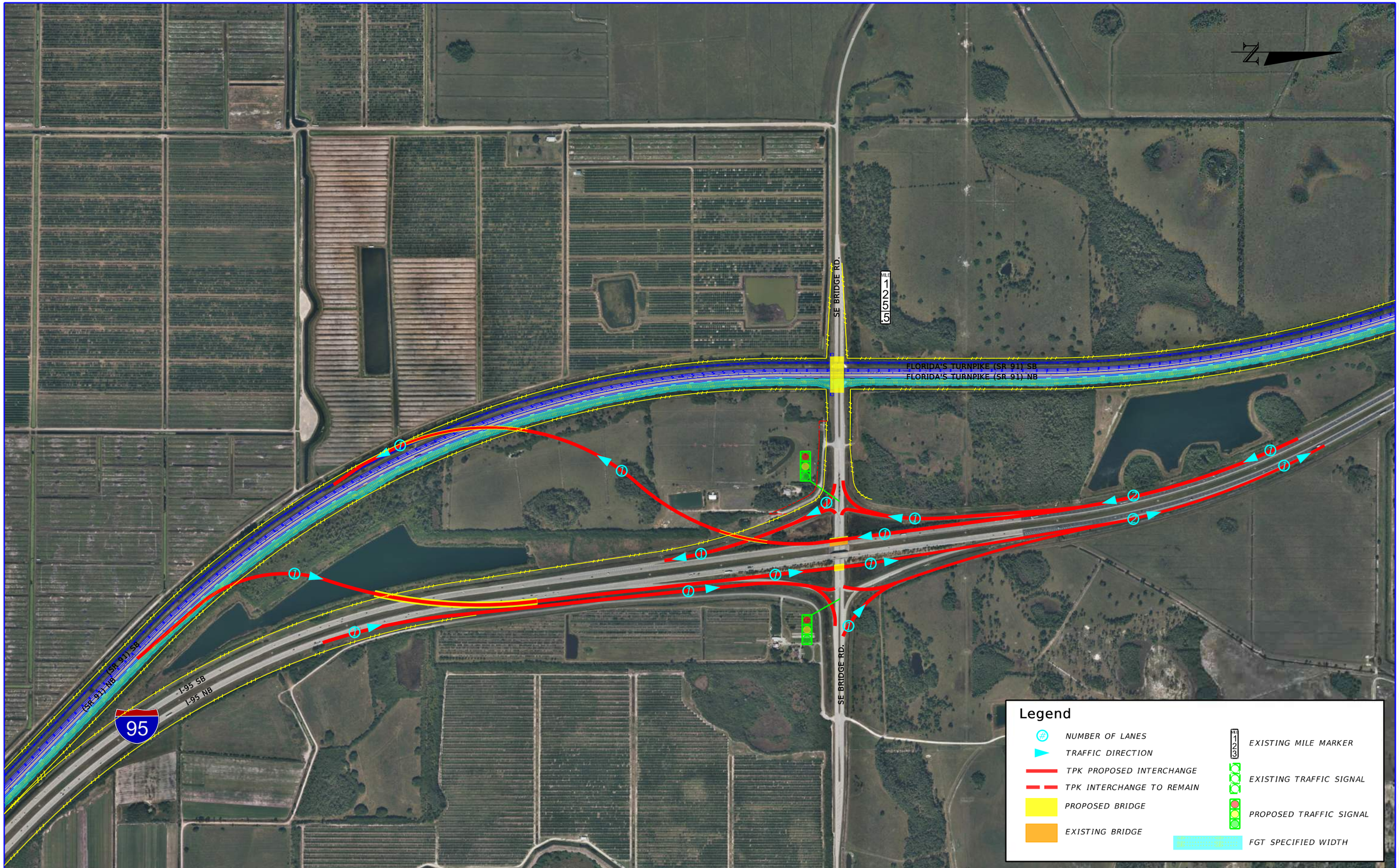
Table 2-3
Interchange Alternatives Evaluation Matrix (Tier 3)

Interchange Location	Tier 1	Tier 2	Tier 3
I-95 Direct Connection near Bridge Road (MP 125.5)			
Alternative 1 (P)	A	A	A
Alternative 2 (P)	A	X	
Alternative 3 (P)	A	A	A
Alternative 4 (P)	A	X	
SW Kanner Highway (MP 130.4)			
Alternative 1 (F)	X		
Alternative 2 (F)	X		
Alternative 3 (F)	X		
Alternative 4 (F)	X		
Alternative 5 (F)	X		
Crosstown Parkway (MP 144.7)			
Alternative 1 (P)	A	X	
Alternative 2 (P)	A	X	
Alternative 3 (P)	A	A	A
Alternative 4 (P)	A	A	A
Alternative 5 (F)	A	X	
Alternative 6 (F)	A	X	
Alternative 7 (F)	A	X	
St. Lucie West Boulevard (MP 146.3)			
Alternative 1 (P)	X		
Alternative 2 (P)	X		
W Midway Road (MP 150.4)			
Alternative 1 (F)	A	A	A
Alternative 2 (F)	A	X	
Alternative 3 (F)	A	X	
Alternative 4 (F)	A	A	A
Total Alternatives	**22**	**15**	**6**

A = Alternative Advanced
X = Alternative Eliminated
P = Partial Interchange
F = Full Interchange

APPENDICES

Appendix A
Interchange Line Diagram Alternatives



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

I-95 / SR 91
INTERCHANGE ALTERNATIVE 1

SHEET NO.

$USER$ $DATE$ $TIME$ $FILE$

DISCARDED

SE BRIDGE RD.

FLORIDA'S TURNPIKE (SR 91) SB
FLORIDA'S TURNPIKE (SR 91) NB

SE BRIDGE RD.

I-95 SB
I-95 NB

INTERSTATE
95

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

I-95 / SR 91
INTERCHANGE ALTERNATIVE 2

SHEET NO.

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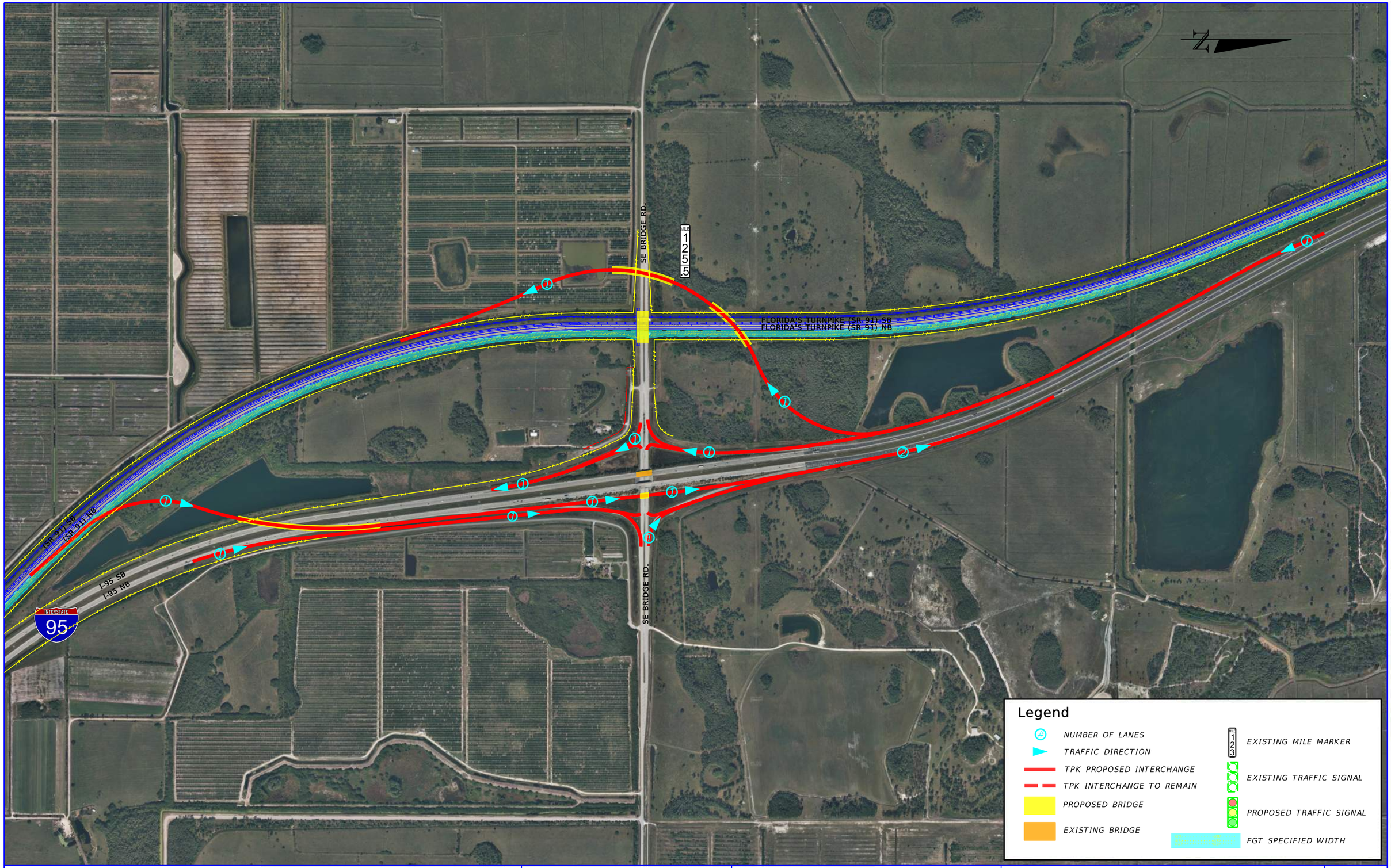

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

I-95 / SR 91
INTERCHANGE ALTERNATIVE 3

SHEET NO.

$USER$ $DATE$ $TIME$ $FILE$

DISCARDED

SE BRIDGE RD.

FLORIDA'S TURNPIKE (SR 91) SB
FLORIDA'S TURNPIKE (SR 91) NB

I-95 SB
I-95 NB

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

I-95 / SR 91
INTERCHANGE ALTERNATIVE 4

SHEET NO.

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DISCARDED

SW LOCKS RD.

KANSAS AVE.

MILE 130

MILE 1305

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

SW JACK JAMES DR.

SW KANNER HWY

INTERSTATE 95

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SR 76 / KANNER HWY INTERCHANGE ALTERNATIVE 1

SHEET NO.

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DISCARDED

SW LOCKS RD.

KANSAS AVE.

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

SW OLD KANSAS AVE.

SW KANNER HWY

SW JACK JAMES DR.

INTERSTATE 95

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SR 76 / KANNER HWY INTERCHANGE ALTERNATIVE 2

SHEET NO.

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DISCARDED

SW LOCKS RD.

KANSAS AVE.

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

SW JACK JAMES DR.

SW KANNER HWY

INTERSTATE 95

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SR 76 / KANNER HWY INTERCHANGE ALTERNATIVE 3

SHEET NO.

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DISCARDED

KANSAS AVE.

SW LOCKS RD.

MILE 130

MILE 1305

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

760

INTERSTATE 95

SW KANNER HWY.

SW JACK JAMES DR.

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED MAINLINE
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SR 76 / KANNER HWY
INTERCHANGE ALTERNATIVE 4

SHEET NO.

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DISCARDED

SW LOCKS RD.

KANSAS AVE.

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

SW JACK JAMES DR.

SW KANNER HWY

INTERSTATE 95

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- TO BE REMOVED
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SR 76 / KANNER HWY
INTERCHANGE ALTERNATIVE 5

SHEET NO.

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DISCARDED

SW CAMEO BLVD.

MILE 144.5

MILE 145

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

SOUTH MACEDO BLVD.

CROSSTOWN PKWY

SW BAYSHORE BLVD.

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CROSSTOWN PKWY
INTERCHANGE ALTERNATIVE 1

SHEET NO.

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DISCARDED

SW CAMEO BLVD.

MILE 144.5

MILE 145

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

SOUTH MACEDO BLVD.

CROSSTOWN PKWY

SW BAYSHORE BLVD.

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CROSSTOWN PKWY INTERCHANGE ALTERNATIVE 2

SHEET NO.

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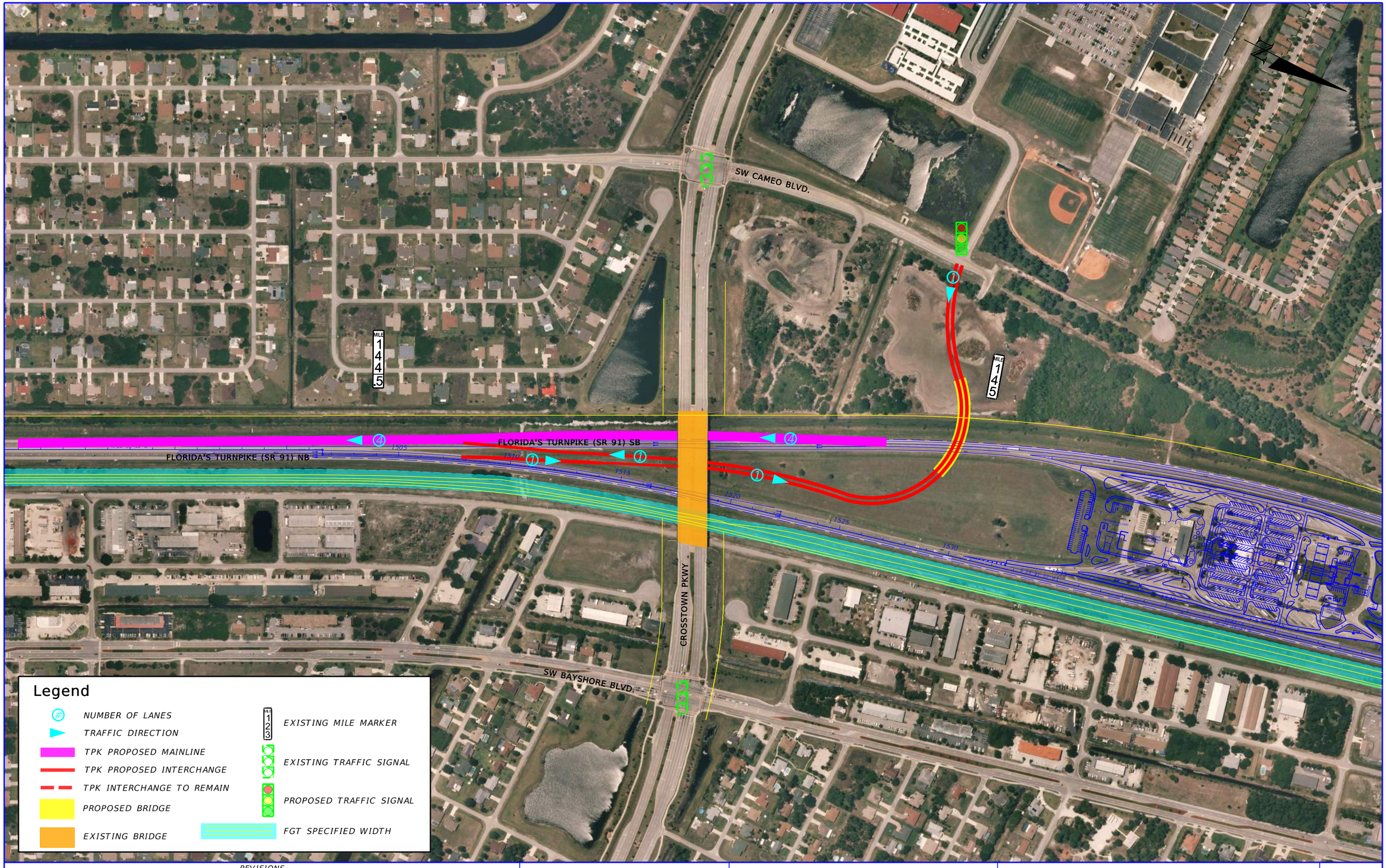

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CROSSTOWN PKWY
INTERCHANGE ALTERNATIVE 3

SHEET NO.

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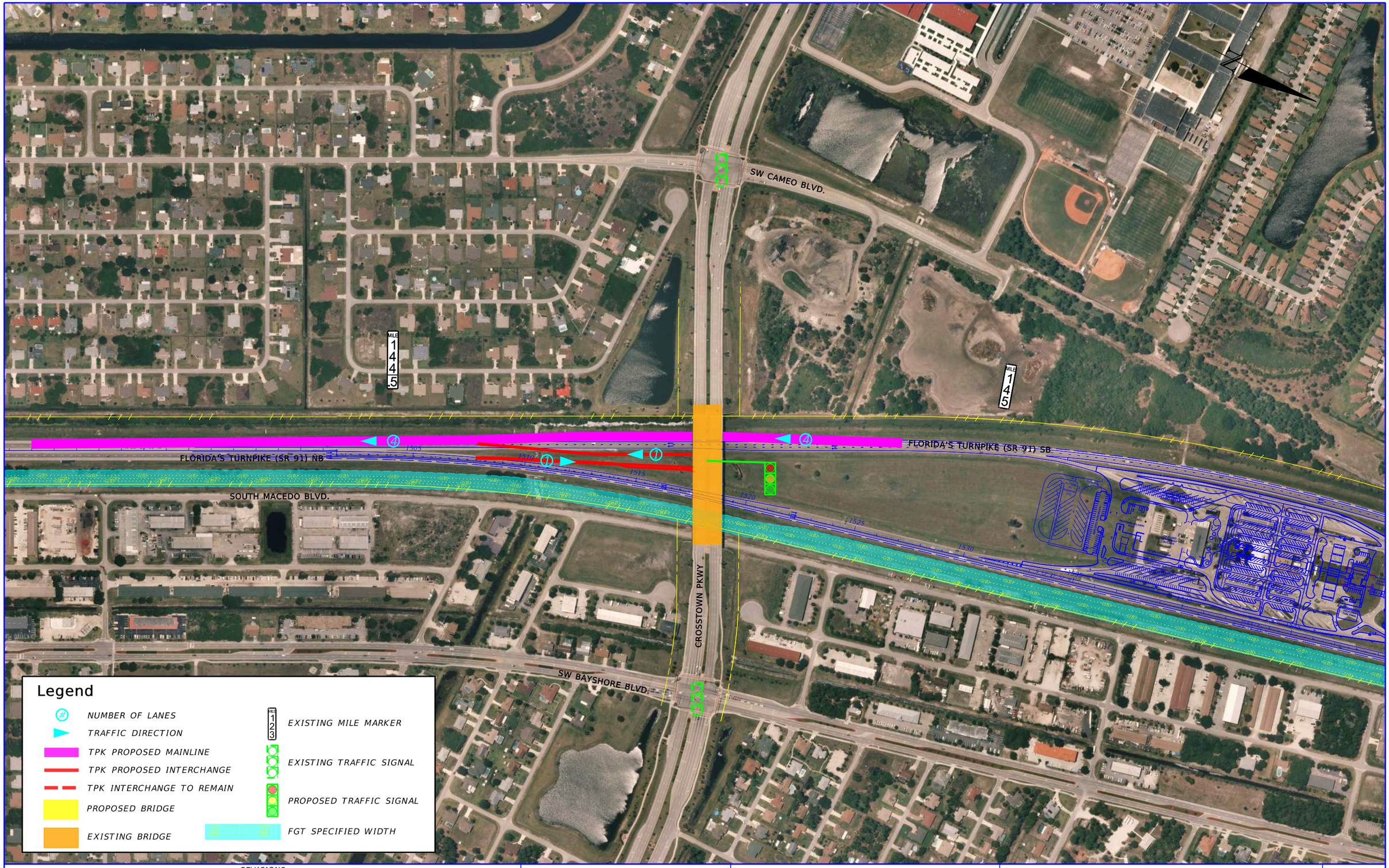

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CROSSTOWN PKWY
INTERCHANGE ALTERNATIVE 4

SHEET NO.

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DISCARDED

SW CAMEO BLVD.

MILE 144.5

MILE 145

FLORIDA'S TURNPIKE (SR 91) SB

SOUTH MACEDO BLVD.

SW BAYSHORE BLVD.

CROSSTOWN PKWY

N

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED MAINLINE
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CROSSTOWN PKWY
INTERCHANGE ALTERNATIVE 5

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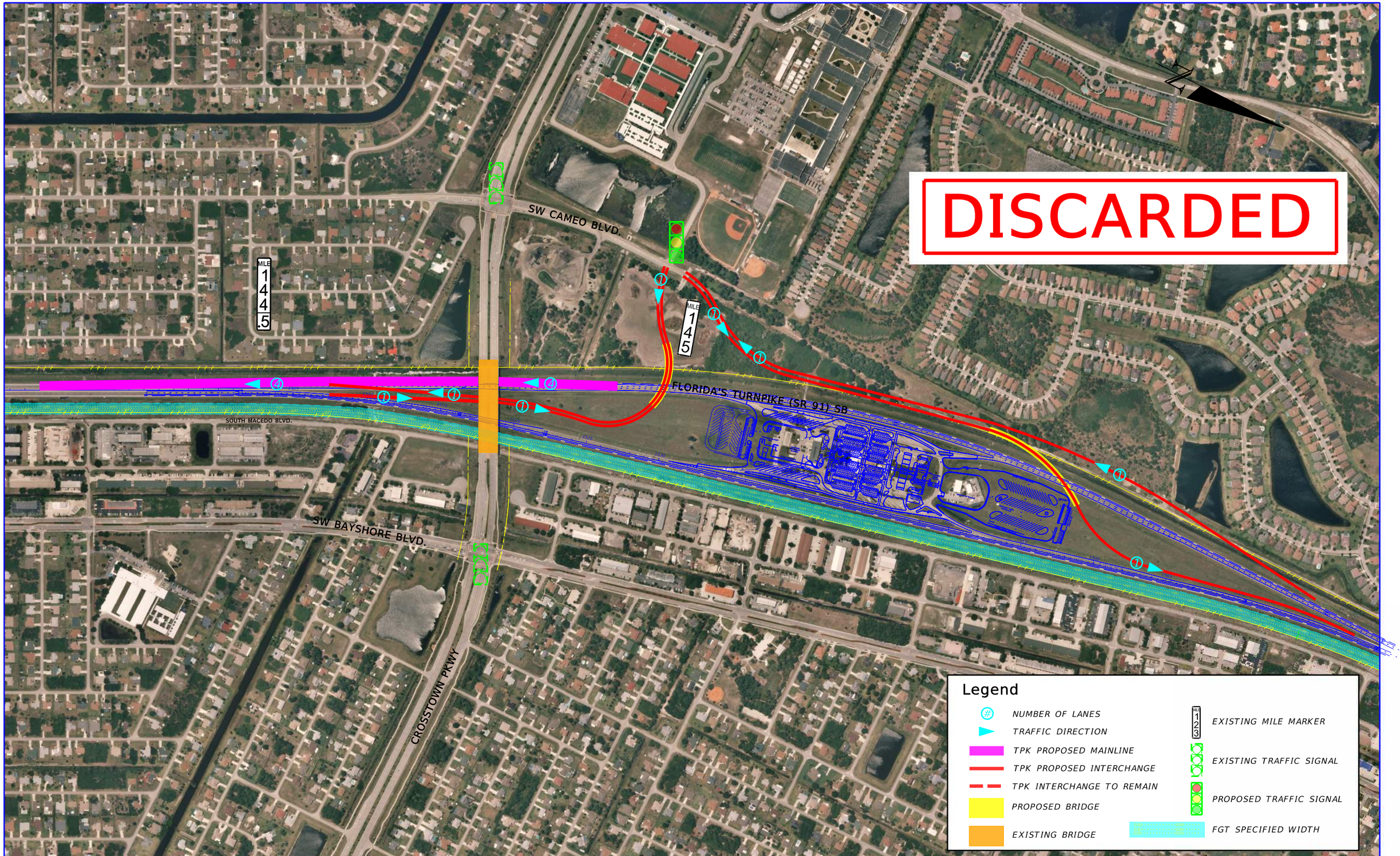

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CROSSTOWN PKWY INTERCHANGE ALTERNATIVE 6

SHEET NO.

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DISCARDED

SW CAMEO BLVD.

SOUTH MACEDO BLVD.

SW BAYSHORE BLVD.

CROSSTOWN PKWY

FLORIDA'S TURNPIKE (SR 91) SB

MILE 144.5

MILE 145

N

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED MAINLINE
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CROSSTOWN PKWY
INTERCHANGE ALTERNATIVE 7

SHEET NO.

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DISCARDED

SW CASHMERE BLVD.

ST. LUCIE BLVD.

SW BAYSHORE BLVD.

MILE 146

MILE 1465

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

1580 1585 1590 1595 1600 1605 1610 1615 1620 1625 1630

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

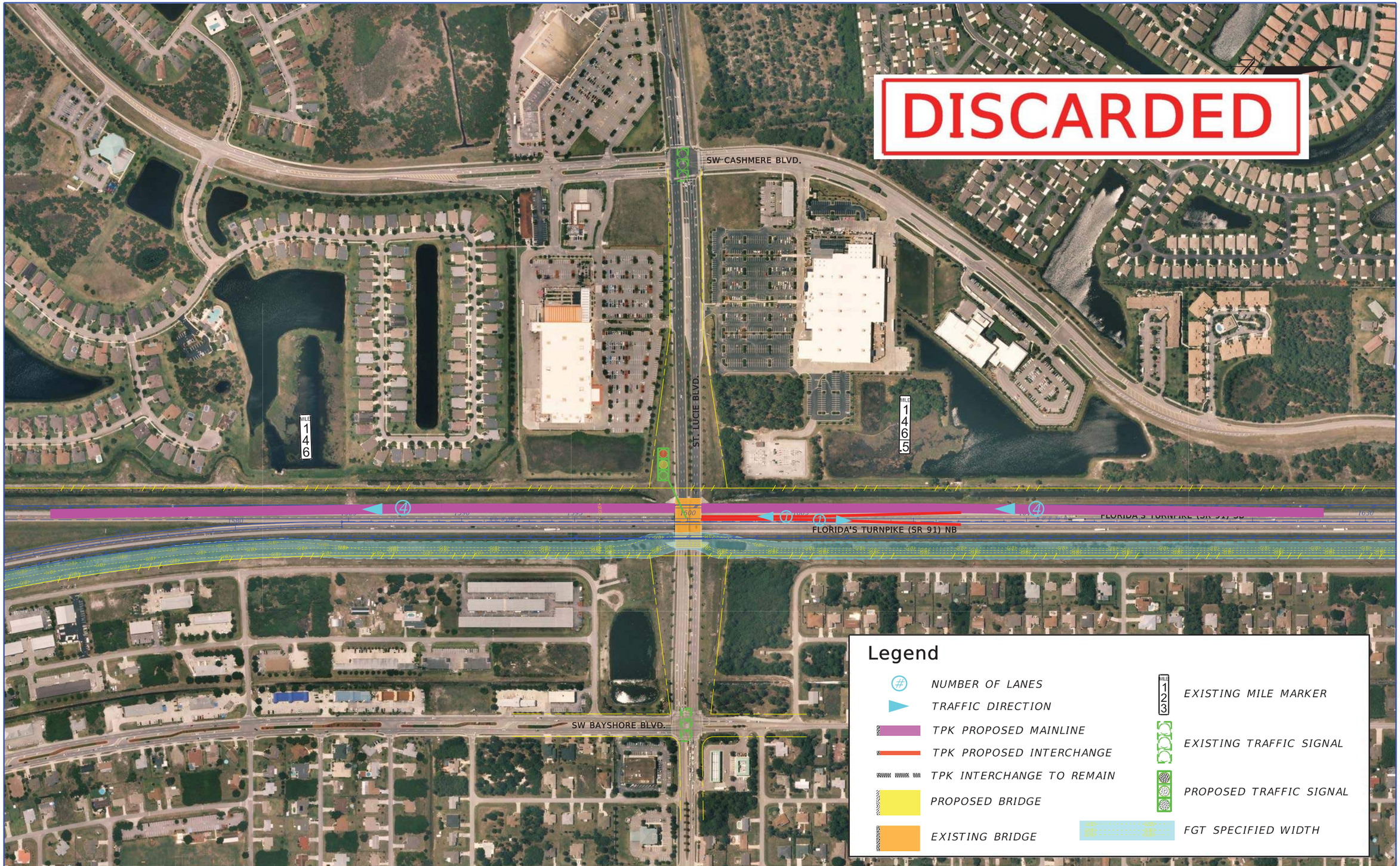
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

$USERS $DATES $TIMES $FILES

ST. LUCIE WEST BLVD.
INTERCHANGE ALTERNATIVE 1

SHEET NO.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

ST. LUCIE WEST BLVD.
INTERCHANGE ALTERNATIVE 2

SHEET NO.

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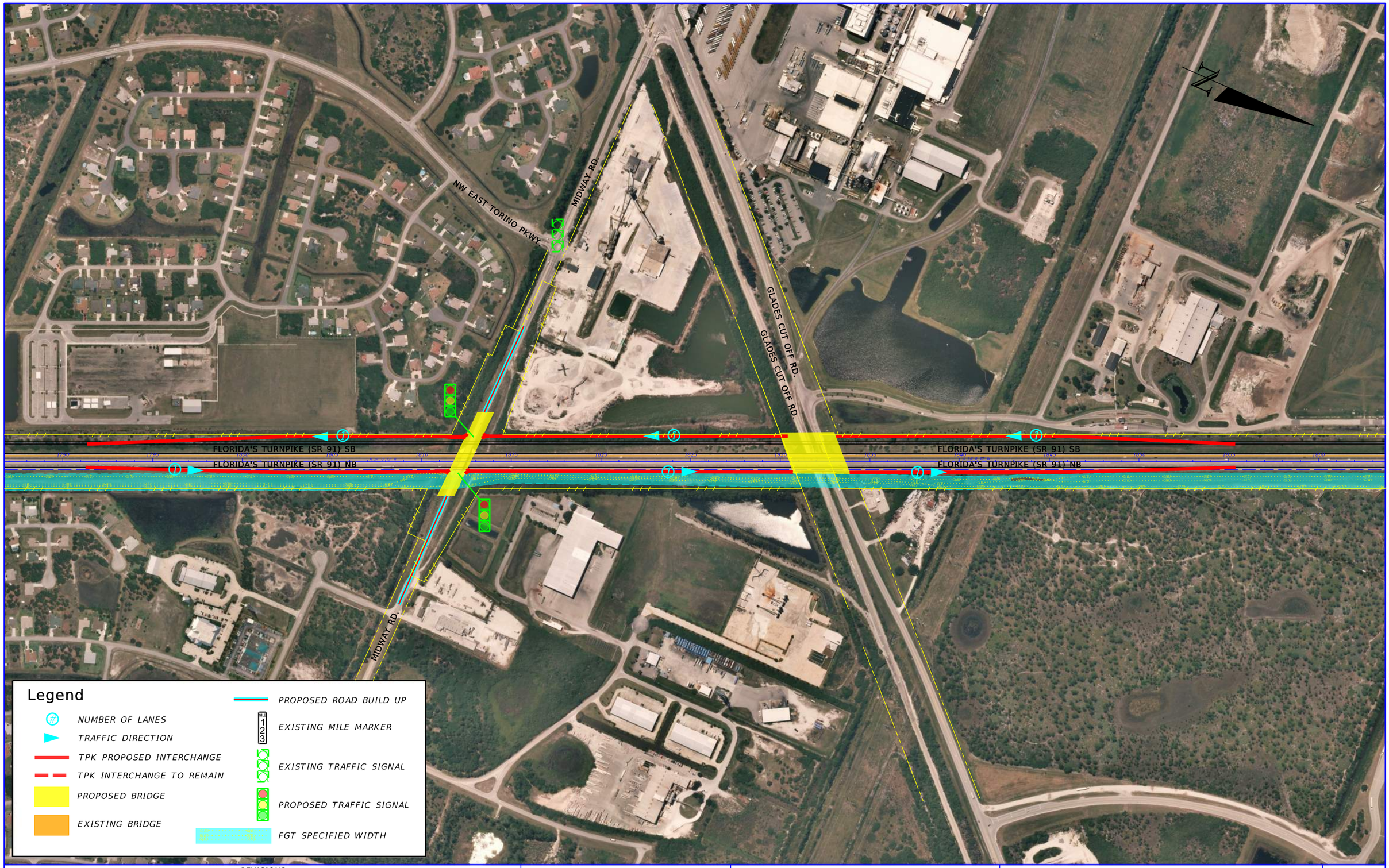

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

MIDWAY RD.
INTERCHANGE ALTERNATIVE 1

SHEET NO.

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DISCARDED

NW EAST TORINO PKWY.

MIDWAY RD.

GLADES CUT OFF RD.

GLADES CUT OFF RD.

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

MIDWAY RD.

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

MIDWAY RD.
INTERCHANGE ALTERNATIVE 2

SHEET NO.

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DISCARDED

NW EAST TORINO PKWY.

MIDWAY RD.

GLADES CUT OFF RD.

GLADES CUT OFF RD.

FLORIDA'S TURNPIKE (SR 91) SB

FLORIDA'S TURNPIKE (SR 91) NB

FLORIDA'S TURNPIKE (SR 91) NB

MIDWAY RD.

Legend

- NUMBER OF LANES
- TRAFFIC DIRECTION
- TPK PROPOSED MAINLINE
- TPK PROPOSED INTERCHANGE
- TPK INTERCHANGE TO REMAIN
- PROPOSED BRIDGE
- EXISTING BRIDGE
- PROPOSED ROAD BUILD UP
- EXISTING MILE MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- FGT SPECIFIED WIDTH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

MIDWAY RD.
INTERCHANGE ALTERNATIVE 3

SHEET NO.

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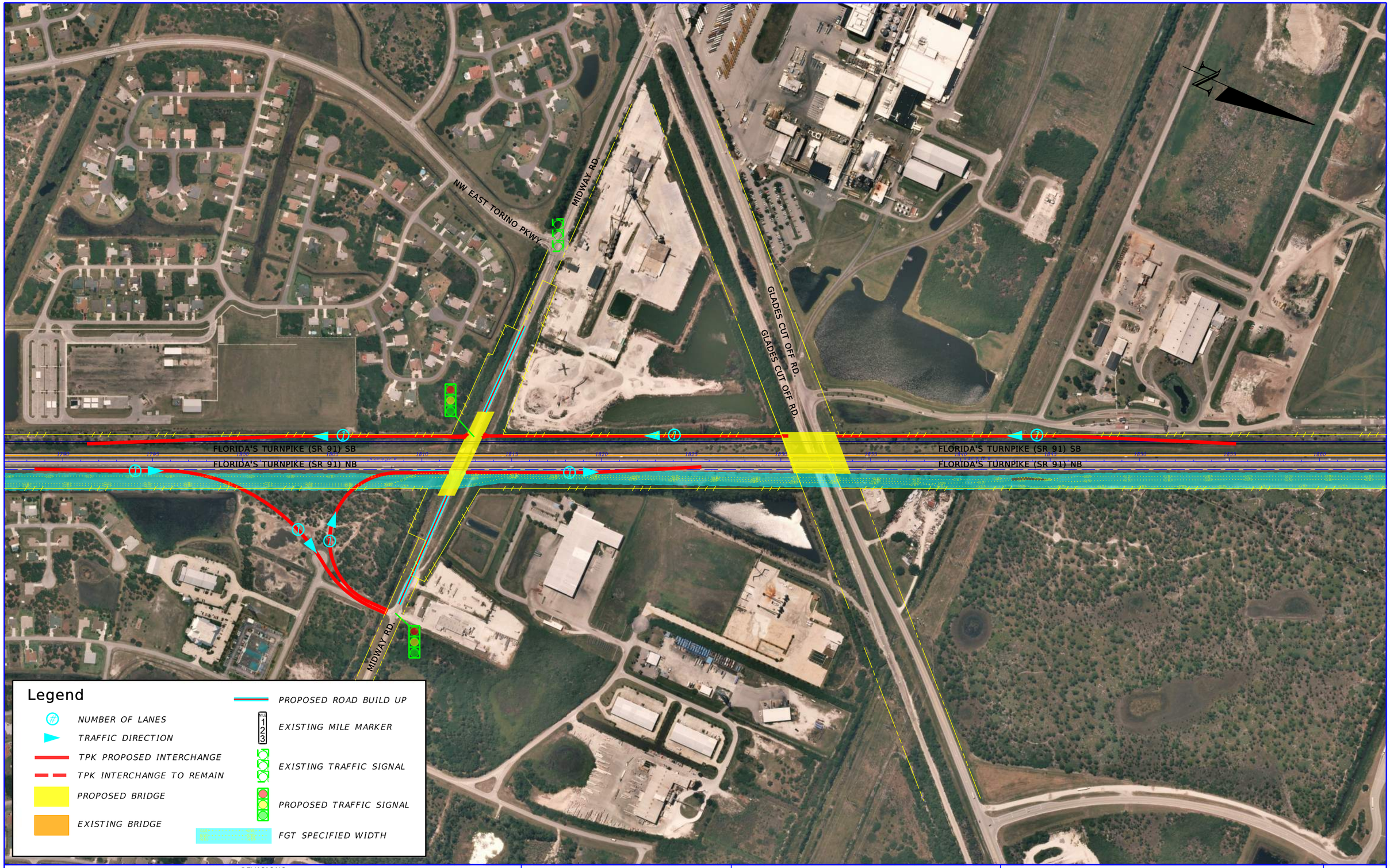

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

MIDWAY RD.
INTERCHANGE ALTERNATIVE 4

SHEET NO.

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Appendix B
Eliminated Interchange Alternatives Evaluation Matrix (Tiers 1 and 2)

ELIMINATED INTERCHANGE ALTERNATIVES EVALUATION MATRIX

FLORIDA'S TURNPIKE (SR 91) WIDENING PD&E STUDY

FROM NORTH OF SR 706 (INDIANTOWN ROAD) TO NORTH OF SR 70 (OKEECHOBEE ROAD)

FINANCIAL PROJECT NO. 423374-1-22-01

INTERCHANGE LOCATION	ALTERNATIVE	REASON FOR ELIMINATION
I-95 Direct Connection near Bridge Road (MP 125.5)	2 (P)	Eliminated from further consideration due to the substantial construction costs associated with the third-level bridge required for the NB SR 91 to NB I-95 connection.
	4 (P)	Eliminated from further consideration due to the substantial construction costs associated with the third-level bridge required for the NB SR 91 to NB I-95 connection, as well as a longer bridge on Bridge Road over SR 91 to accommodate the I-95 southbound off-ramp. This alternative also requires consecutive exits along southbound I-95 within a relatively short distance increasing traffic friction, which is undesirable.
SW Kanner Highway (MP 130.4)	1 through 5 (F)	• A total of four signalized intersections currently existing along SW Kanner Highway in less than 0.75 miles, including two existing signalized intersections at the interchange with I-95, as well as existing signalized intersections at SW Jack James Drive and SW Locks Road. With the additional signalization required for a new interchange with SR 91, the excessive signalization along SW Kanner Highway would not meet signalization spacing requirements and would complicate the traffic operations along SW Kanner Highway. • Design options were evaluated to eliminate adding signalized intersection along SW Kanner Highway, however, the impacts to the local traffic would have been too circuitous. • The larger amount of traffic that would be entering/exiting the less than 0.5 mile segment between the interchange at SR 91 and I-95 would negatively impact the operation of this critical segment. • The residential developments along the west side of SR 91 inhibit the consideration of interchange alternatives to the west. • The addition of a new interchange at this location is less needed with the addition of a new I-95 Direct Connection near Bridge Road interchange to the south of this location, which provides access to/from SR 91, for traffic that would have likely used this interchange. • The interchange alternativesconsidered at this location create major impacts to the existing Florida Gas Transmission (FGT) easement along the east side of SR 91, resulting in substantial relocation costs.

ELIMINATED INTERCHANGE ALTERNATIVES EVALUATION MATRIX

FLORIDA'S TURNPIKE (SR 91) WIDENING PD&E STUDY

FROM NORTH OF SR 706 (INDIANTOWN ROAD) TO NORTH OF SR 70 (OKEECHOBEE ROAD)

FINANCIAL PROJECT NO. 423374-1-22-01

INTERCHANGE LOCATION	ALTERNATIVE	REASON FOR ELIMINATION
Crosstown Parkway (MP 144.7)	1 (P)	• Increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91. • The proposed ramp connections to the existing Crosstown Parkway bridge over SR 91 would require complex, atypical structural modifications to the superstructure of the existing bridge. • The replacement of this bridge is not recommended due to impacts that the required temporary traffic control would have on the surrounding community that utilizes the Crosstown Parkway daily (note that this bridge was recently upgraded). • This alternative requires additional signalized intersections along the Crosstown Parkway, creating four signalized intersections within less than 0.5 mile total distance. • Although access is provided to Crosstown Parkway from southbound SR 91, no return movement is provided from the Crosstown Parkway to northbound SR 91. • Terminal ramps for southbound SR 91 are being placed at two different locations, which is undesirable. • This alternative creates major impacts to the existing FGT easement along the east side of SR 91, resulting in substantial relocation costs.
	2 (P)	• Increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91. • The proposed northbound SR 91 off-ramp connection to the existing Crosstown Parkway bridge over SR 91 would require complex, atypical structural modifications to the superstructure of the existing bridge. • The replacement of this bridge is not recommended due to impacts that the required temporary traffic control would have on the surrounding community that utilizes the Crosstown Parkway daily (note that this bridge was recently upgraded). • This alternative requires an additional signalized intersection along the Crosstown Parkway, creating three signalized intersections within less than 0.5 mile total distance. • Although access is provided to Crosstown Parkway from southbound SR 91, no return movement is provided from the Crosstown Parkway to northbound SR 91. • This alternative creates major impacts to the existing FGT easement along the east side of SR 91, resulting in substantial relocation costs.
	5 (F)	• As evidenced by Alternatives 1 and 2 above, any alignment shift to the east would create major impacts to the existing FGT easement, resulting in substantial relocation costs. Therefore, improvements for this alternative all occur west of the right side of the northbound outside shoulder to avoid FGT impacts. However, this in turn causes increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91. • The proposed ramp connections to the existing Crosstown Parkway bridge over SR 91 would require complex, atypical structural modifications to the superstructure of the existing bridge. • The replacement of this bridge is not recommended due to impacts that the required temporary traffic control would have on the surrounding community that utilizes the Crosstown Parkway daily (note that this bridge was recently upgraded). • This alternative requires an additional signalized intersection along the Crosstown Parkway, creating three signalized intersections within less than 0.5 mile total distance. • The two proposed terminals of the four ramp connections are being placed at two different locations, which is undesirable. • The proposed ramp connection from SW Cameo Boulevard to northbound SR 91 directly conflicts with the recently constructed truck parking facility at the north end of the Port St. Lucie – Fort Pierce Service Plaza.

ELIMINATED INTERCHANGE ALTERNATIVES EVALUATION MATRIX

FLORIDA'S TURNPIKE (SR 91) WIDENING PD&E STUDY

FROM NORTH OF SR 706 (INDIANTOWN ROAD) TO NORTH OF SR 70 (OKEECHOBEE ROAD)

FINANCIAL PROJECT NO. 423374-1-22-01

INTERCHANGE LOCATION	ALTERNATIVE	REASON FOR ELIMINATION
Crosstown Parkway (MP 144.7)	6 (F)	• As evidenced by Alternatives 1 and 2 above, any alignment shift to the east would create major impacts to the existing FGT easement, resulting in substantial relocation costs. Therefore, improvements for this alternative all occur west of the right side of the northbound outside shoulder to avoid FGT impacts. However, this in turn causes increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91. • The proposed ramp connection from SW Cameo Boulevard to northbound SR 91 partially conflicts with the recently constructed truck parking facility at the north end of the Port St. Lucie – Fort Pierce Service Plaza. • The proposed signalized ramp connections along SW Cameo Boulevard will introduce significant additional traffic and impact the school bus route/access to St. Lucie West Centennial High School. • The proposed ramp connections along SW Cameo Boulevard will impact the planned skate park proposed between SW Cameo Boulevard and southbound SR 91. • This alternative requires a new signalized intersection along SW Cameo Boulevard, located 0.25 mile north of the existing signalized intersection at Crosstown Parkway.
	7 (F)	• As evidenced by Alternatives 1 and 2 above, any alignment shift to the east would create major impacts to the existing FGT easement, resulting in substantial relocation costs. Therefore, improvements for this alternative all occur west of the right side of the northbound outside shoulder to avoid FGT impacts. However, this in turn causes increased noise and visual impacts to the Lake Forest Pointe subdivision to the west of southbound SR 91. • The proposed SR 91 northbound on-ramp connection from SW Cameo Boulevard utilizes a viaduct that significantly impacts the entire operation of the Port St. Lucie – Fort Pierce Service Plaza. • The proposed signalized ramp connections along SW Cameo Boulevard will introduce significant additional traffic and impact the school bus route/access to St. Lucie West Centennial High School. • The proposed ramp connections along SW Cameo Boulevard will impact the planned skate park proposed between SW Cameo Boulevard and southbound SR 91. • This alternative requires a new signalized intersection along SW Cameo Boulevard, located 0.25 mile north of the existing signalized intersection at Crosstown Parkway.
St. Lucie West Boulevard (MP 146.3)	1 and 2 (P)	• Only one partial interchange alternative being considered at this location create major impacts to the existing FGT easement along the east side of SR 91, resulting in substantial relocation costs. • Both partial interchange alternatives required proposed signals that would impact the traffic operation for the ramp connections and St. Lucie West Boulevard due to their proximity to each other. • The potential addition of new interchanges on SR 91 to the north at W Midway Road and to the south at Crosstown Parkway create less traffic demand for an interchange connection to SR 91 at St. Lucie West Boulevard.
W Midway Road (MP 150.4)	2 (F)	Eliminated from further consideration due to the proposed partial cloverleaf in the northwest quadrant creating a significant economic impact on the community by directly affecting/eliminating the Cemex plant.
	3 (F)	• The access to W Midway Road utilizing ramp connections generated from the median of SR 91 has the potential to impact the traffic operation along SR 91. • Impacts of the ramp connections on the bridge, as well as the requirement of a signal on the bridge.

P = Partial Interchange

F = Full Interchange

Appendix C
Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation

Traffic and Revenue Consultant
Florida's Turnpike Enterprise

Florida Department
of Transportation

MEMORANDUM

Date: January 10, 2020

To: Brian Ribaric, Senior Project Manager

From: Kim Samson, Traffic Engineering Project Manager

Copies: Andrew Velasquez, Emam B. Emam, Enock Mtoi

Subject: Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation

FPN(s): 423374-1

Counties: Palm Beach, Martin, St. Lucie

Overview

The Turnpike is in the process of preparing a Project Development & Environment (PD&E) study [FPN 423374-1] for widening Florida's Turnpike to address future demand resulting from growth occurring in the region. The PD&E study is evaluating widening from four to eight lanes from north of Palm Beach County to the St. Lucie County line (north of Ft. Pierce/SR 70 interchange). In addition to the mainline widening evaluation, there are interchange improvements being explored at Martin's Downs Boulevard in Stuart, Becker Road, Port St. Lucie Boulevard, SR 70 in Fort Pierce and potential new interchanges at I-95/Bridge Road (Direct Connect Ramps), Crosstown Parkway and Midway Road. Several alternatives were evaluated in Tier 1, this memo provides information for the preferred alternatives advancing into Tier 2. For all analysis to date, the most conservative future forecast scenarios (with evaluation of new interchanges) were used to compare the alternatives at each location. The final detailed analysis will be documented in a Project Traffic Analysis Report (PTAR) and/or System Interchange Justification Report(SIJR). The alternatives at these interchanges are described below:

I-95 Direct Connect (Mile Post 124)

The purpose of this proposed interchange is to provide a partial system to system direct access between the Turnpike and Interstate 95 (I-95). Two direct connect ramps are evaluated: Turnpike northbound to I-95 northbound and I-95 southbound to Turnpike southbound. The access is planned to be provided within the I-95/Bridge Road Interchange footprint at milepost 124. The following two alternatives are evaluated for this potential system to system access:

- **Alternative 1**: In this alternative traffic from south of Turnpike connects directly to the existing Bridge Road northbound on ramp before merging into mainline I-95. The I-95 southbound off ramp to is split to provide direct access to southbound Turnpike and an exit to Bridge Road.
- **Alternative 3**: This alternative is similar to Alternative 1, except the I-95 direct access to southbound Turnpike forms a curve looping west before merging into the mainline Turnpike.

The lane geometry and directional design traffic volumes (DDHVs) for these alternatives are included in **Attachment A**. **Tables 1** and **2** show Highway Capacity Software (HCS) analysis summary for 2045 No-Build and Build Alternatives.

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Tel: 407-532-3999
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Table 1
2045 No-Build HCS Freeway Analysis Results

Segment	Segment Type	Lanes	Volume (vph)		LOS	
			AM	PM	AM	PM
Turnpike - Southbound						
North/South of Bridge Road Overpass	Basic	4	5,070	3,490	C	B
Turnpike - Northbound						
North/South of Bridge Road Overpass	Basic	4	3,490	5,070	B	C
I-95 - Southbound						
Upstream of I-95 off-ramp to Bridge Road	Basic	3	6,180	5,500	F	D
I-95 off-ramp to Bridge Road Diverge Influence Area	Diverge	3	6,180	5,500	D	D
Between I-95 off-ramp and on-ramp from Bridge Road	Basic	3	5,450	5,130	F*	D
I-95 on-ramp from Bridge Road Merge Influence Area	Merge	3	6,300	5,550	F	D
Downstream of I-95 on-ramp from Bridge Road Merge Influence Area	Basic	3	6,300	5,550	E	D
I-95 - Northbound						
Upstream of I-95 off-ramp to Bridge Road	Basic	3	4,670	7,040	D	F
I-95 off-ramp to Bridge Road Diverge Influence Area	Diverge	3	4,670	7,040	C	F
Between I-95 off-ramp and on-ramp from Bridge Road	Basic	3	4,260	6,220	C	F*
I-95 on-ramp from Bridge Road Merge Influence Area	Merge	3	4,600	6,920	C	F
Downstream of I-95 on-ramp from Bridge Road Merge Influence Area	Basic	3	4,600	6,920	C	F

Notes: 00 indicates constrained operations and 00 indicates failing operation

*Failing due to downstream bottleneck/congestion

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Table 2
Turnpike/I-95 Direct Connect 2045 HCS Freeway Analysis Results

Segment	Segment Type	Lanes	Volume (vph)		LOS	
			AM	PM	AM	PM
Turnpike - Southbound						
Upstream of I-95 SB Direct Connect	Basic	4	4,560	3,490	B	B
I-95 SB Direct Connect Merge Influence Area	Merge	5	6,000	4,300	C	B
Downstream of I-95 SB Direct Connect Merge Influence Area	Basic	4	6,000	4,300	C	B
Turnpike - Northbound						
Upstream of I-95 NB Direct Connect	Basic	4	4,000	6,000	B	C
I-95 NB Direct Connect Diverge Influence Area	Diverge	5	4,000	6,000	C	C
Downstream of I-95 NB Direct Connect Diverge Influence Area	Basic	4	3,190	4,560	B	C
I-95 - Southbound						
Upstream of I-95 off-ramp to Bridge Road	Basic	3	6,180	5,500	**F**	D
I-95 off-ramp to Bridge Road Diverge Influence Area	Diverge	4	6,180	5,500	D	C
Between I-95 off-ramp and on-ramp from Bridge Road	Basic	3	4,010	4,320	C	C
I-95 on-ramp from Bridge Road Merge Influence Area	Merge	3	4,860	5,170	D	C
Downstream of I-95 on-ramp from Bridge Road Merge Influence Area	Basic	3	4,860	5,170	D	C
I-95 - Northbound						
Upstream of I-95 off-ramp to Bridge Road	Basic	3	3,860	5,600	C	D
I-95 off-ramp to Bridge Road Diverge Influence Area	Diverge	3	3,860	5,600	C	D
Between I-95 off-ramp and on-ramp from Bridge Road	Basic	3	3,450	4,780	B	C
I-95 on-ramp from Bridge Road Merge Influence Area	Merge	4	4,600	6,920	B	**F**
Downstream of I-95 on-ramp from Bridge Road Merge Influence Area	Basic	3	4,600	6,920	C	**F**

Notes: 00 indicates constrained operations and **00** indicates failing operations

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To the north of Bridge Road, the LOS are the same for both No-Build and Build scenarios. South of Bridge Road, LOS improvement of LOS F to LOS D or better on I-95 are anticipated. With additional capacity on Turnpike, the LOS is D or better.

Stuart/Martin Highway

S.R. 714 is a four-lane divided minor arterial with a posted speed limit of 45 mph. The Turnpike interchange has a trumpet configuration with ramps that connect to S.R. 714 at a single intersection. The projected traffic growth shows that the existing interchange configuration is unsuitable to process future demand efficiently and will cause unsafe operations for the mainline Turnpike and arterial streets. To accommodate future traffic growth, the following alternatives were proposed and evaluated:

- **Modified Alternative 7**: This alternative includes a displaced southbound left turn on Martin Downs Boulevard and a new ramp terminal at SW Armellini Avenue for the Turnpike southbound and northbound exiting traffic heading westbound on Martin's Highway.
- **Modified Alternative 7a**: Similar to Alternative 7, without the displaced southbound left turn on Martin Downs Boulevard.
- **Modified Alternative 7b**: In this alternative, a new ramp terminal is introduced at SW Leighton Farm Avenue for the Turnpike southbound off traffic heading westbound on Martin's Highway while the left turns from northbound off ramp are served at the existing intersection.
- **Modified Alternative 7c**: In this alternative, a new ramp terminal is introduced at SW Leighton Farm Avenue for the Turnpike southbound off traffic heading westbound on Martin's Highway, while the left turns from northbound off ramp are directed to make a U-turn at SW High Meadows Avenue intersection. The southbound left turns from Martin Downs Boulevard are directed to make a U-turn at SW Leighton Farm Avenue intersection.
- **Alternative 7s**: This is a hybrid of **Modified Alternative 7b** and an additional new ramp terminal introduced at SW High Meadow Avenue for the to/from south of Turnpike traffic.

The lane geometry and DDHVs are included in **Attachment B** and analysis results are summarized in **Tables 3**.

The results in **Table 3** show that the displaced left on Martin Downs Boulevard benefits in terms of reduction in delay will be marginal compared to the ROW and business access impacts. With the removal of the displaced left turn, comparable performance results still will be achieved. **Alternatives 7b** and **7c** evaluated replacing the braided ramp that serving low volume with allowing U-turn at the downstream intersections. Again, marginal benefits are obtained compared to the construction cost. Therefore, it is recommended that **Modified Alternatives 7b** and **7s** advance for further consideration.

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Table 3
2045 Martin Highway Synchro Intersection Analysis Results

Intersection	No-Build		Modified Alternative 7		Modified Alternative 7a		Modified Alternative 7b		Modified Alternative 7c		Alternative 7s	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
SW Martin Hwy & SW 42nd Ave	E/76	E/56	E/76	E/56	E/76	E/56	E/76	E/56	E/76	E/56	E/76	E/56
SW Martin Hwy & Leighton Farm Ave	D/42	E/59	C/27	E/65	C/27	E/65	D/54	D/46	E/70	D/43	D/54	D/46
SW Martin Hwy & Off Ramp to WB SW Martin Hwy/SW Amellini Ave	--	--	A/7	B/13	B/12	C/33	--	--	--	--	--	--
SW Martin Hwy & Off Ramp to WB SW Martin Hwy/NB On Ramp	--	--	--	--	--	--	--	--	--	--	--	--
SW Martin Downs Blvd at DLT	--	--	A/5	A/8	--	--	--	--	--	--	--	--
SW Martin Hwy & TPK Ramps/SW Martin Downs Blvd	**F/139**	**F/246**	C/29	D/55	D/50	E/61	D/51	E/78	D/37	D/41	D/50	E/64
SW Martin Hwy & SW High Meadows Ave*	**F/248**	**F/193**	**F/168**	**F/184**	**F/168**	**F/184**	**F/168**	**F/184**	**F/226**	**F/199**	E/73	E/57
SW High Meadows Ave & to/from South Ramps	--	--	--	--	--	--	--	--	--	--	C/26	C/29

* North-south approaches at SW Martin Highway/SW High Meadows Avenue intersection matches existing geometry

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Becker Road

Becker Road is a four-lane divided minor arterial that forms a partial cloverleaf interchange with the Turnpike. Although this interchange is currently operating acceptably, two alternatives are explored to keep up with future traffic growth and maintain safe operations. The following alternatives were proposed and evaluated:

- **Alternative 1**: This alternative maintains the existing interchange configuration while implementing Transportation Systems Management and Operations (TSM&O) solutions by adding left turn lane for both the southbound and northbound off ramps, and adding an eastbound left turn lane at the northbound ramp terminal. In this alternative, the westbound left turn lane to southbound on ramp is extended to the northbound ramp terminal to provide continuity.
- **Alternative 3**: In this alternative, the lane geometry at the northbound ramp terminal is maintained as in Alternative 1 with a new westbound right turn into southbound loop ramp connecting to the existing eastbound to southbound on ramp before merging into the mainline. In this alternative, the westbound right turn lane to southbound on ramp is extended to the northbound ramp terminal to provide continuity.

Attachment C shows the lane geometry and DDHVs and **Table 4** provides summarized analysis results.

Table 4
2045 Becker Road Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 1		Alternative 3	
	AM	PM	AM	PM	AM	PM
Becker Road & TPK SB Ramps	D/41	C/25	D/46	C/30	C/31	C/24
Becker Road & TPK NB Ramps	E/71	E/65	C/26	C/34	C/26	D/36

The results in **Table 4** show that **Alternative 1**, the TSM&O solution would be sufficient to keep the interchange ramp terminals at acceptable operational conditions.

Port St. Lucie Boulevard

Currently, the Turnpike interchange at Port St. Lucie Boulevard has a trumpet configuration with ramps that connect to Port St. Lucie Boulevard at a single intersection. In addition, there is an unsignalized intersection of SE Bayshore Boulevard and Turnpike ramp access road located approximately 500 feet south of the Port St. Lucie Boulevard intersection. The interchange is currently experiencing operational failure where traffic congestion has been observed on the westbound left-turn lanes during the AM peak period and on the northbound approach during PM peak period. The exit ramps traffic queues extended past the toll plazas causing periodic queue backups on the Turnpike Mainline. To alleviate the existing deviancies and accommodate future traffic growth, the following alternatives were proposed and evaluated:

- **Alternative 1**: The alternative proposes two new ramp terminal intersections at Port St. Lucie Boulevard for the Turnpike northbound off ramp and the another one at SW Bayshore Boulevard for Turnpike ramps to and from the north. A loop ramp serves the westbound Port St. Lucie Boulevard to southbound Turnpike movement. The northbound approach at the existing Port St. Lucie Boulevard intersection serves SE Bayshore Boulevard traffic only.

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- **Alternative 2**: Similar to Alternative 1, Two new ramp terminal intersections are created: one at Port St. Lucie Boulevard for the northbound off-ramp right turn movement and southbound on ramp to the Turnpike, and the other at SW Bayshore Boulevard for Turnpike ramps to and from the north and northbound off-ramp traffic to SW Bayshore Boulevard. A loop ramp serves the northbound off-ramp to westbound Port St. Lucie Boulevard movement. The northbound approach at the existing Port St. Lucie Boulevard intersection serves SE Bayshore Boulevard traffic only.

Attachment D shows the lane geometry and DDHVs for these alternatives. Summary analysis results are provided in **Table 5**.

Table 5
2045 Port St. Lucie Boulevard Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 1		Alternative 2	
	AM	PM	AM	PM	AM	PM
Port St. Lucie Boulevard & SW Cameo Boulevard	**F/105**	**F/103**	E/62	E/64	E/73	E/57
Port St. Lucie Boulevard & Turnpike Ramps (To/From South)	--	--	B/15	C/29	--	--
Port St. Lucie Boulevard & SE/SW Bayshore Boulevard	**F/158**	**F/156**	D/48	E/73	D/42	E/74
SW Bayshore Boulevard & Turnpike Ramps (To/From North)	--	--	D/39	C/22	D/40	C/22

Crosstown Parkway

Crosstown Parkway is a six-lane divided arterial running east-west parallel to Port St. Lucie Boulevard. The facility is about a mile north of Port St. Lucie Boulevard. The Crosstown Parkway Extension Project was just completed and opened, providing a new bridge crossing over the North Fork of the St. Lucie River in the City of Port St. Lucie, connecting Crosstown Parkway from Manth Lane to US 1 Highway at Village Green Drive. Currently, there is no Turnpike interchange at this location. The ongoing PD&E is evaluating two interchange alternatives at Crosstown Parkway:

- **Alternative 3**: The alternative proposes a partial interchange providing access to/from south Turnpike. The ramp lanes are implemented from northbound and southbound inside lanes, passing under the Crosstown Parkway overpass bridge and connects to the northern leg of SE Cameo Boulevard.

- **Alternative 4**: This alternative also proposes a partial interchange providing access to/from south Turnpike. Similar to Alternative 3, the ramp lanes are implemented from northbound and southbound inside lanes and creates a T-intersection with the Crosstown Parkway overpass bridge.

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The lane geometry and DDHVs for these alternatives are included in **Attachment E** and summary analysis results are shown in **Table 6**.

Table 6
2045 Crosstown Parkway Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 3		Alternative 4	
	AM	PM	AM	PM	AM	PM
SW Cameo Blvd & Crosstown Pkwy	D/42	D/43	E/59	D/47	D/42	D/42
SW Cameo Blvd & Turnpike Ramps	--	--	D/46	E/65	--	--
Crosstown Pkwy & Turnpike Ramps (To/From South)	--	--	--	--	D/40	D/47
SW Bayshore Blvd & Crosstown Pkwy	E/68	E/73	E/77	E/75	E/77	**F/82**

Midway Road

The need for additional Turnpike access at Midway Road was evaluated in two previous Florida Department of Transportation (FDOT) efforts: the Turnpike in 2005 and District 4 in 2016. The Turnpike's Midway Road Interchange Concept Study – December 2005 planning level study addressed growth of traffic on the Turnpike in St. Lucie County and a future planned network scenario, which now exists. It determined no fatal flaws existed to providing the interchange in the future; however, no demonstrated need was determined and priority was low to medium. FDOT District 4 also included a feasibility study, re-evaluating an interchange at Midway Road in the 2016 PD&E study completed for widening Midway Road from Glades Cut-Off Road to Selvitz Road. Two alternatives (Full Diamond and Partial Cloverleaf) being carried forward and evaluated. The evaluation also considered with and without an extension of Jenkins Road between Midway Road and SR 70. The District's evaluation study concluded that the interchange is not anticipated to have a significant impact on the adjacent interchanges to the south and north to justify need.

In this ongoing PD&E, multiple single-line alternatives were developed for the proposed interchange. Two alternatives are being short listed based on screening/high level analysis and are evaluated for the proposed interchange at Midway Road:

- **Alternative 1**: A tight diamond interchange (TUDI) with northbound ramps on the east side and southbound ramps on the west of Turnpike.

- **Alternative 4**: A tight diamond on the west of Turnpike as in Alternative 1, and a partial cloverleaf on the east of Turnpike.

The lane geometry and DDHVs for these alternatives are included in **Attachment F** and Synchro analysis results are provided in **Table 7**.

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Table 7
2045 Midway Road Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 1		Alternative 4	
	AM	PM	AM	PM	AM	PM
Midway Rd & Glades Cut Off Rd	D/54	D/38	D/47	D/40	D/47	D/40
Midway Rd & NW E Torino Pkwy	**F/140**	**F/99**	**F/89**	E/76	**F/89**	E/76
Midway Rd & SB Ramps	--	--	C/21	C/24	D/38	C/25
Midway Rd & NB Ramps	--	--	D/50	D/46	C/27	D/52

Fort Pierce/SR 70

SR 70 is a divided principal arterial with six lanes to the east of the Turnpike ramps/South Kings Highway intersection and four lanes to the west. The existing Turnpike interchange has a trumpet configuration with ramps that connect to SR 70 at a single intersection. The Turnpike and I-95 offer parallel and often competing services through St. Lucie County. Both have interchanges on SR 70 about 1 mile apart, creating a convenient place to switch from one facility to the other. The next I-95 interchange south of SR 70 is at SR 712 (Midway Road), approximately 1.6 miles to the west of where that road crosses the Turnpike.

Currently the interchange ramp terminal is operating at acceptable level of service but accommodate projected traffic growth, the following alternatives were proposed and evaluated:

- **Alternative 1**: This alternative maintains the existing interchange configuration while implementing TSM&O solutions by adding right turn lane for both the southbound and northbound approaches the ramp terminal, adding an eastbound left turn lane and an extra westbound through lane through the overpass bridge. In this alternative, two more southbound lanes and one extra northbound lane are added.
- **Alternative 4**: In this alternative, northbound movements are maintained as a partial cloverleaf at the existing ramp terminal and a new ramp terminal with partial cloverleaf configuration as well is introduced on the west of Turnpike to serve southbound movements.

Attachment G shows the alternatives lane geometry and DDHVs and Synchro intersection results are summarized in **Table 8**.

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Table 8
2045 SR 70/Okeechobee Road Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 1		Alternative 4	
	AM	PM	AM	PM	AM	PM
SR 70 & TPK Ramps/S Kings Hwy	F/218	F/220	D/53	D/51	D/48	D/49
SR 70 & TPK Ramps (New SB Ramps)	--	--	--	--	D/40	C/32
SR 70 & Crossroads Pkwy	D/39	D/45	D/37	D/40	D/37	D/40

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Attachments

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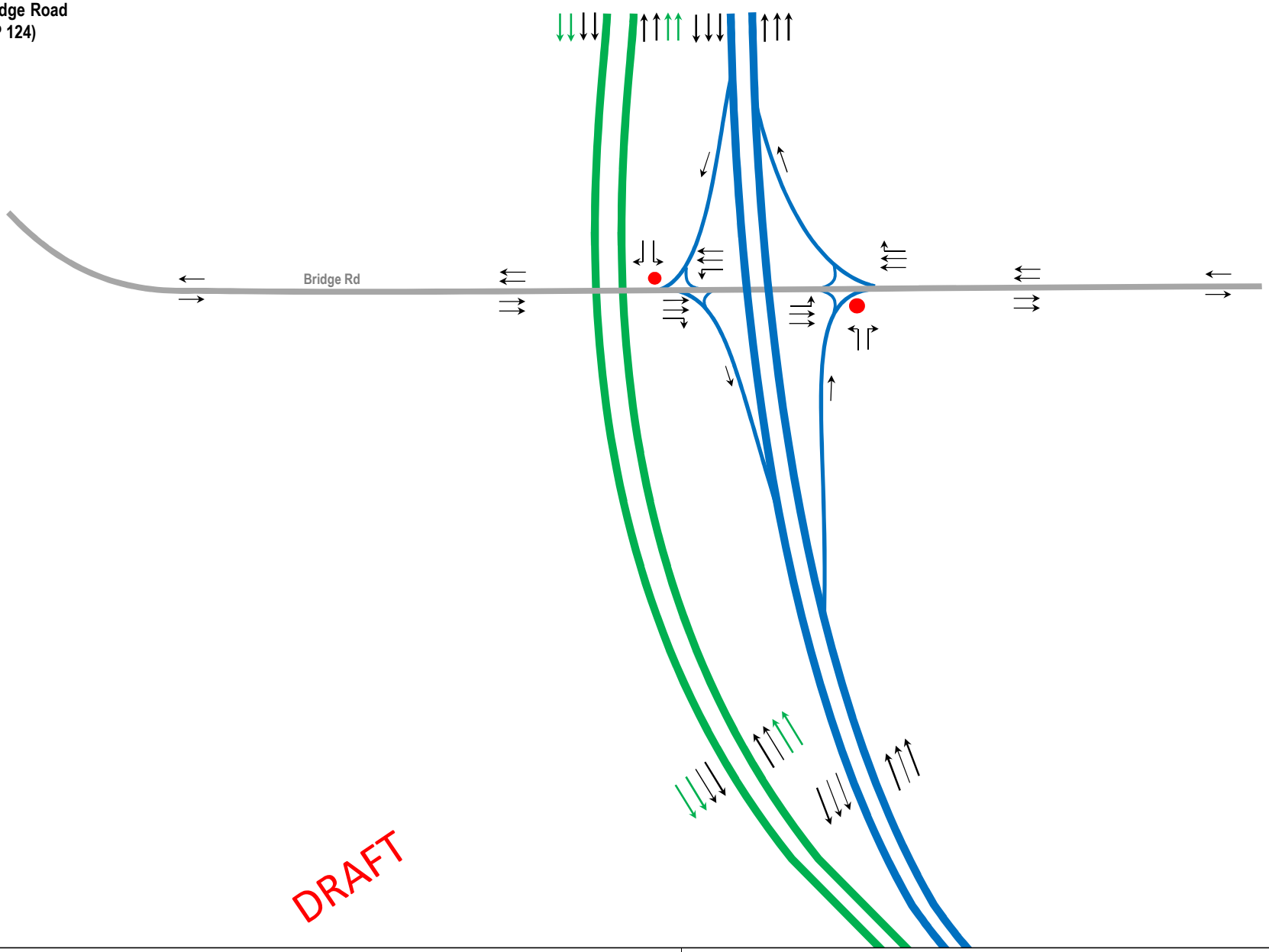
Attachment A

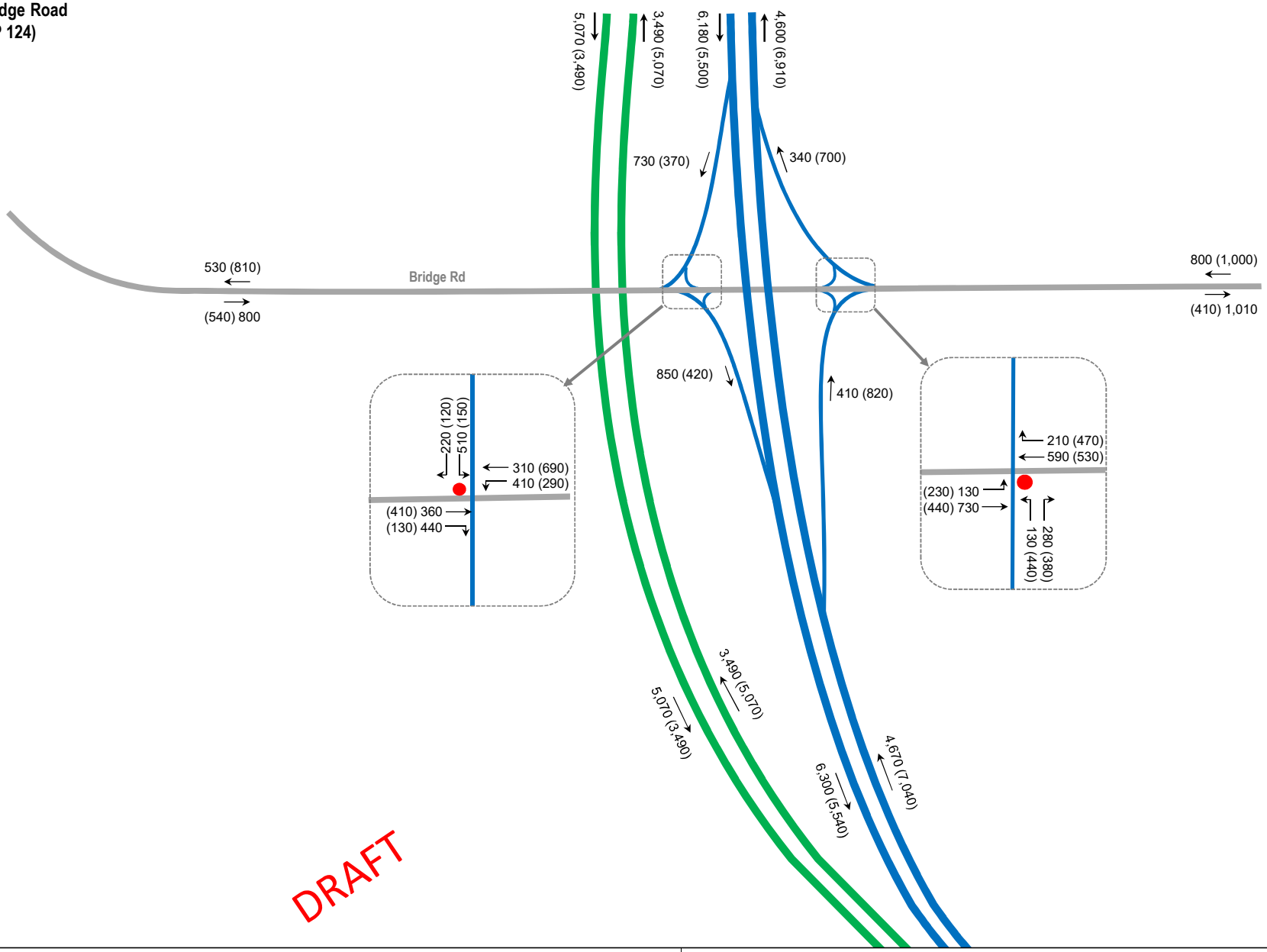
I-95/Bridge Road
(MP 124)

I-95/Bridge Road
(MP 124)

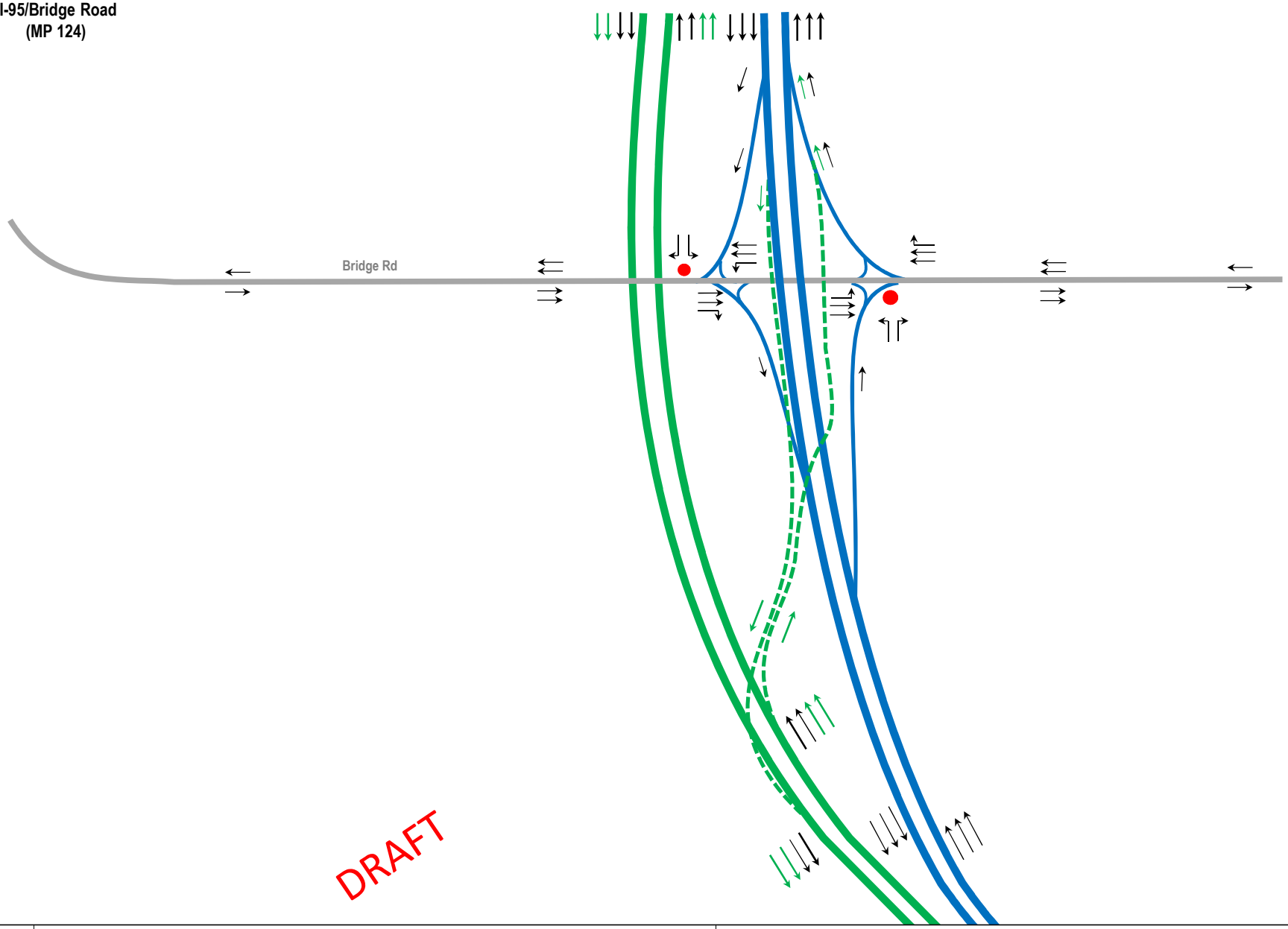


DRAFT

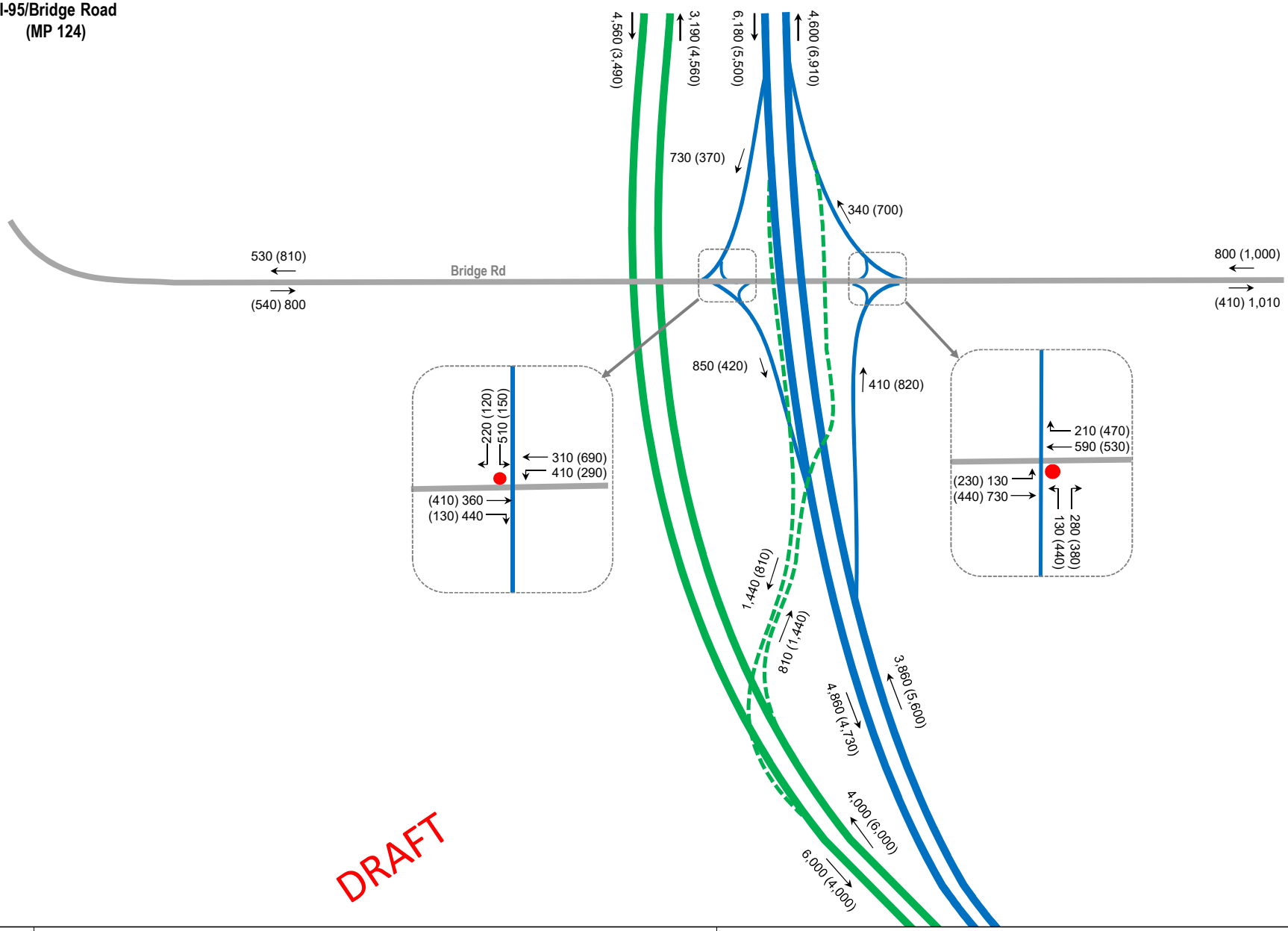
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure A.1



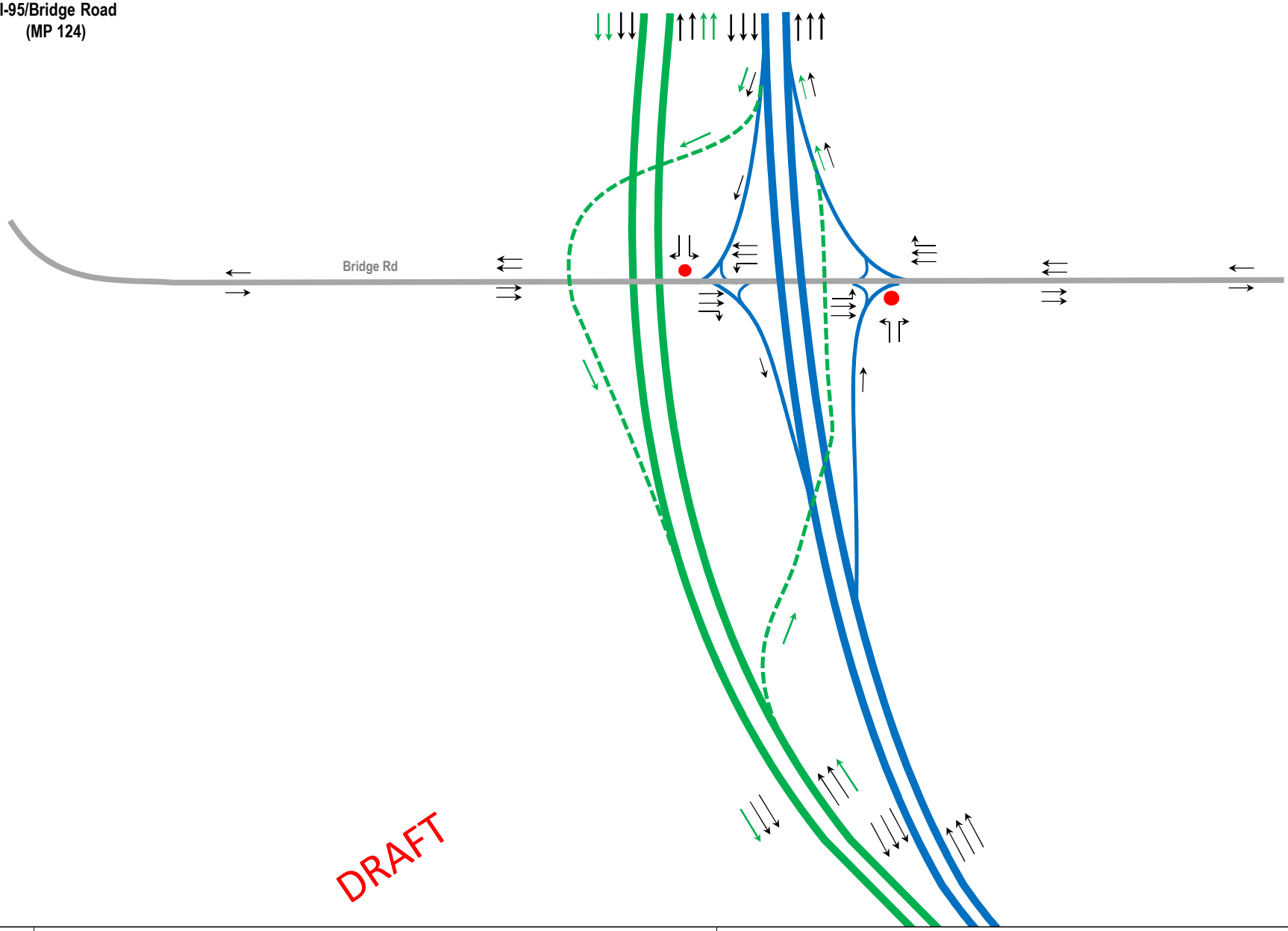
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure A.2



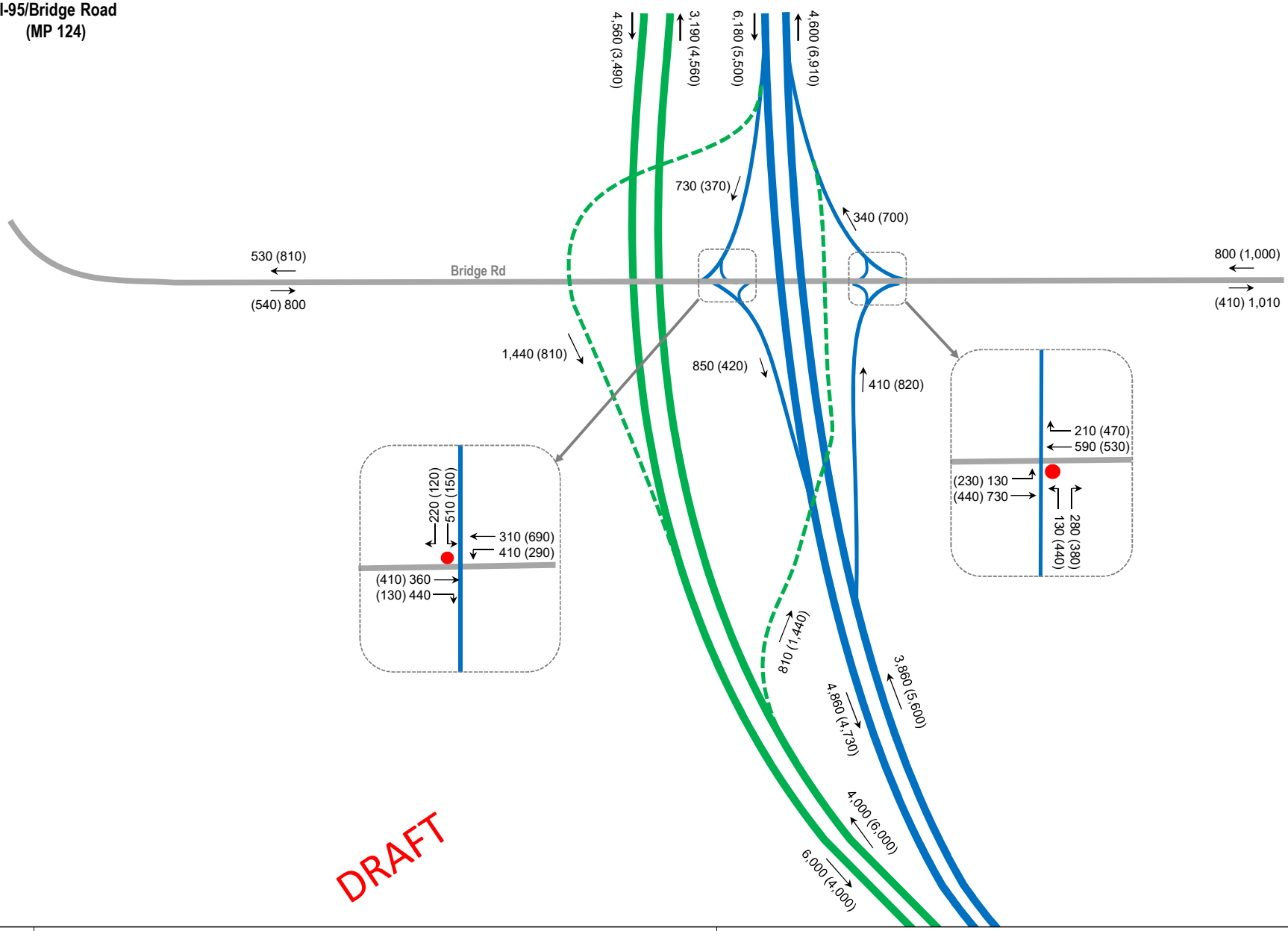
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 Lane Geometry	Figure A.3



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 2045 DDHVs	Figure A.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 Lane Geometry	Figure A.5

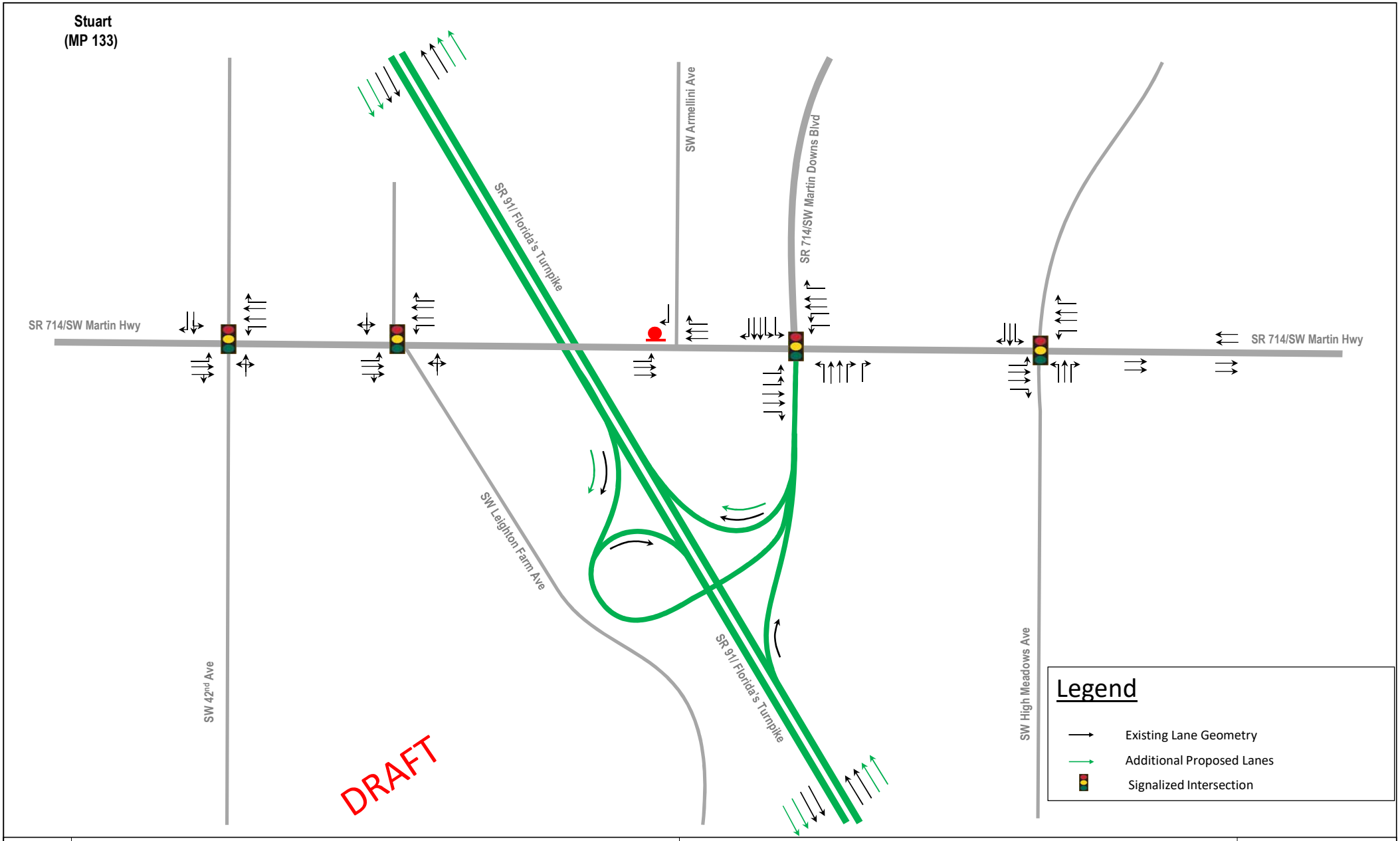


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 2045 DDHVs	Figure A.6

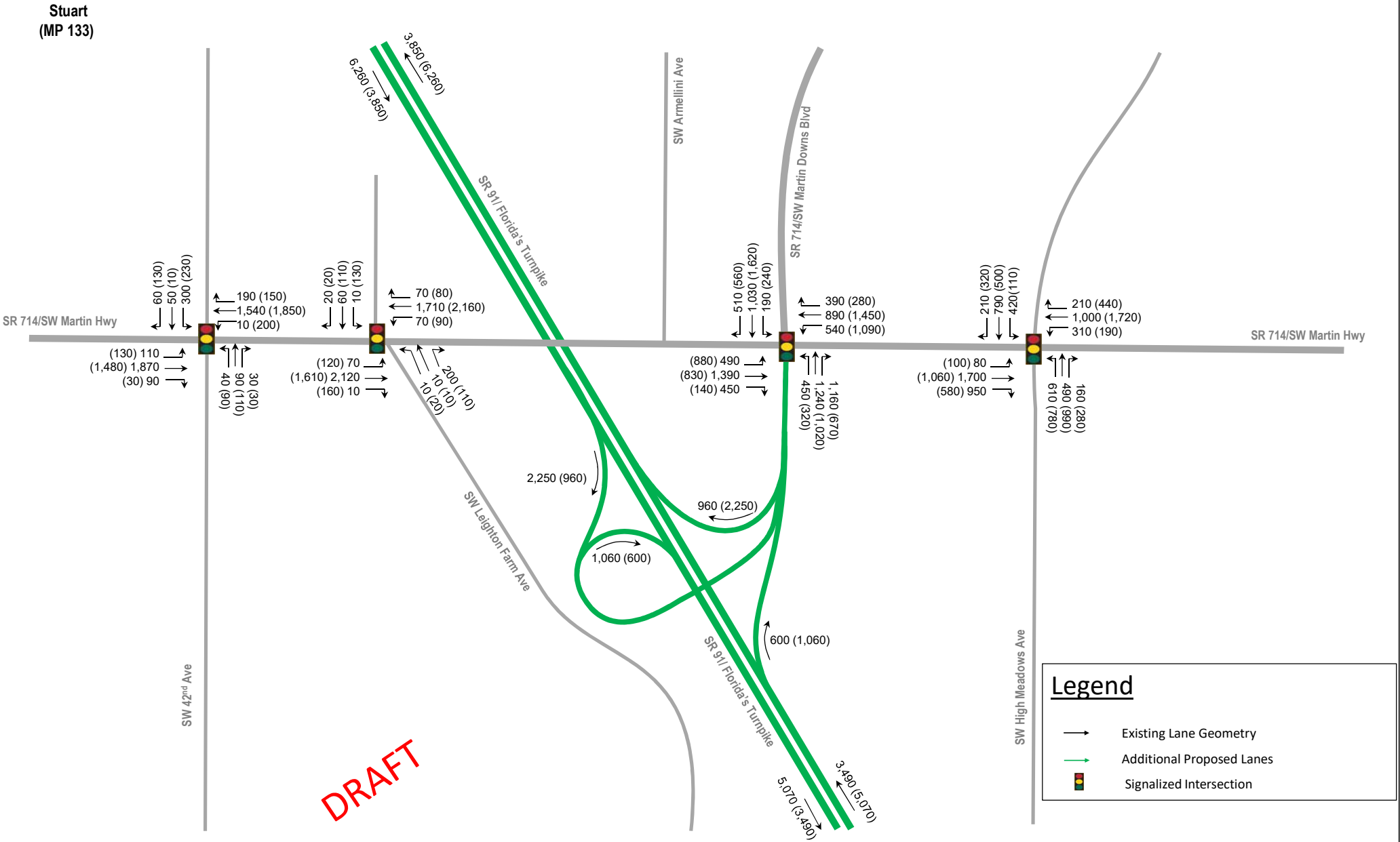
Attachment B

Stuart/Martin Highway

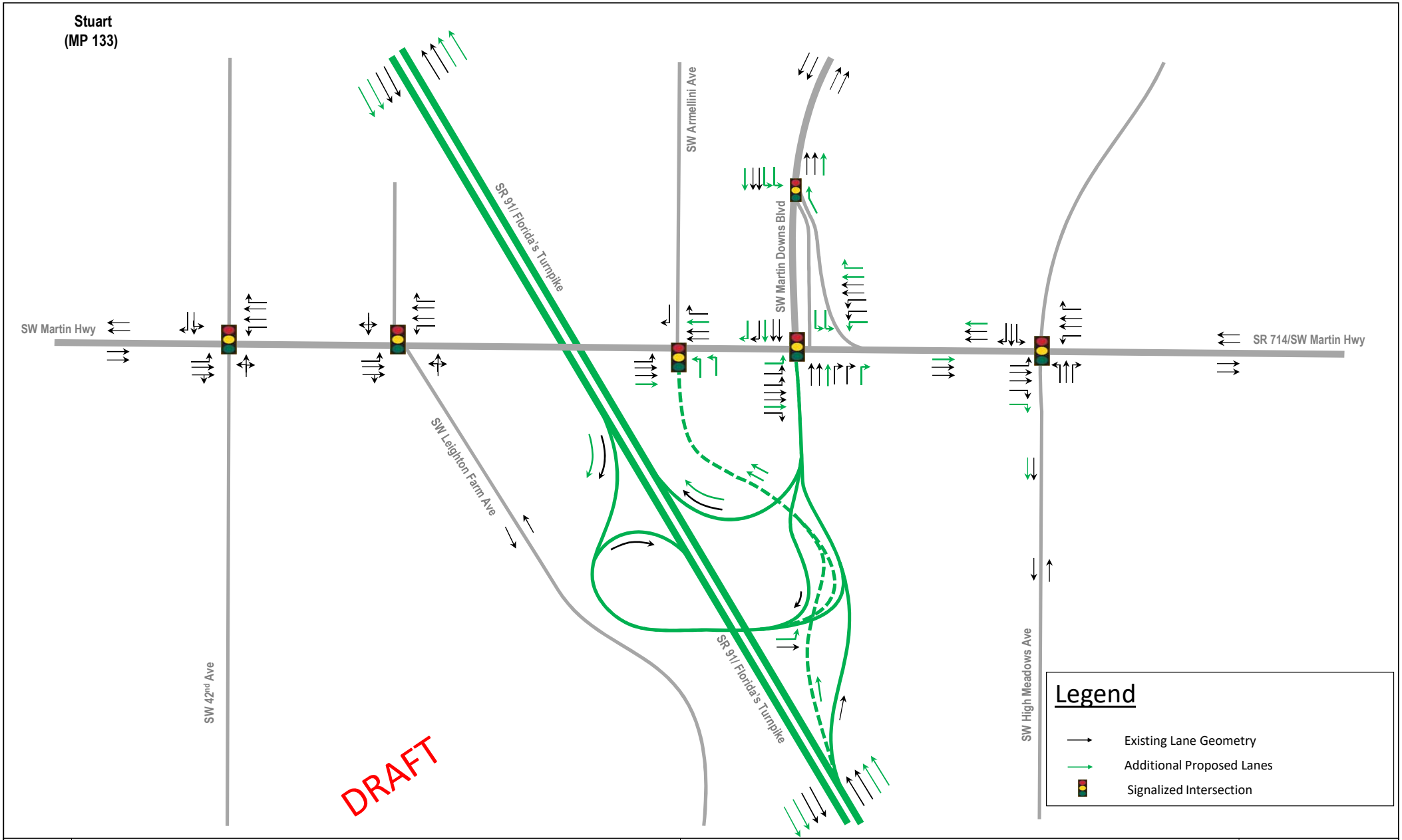
(MP 133)



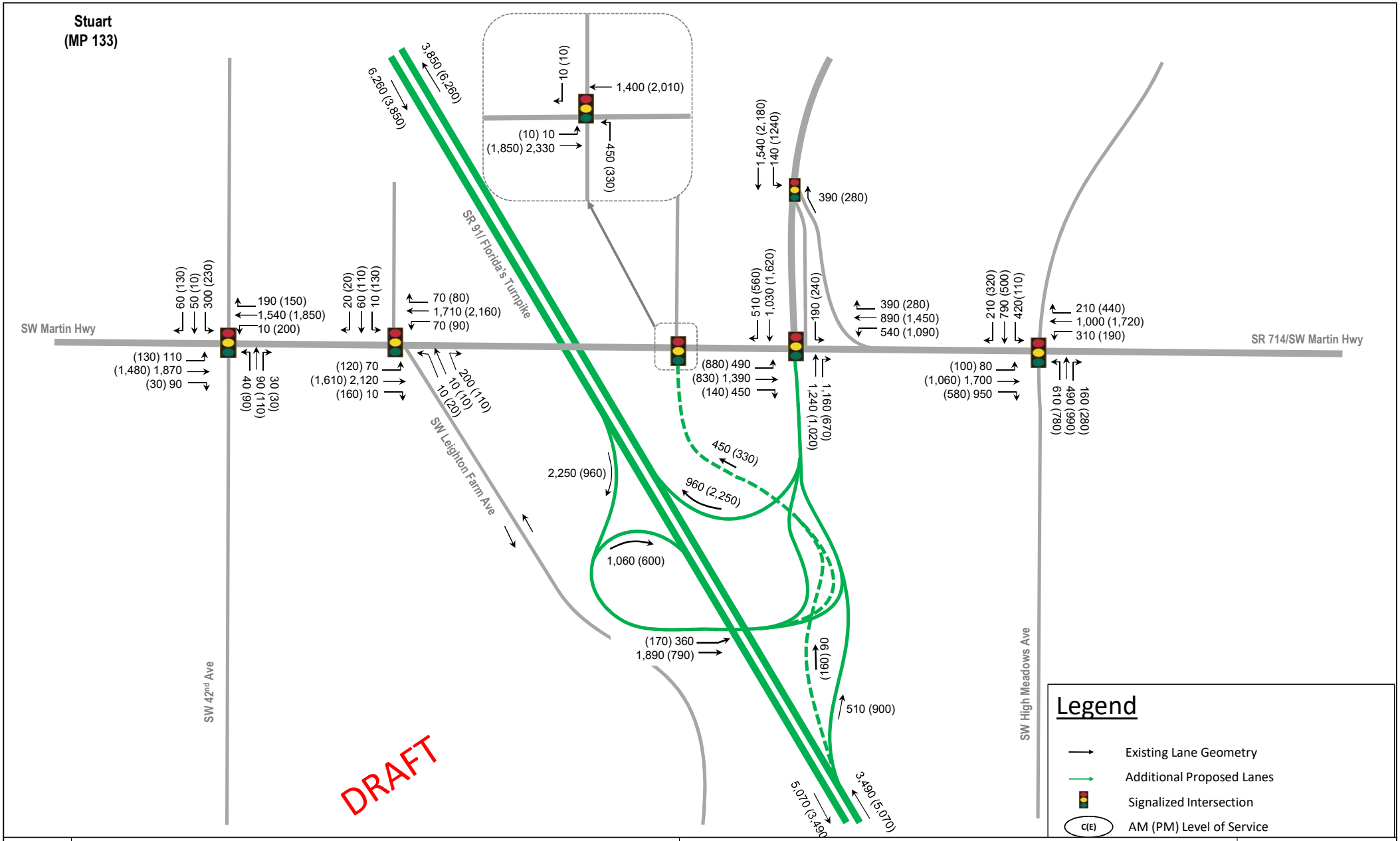
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure B.1



FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**2045 No-Build DDHVs**
		Figure B.2



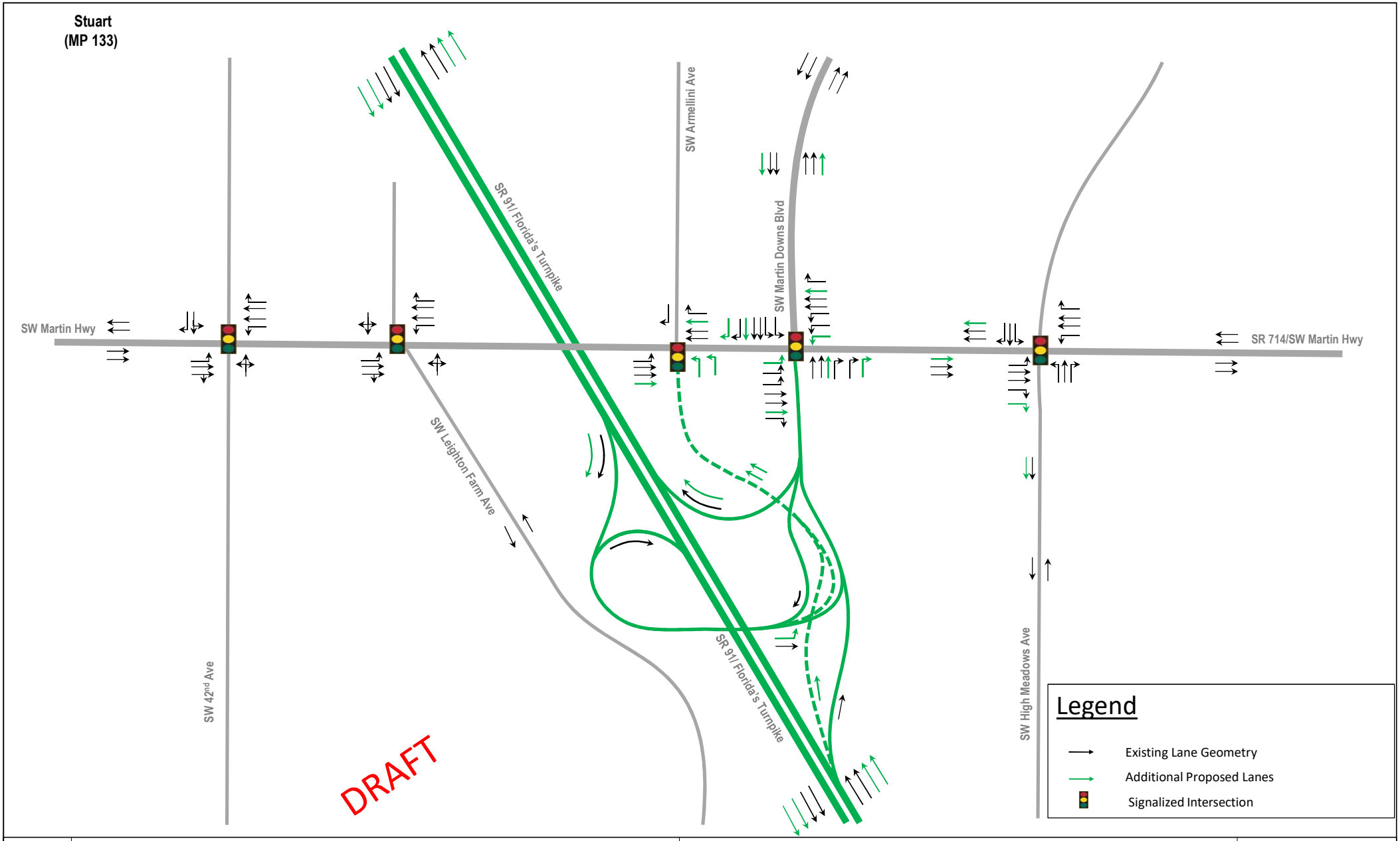
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7 Lane Geometry	Figure B.3



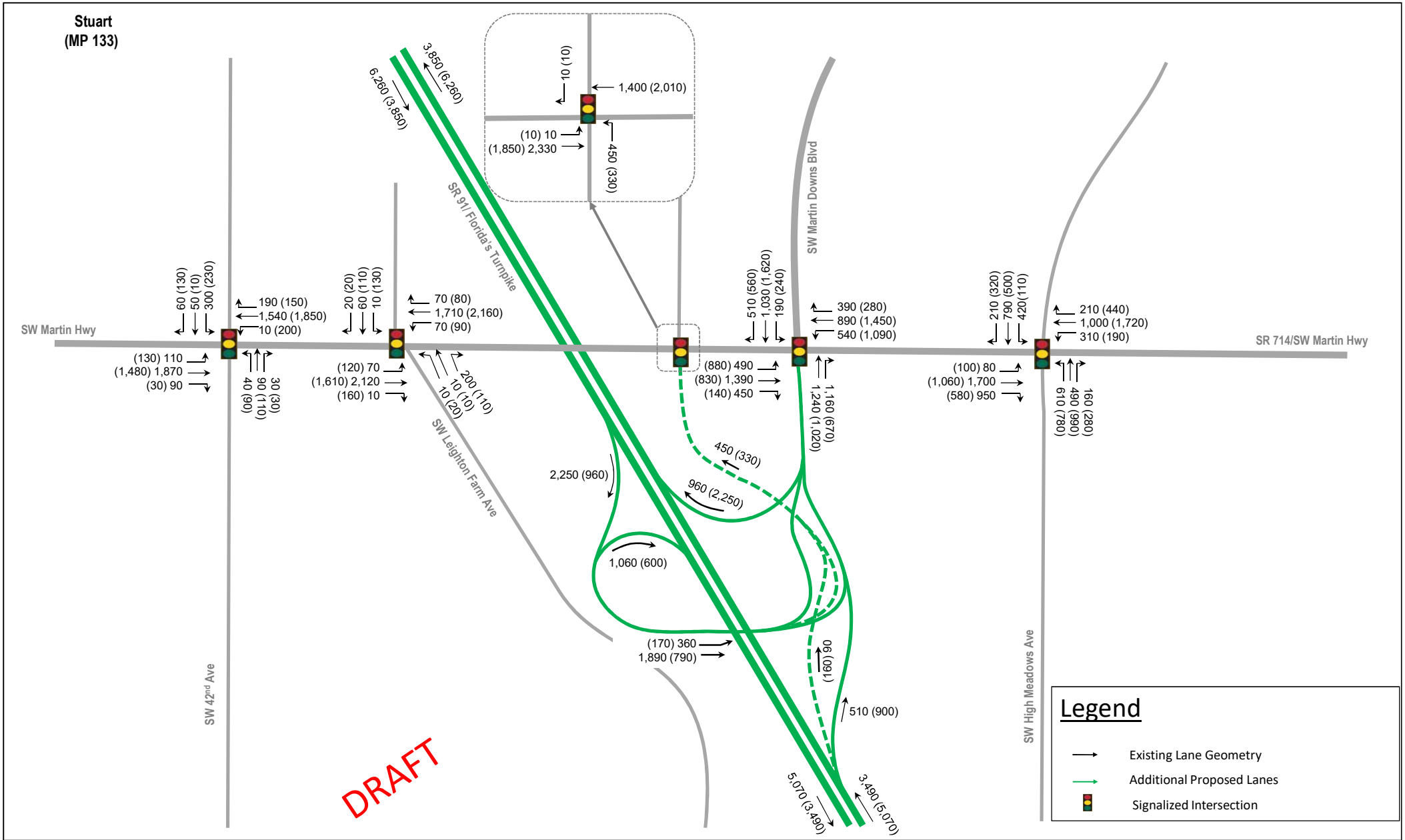
Central Turnpike Widening North of Jupiter to North of Fort Pierce
Alternative Analysis Memorandum

Modified Alternative 7
2045 DDHVs

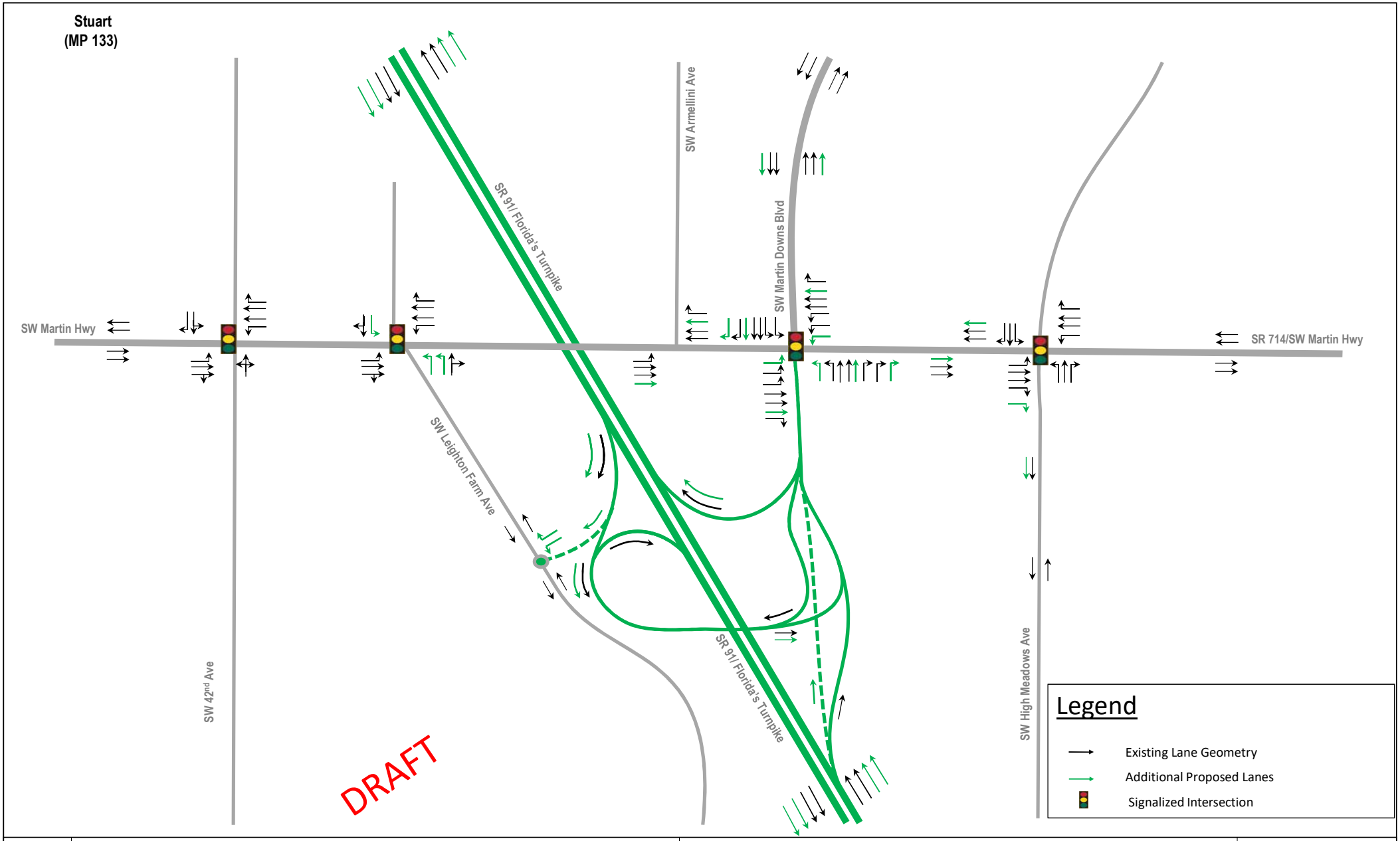
Figure B.4



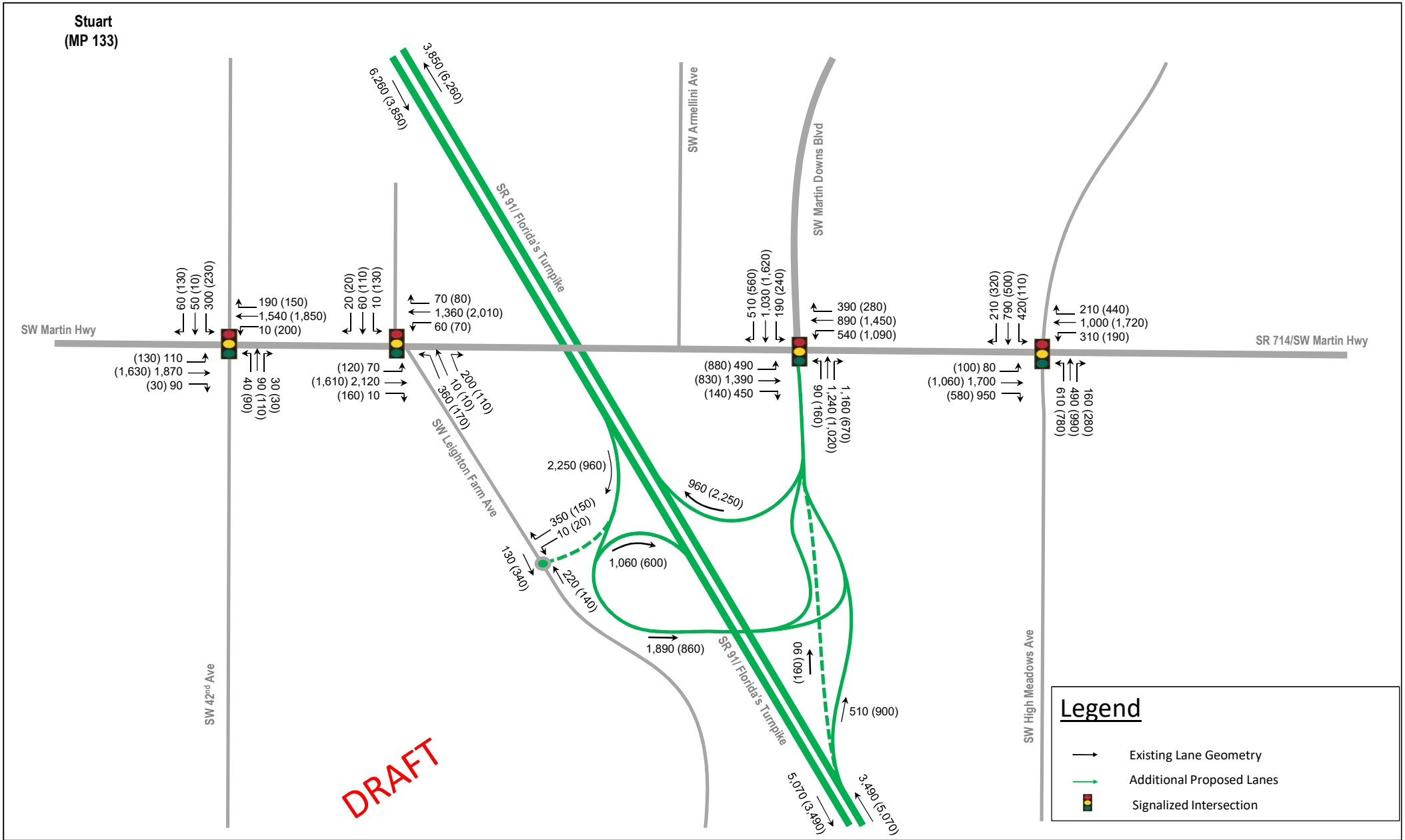
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7a Lane Geometry	Figure B.5



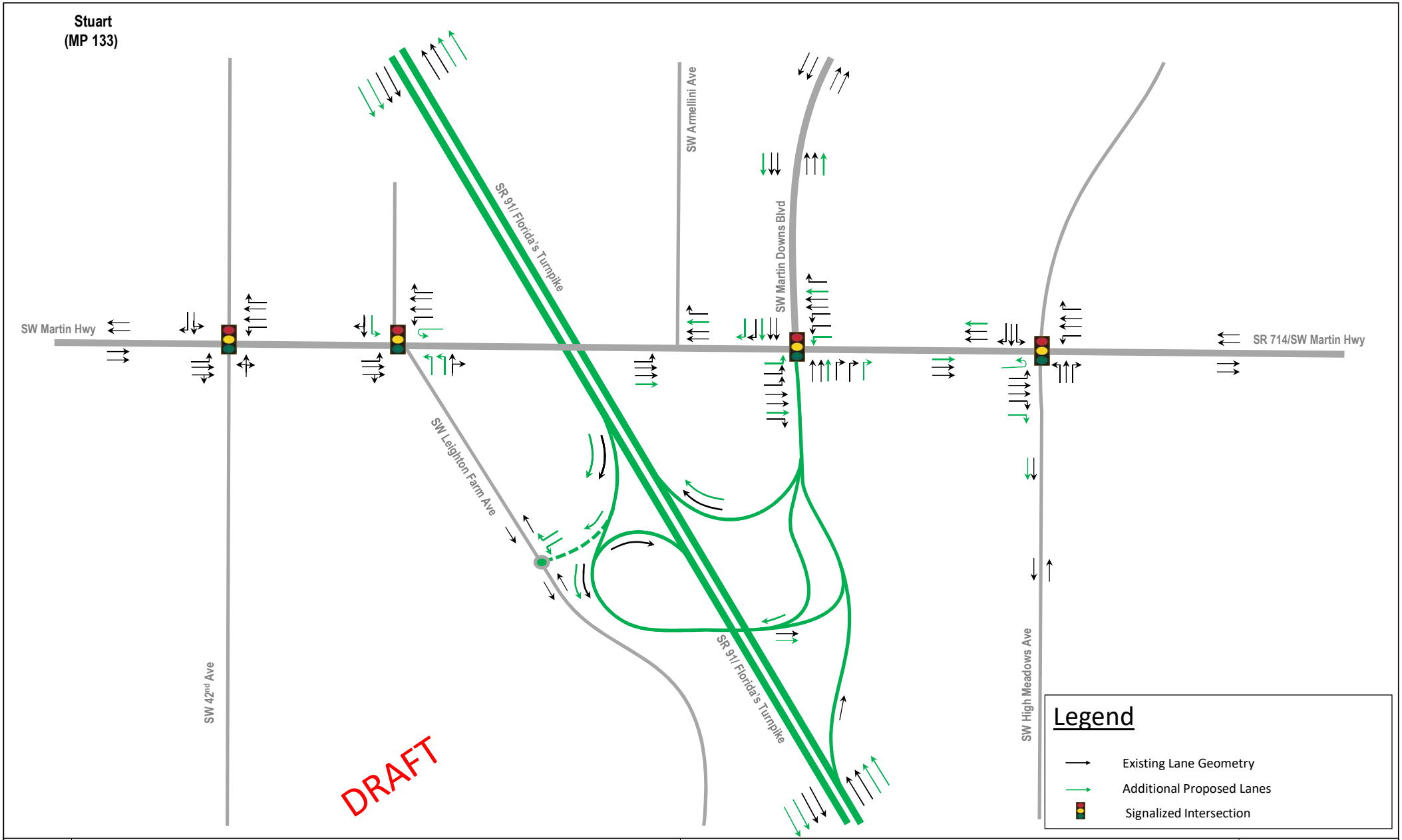
FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**Modified Alternative 7a** **2045 DDHVs**
		Figure B.6



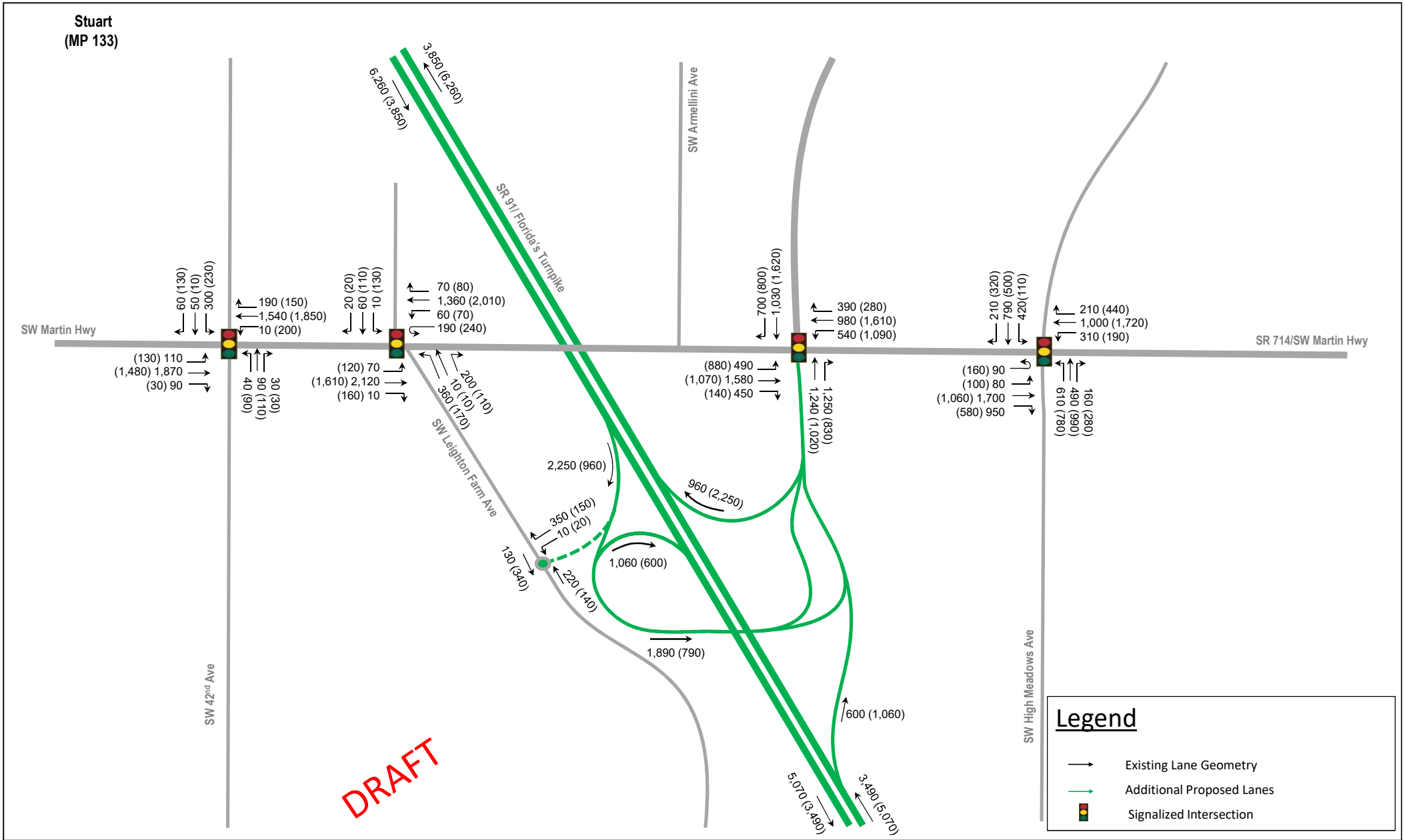
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7b Lane Geometry	Figure B.7



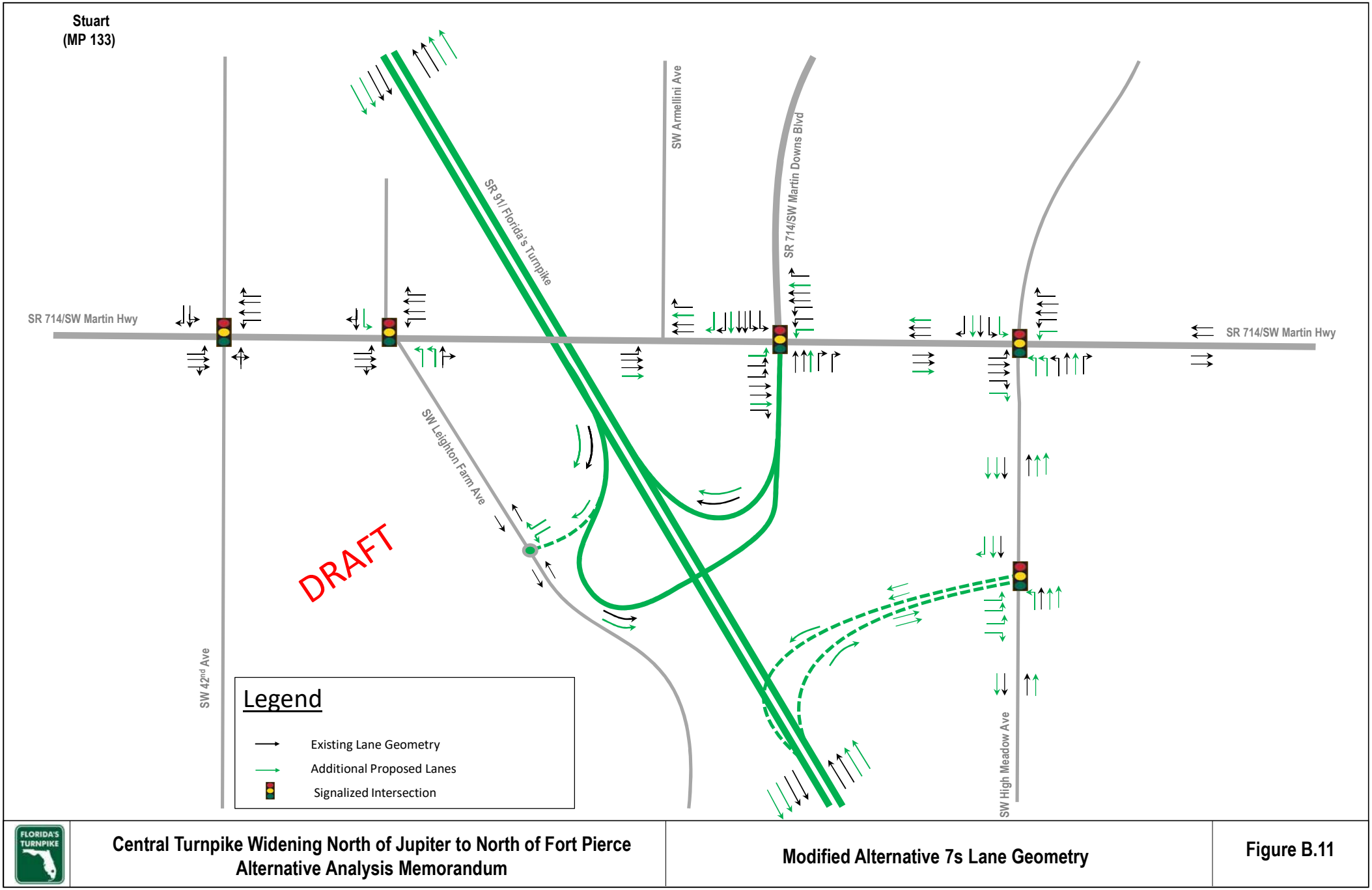
FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**Modified Alternative 7b** **2045 DDHVs**
		Figure B.8



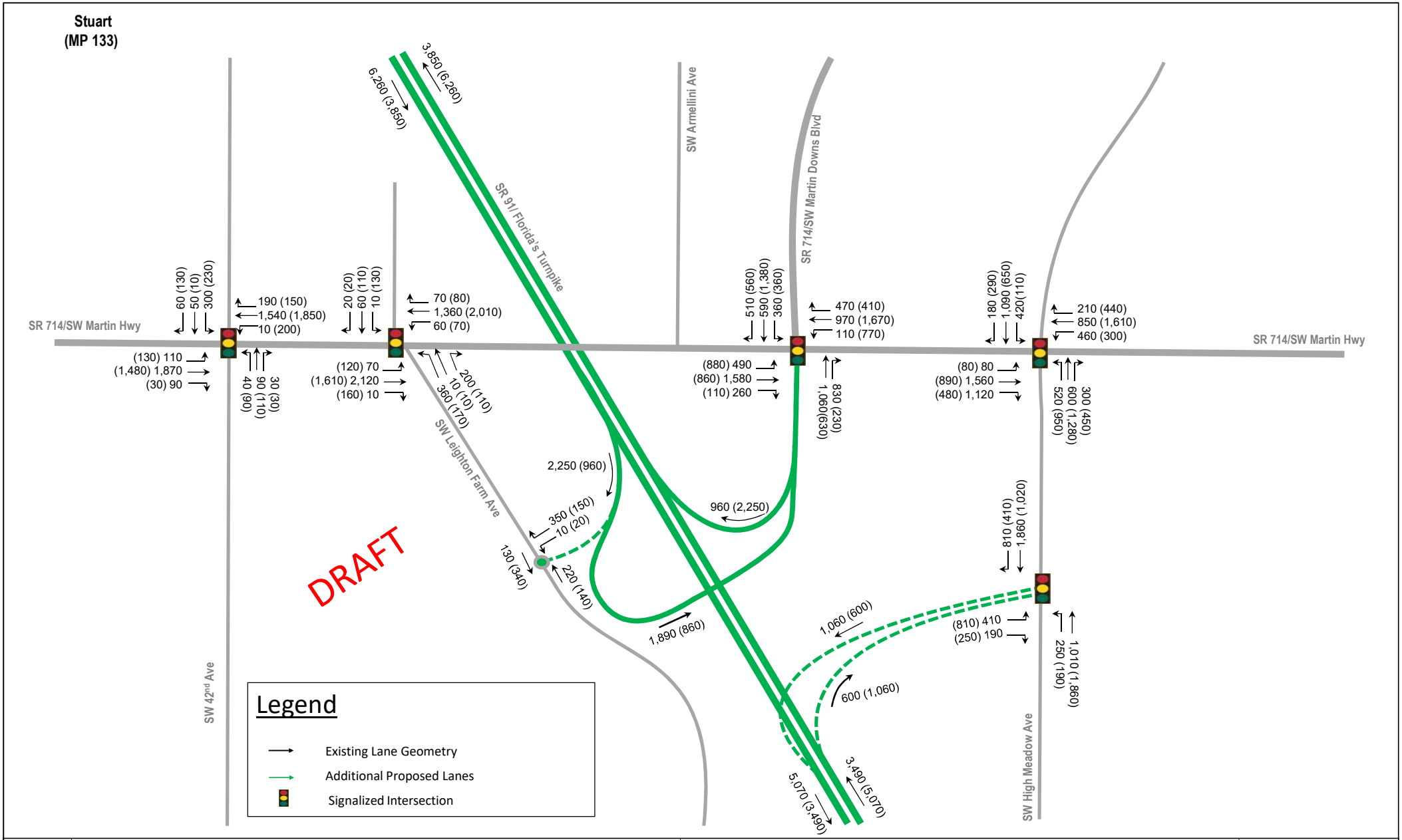
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7c Lane Geometry	Figure B.9



FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**Modified Alternative 7c** **2045 DDHVs**
		Figure B.10



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7s Lane Geometry	Figure B.11

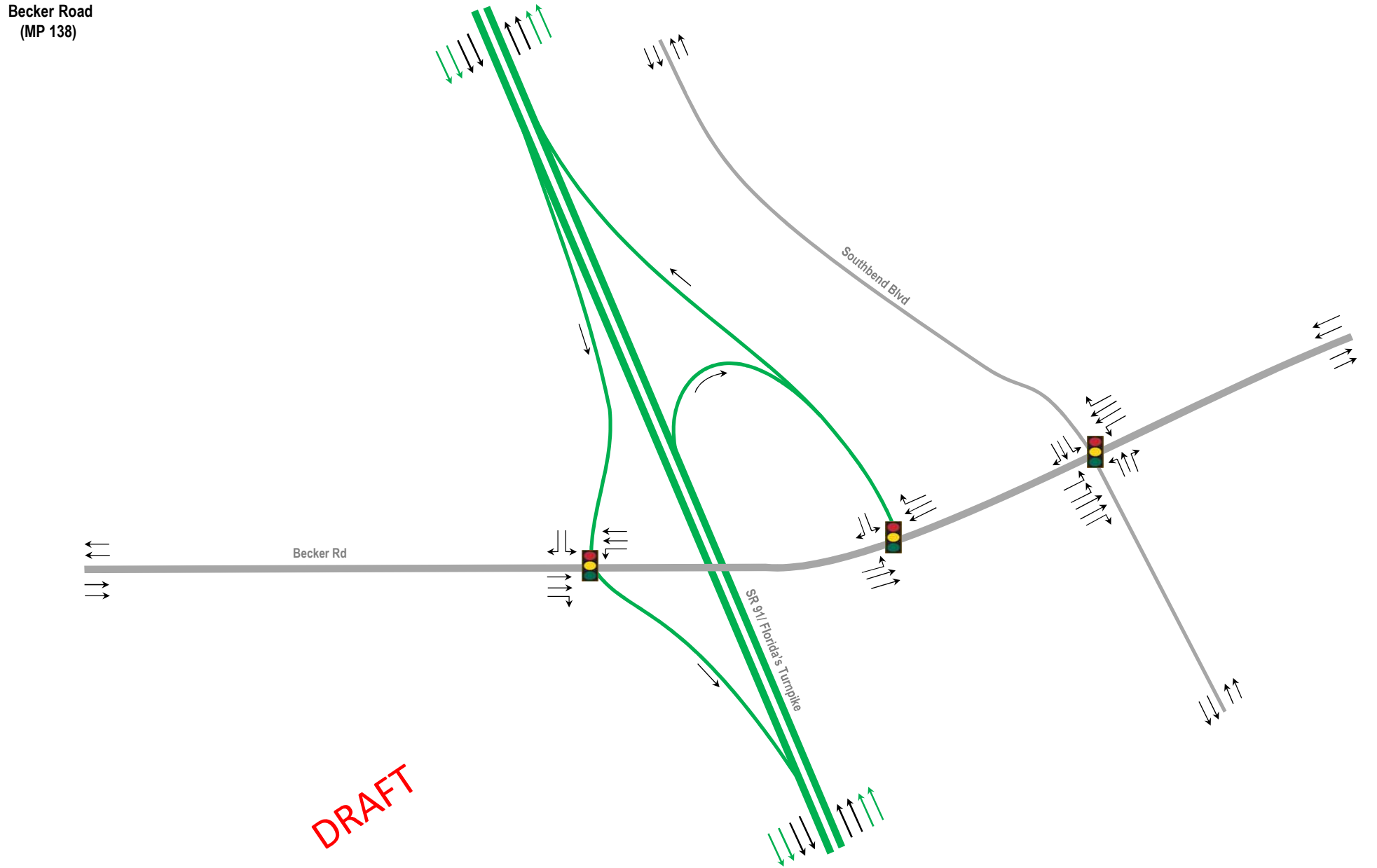


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7s 2045 DDHVs	Figure B.12

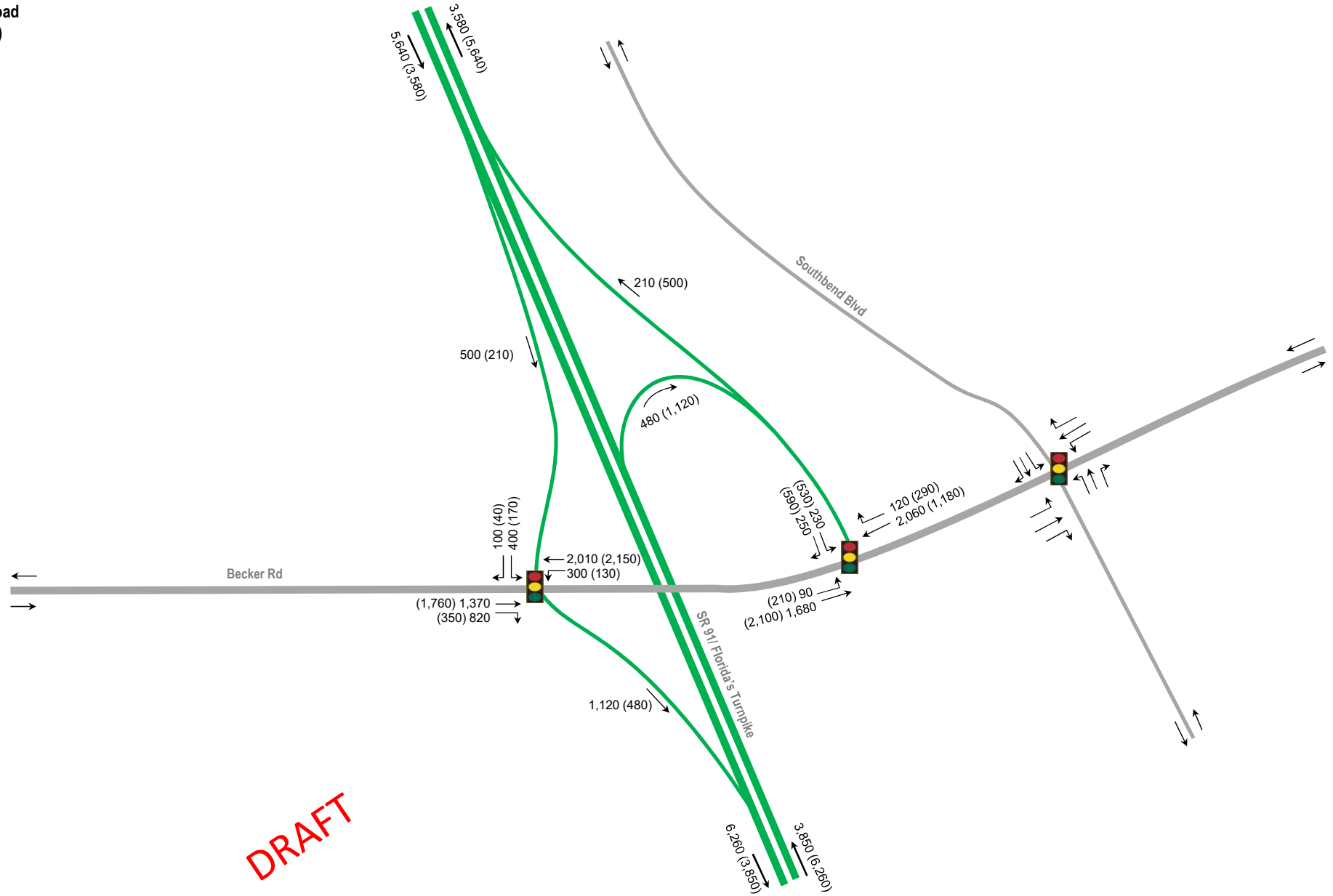
Attachment C

Becker

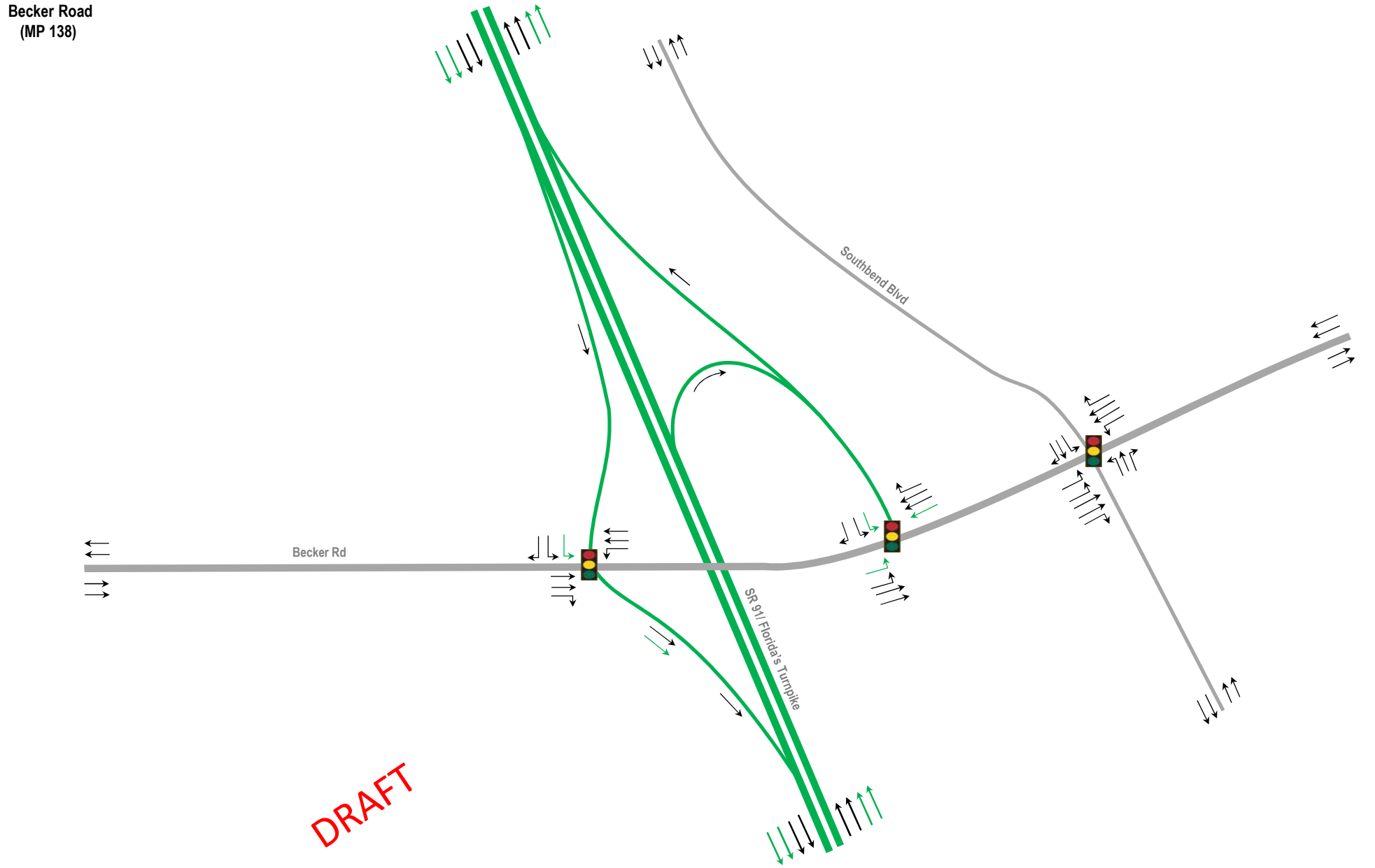
(MP 138)



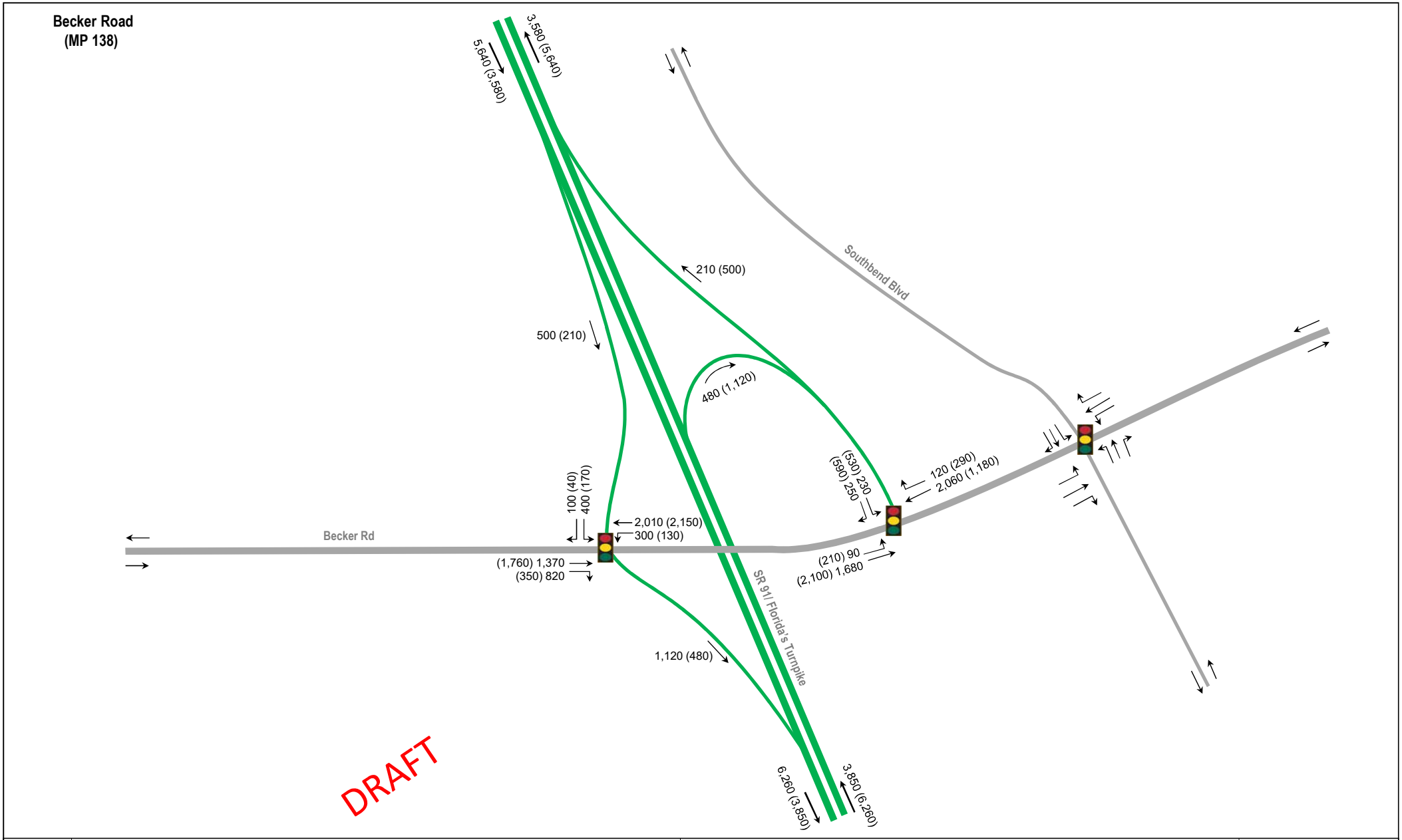
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure C.1



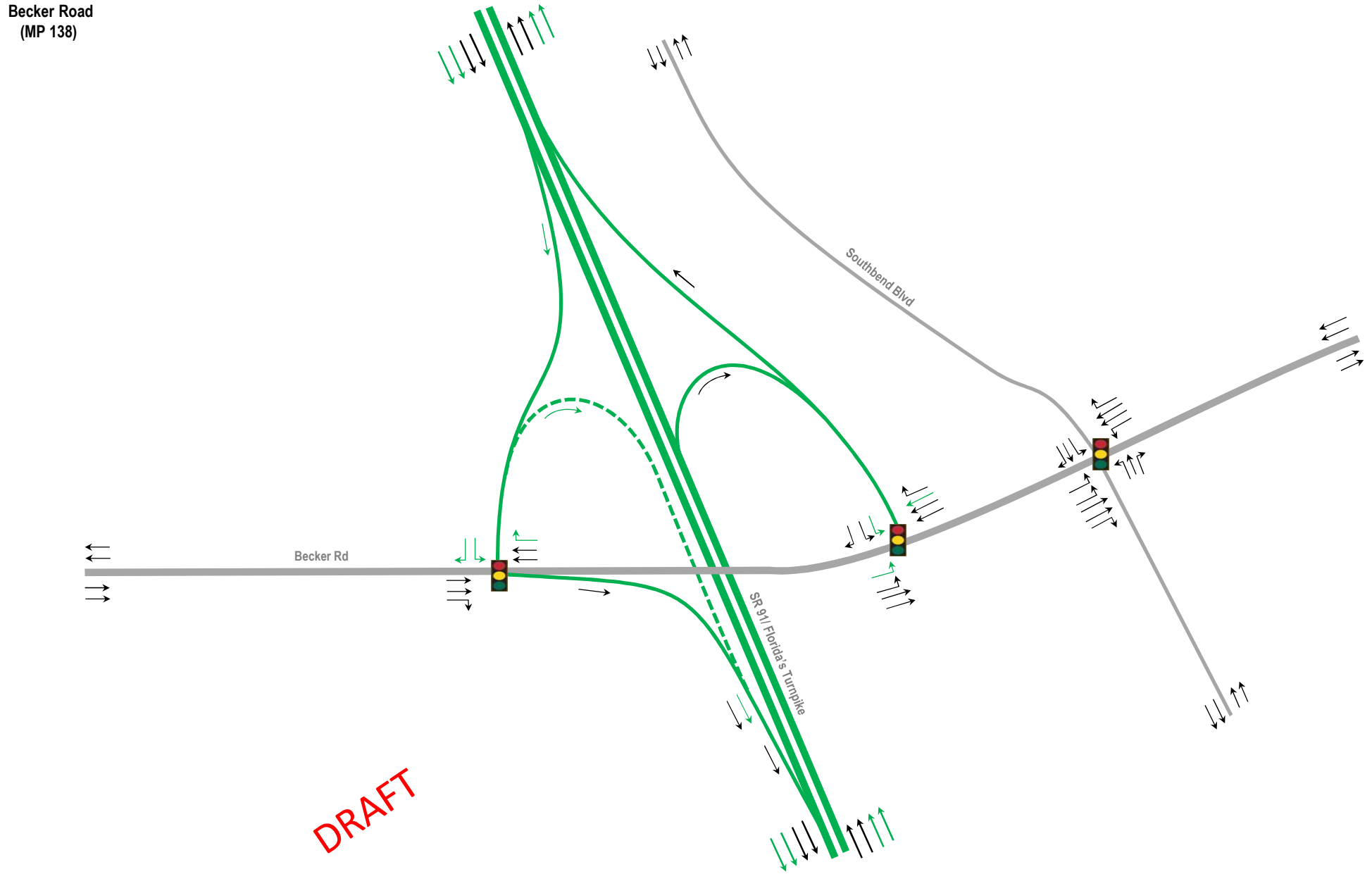
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure C.2



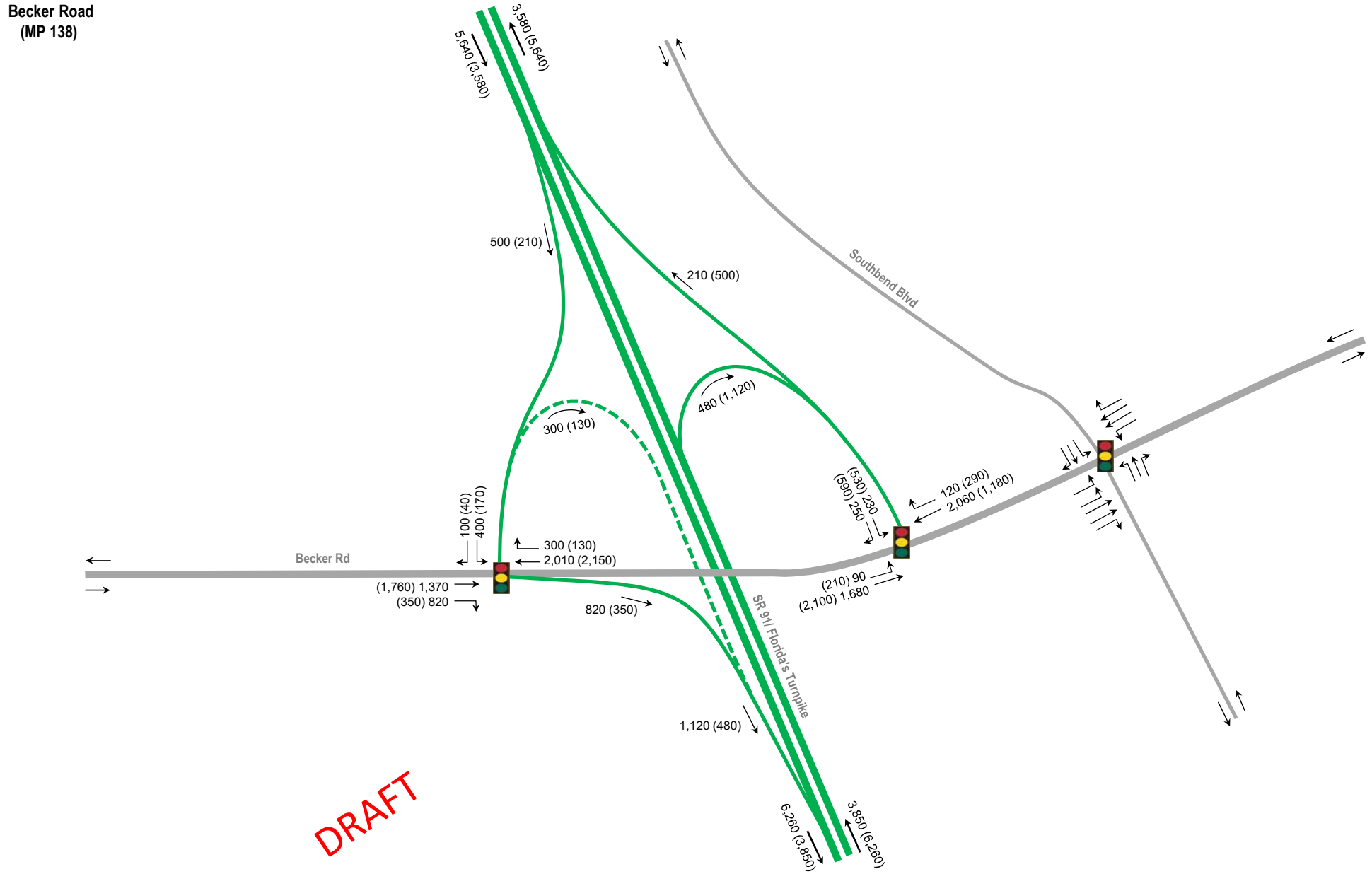
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 Lane Geometry	Figure C.3



FLORIDA'S TURNPIKE	Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 2045 DDHVs	Figure C.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 Lane Geometry	Figure C.5

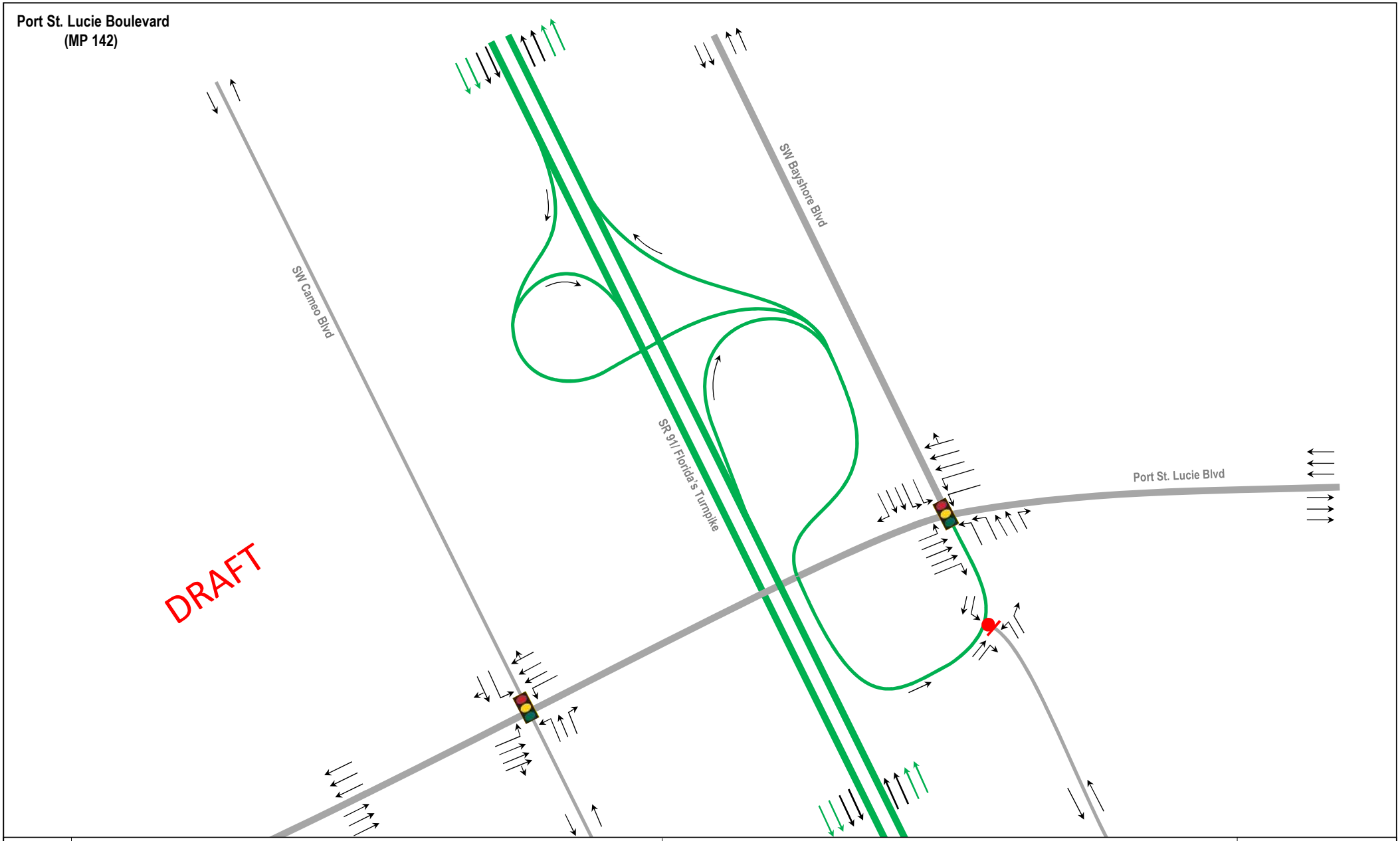


FLORIDA'S TURNPIKE	Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 2045 DDHVs	Figure C.6

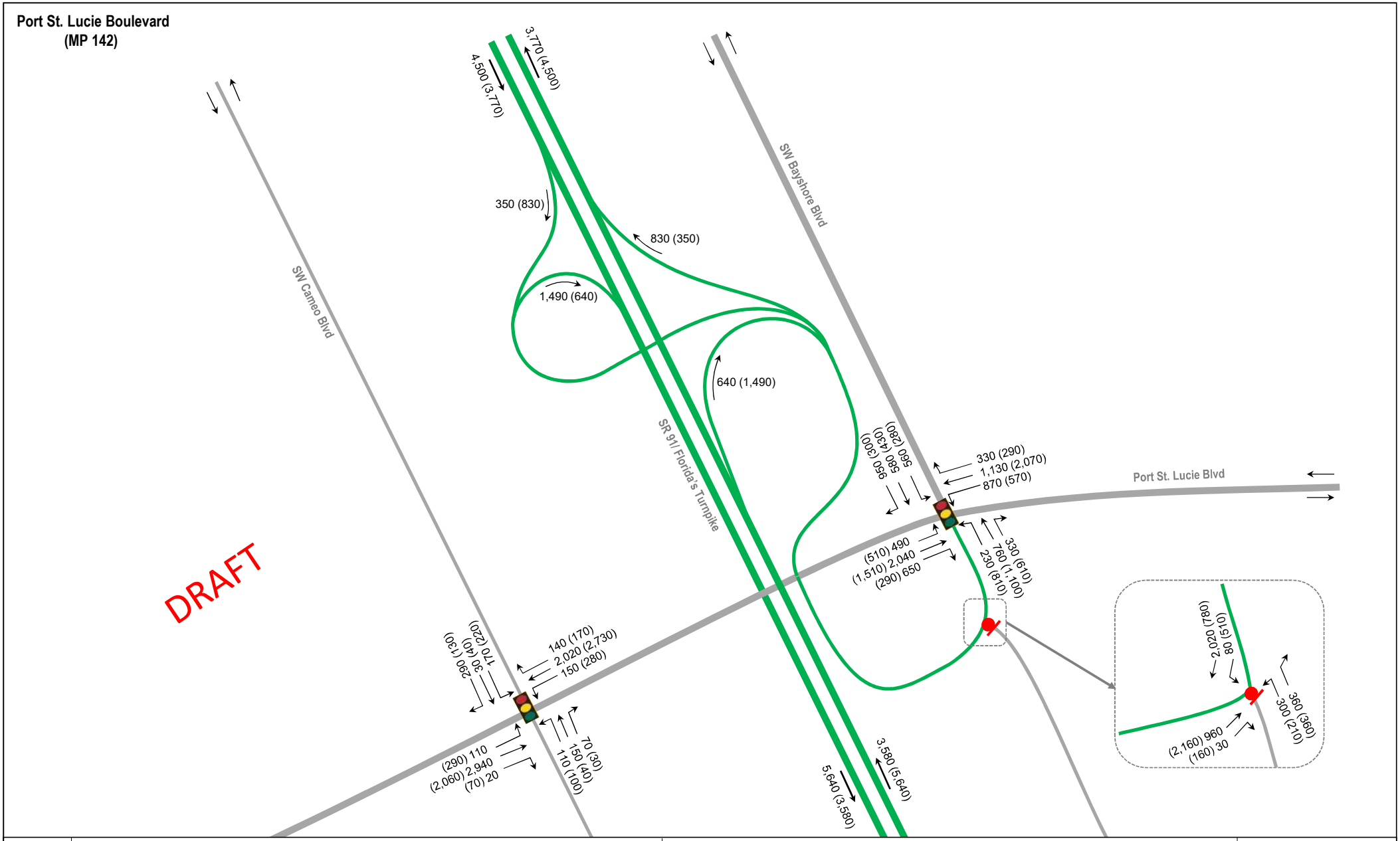
Attachment D

Port St. Lucie

(MP 142)

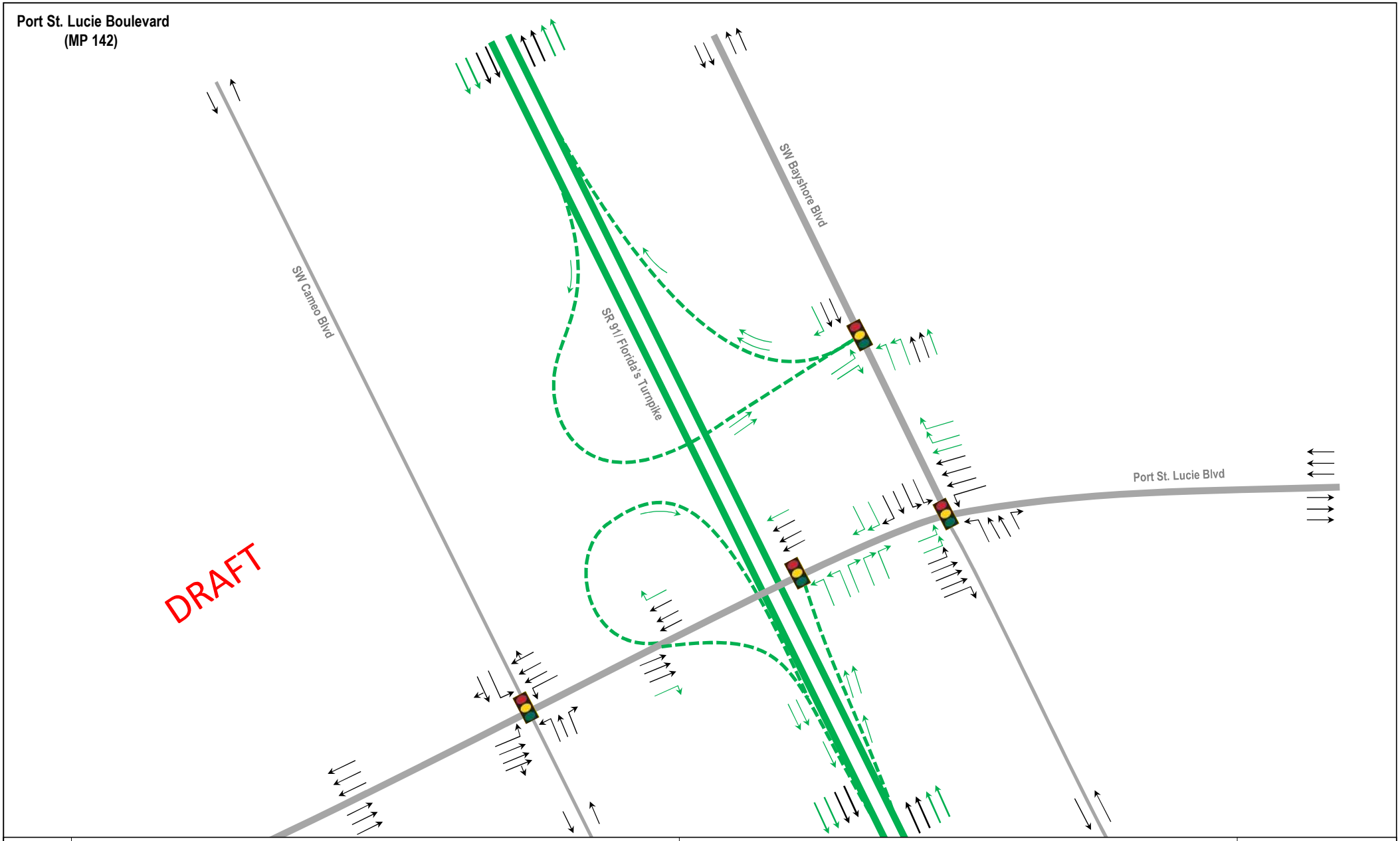


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure D.1



FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**2045 No-Build DDHVs**

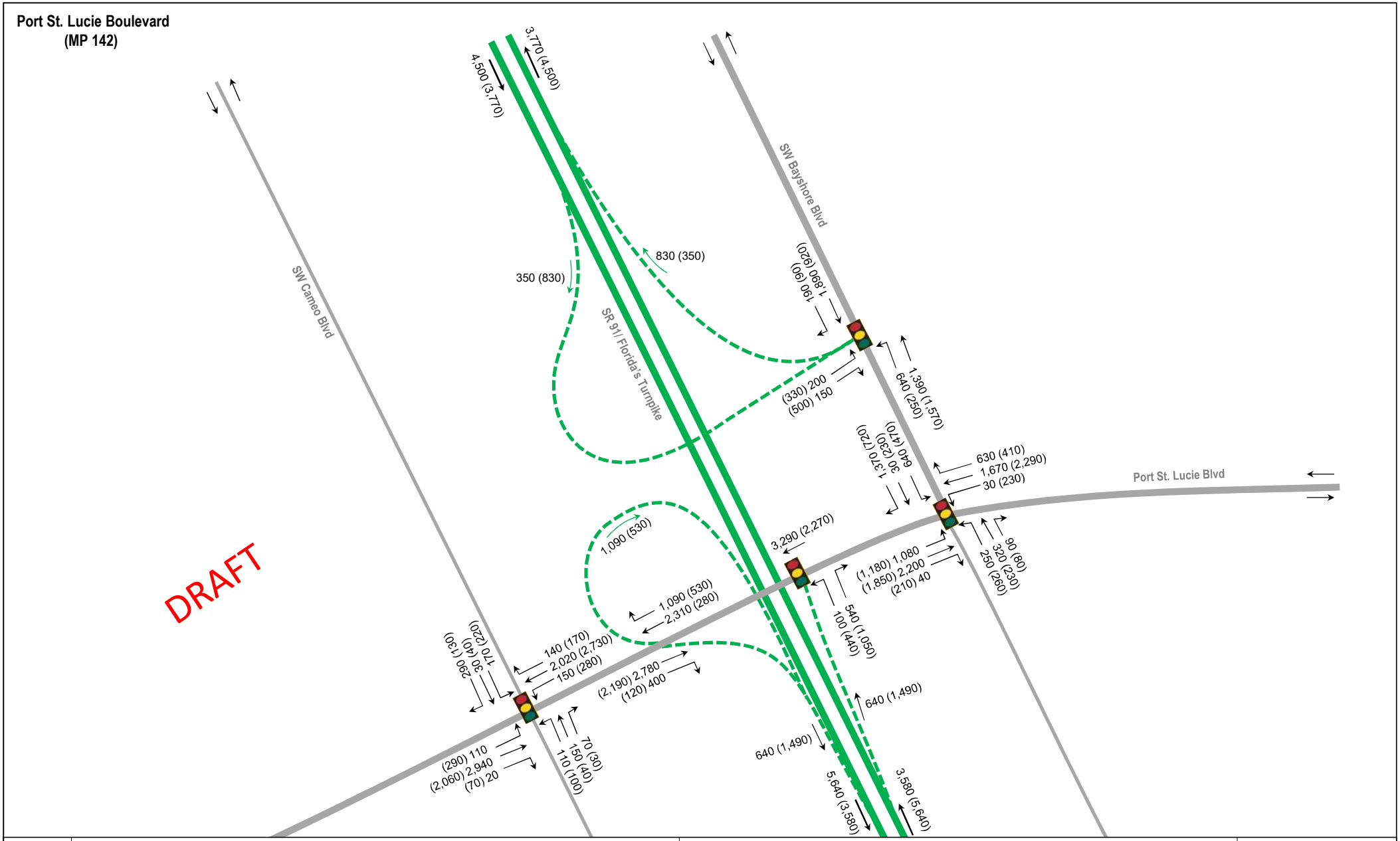
Figure D.2



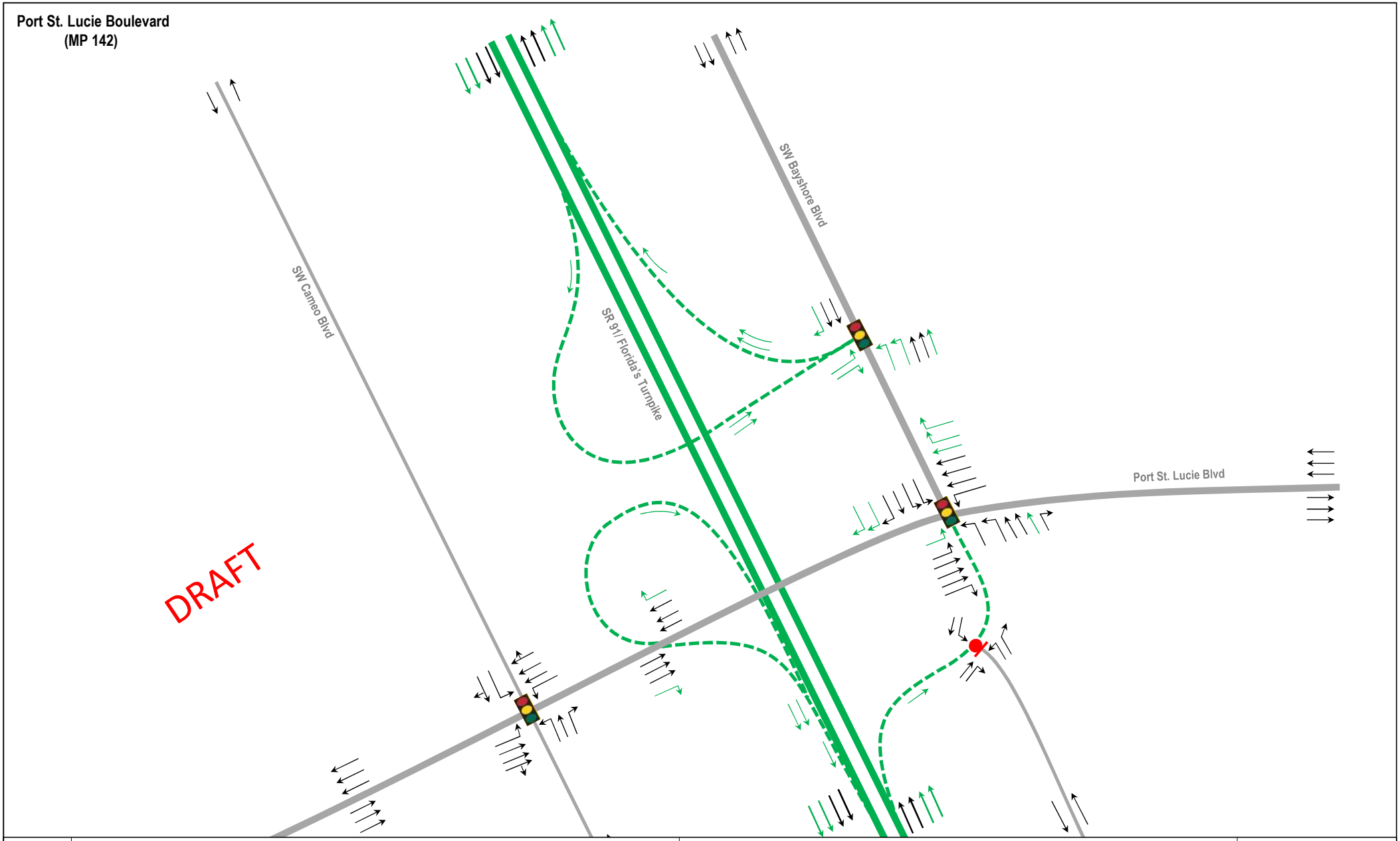
Central Turnpike Widening North of Jupiter to North of Fort Pierce
Alternative Analysis Memorandum

Alternative 1 Lane Geometry

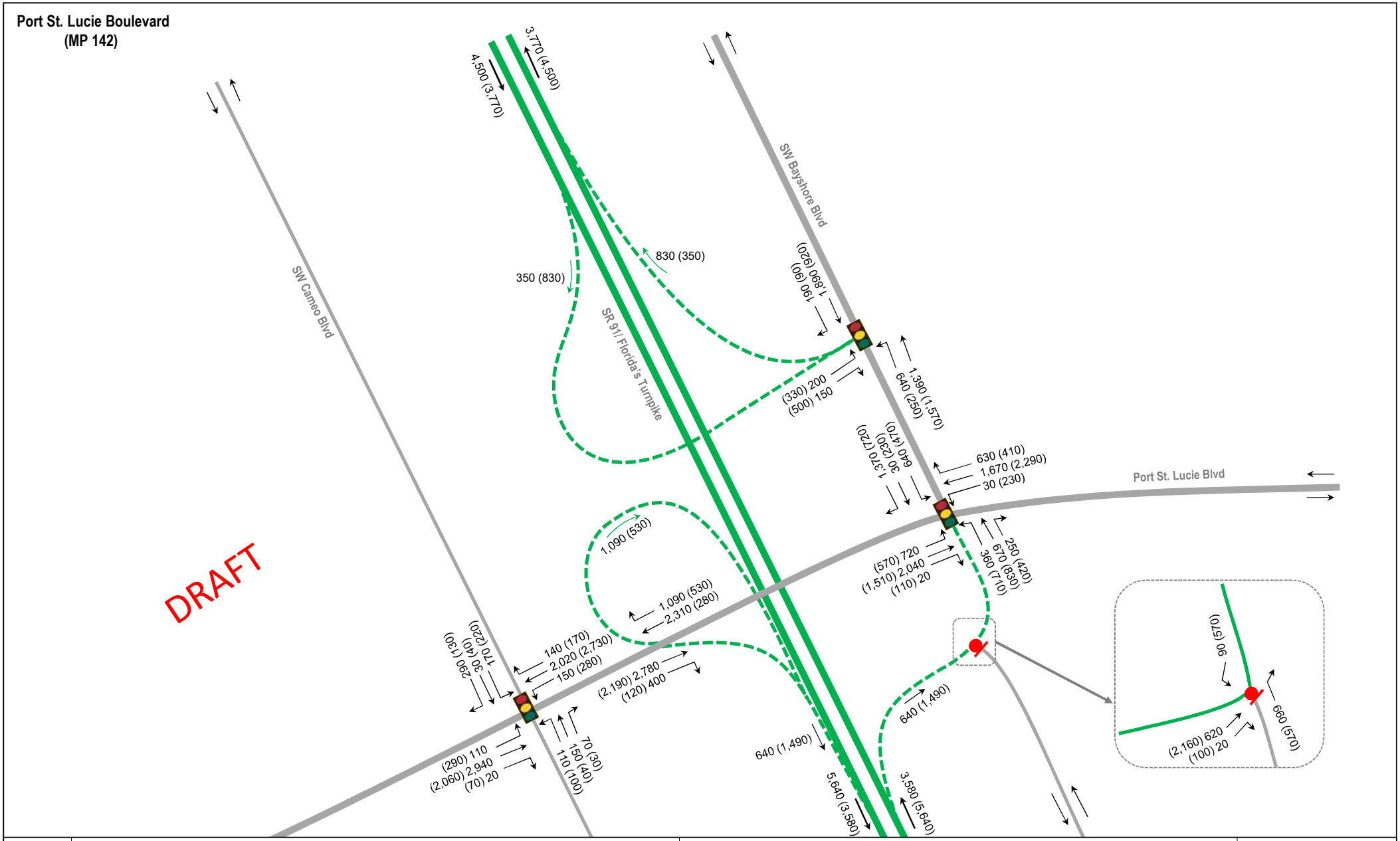
Figure D.3



FLORIDA'S TURNPIKE	Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 2045 DDHVs	Figure D.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 2 Lane Geometry	Figure D.5

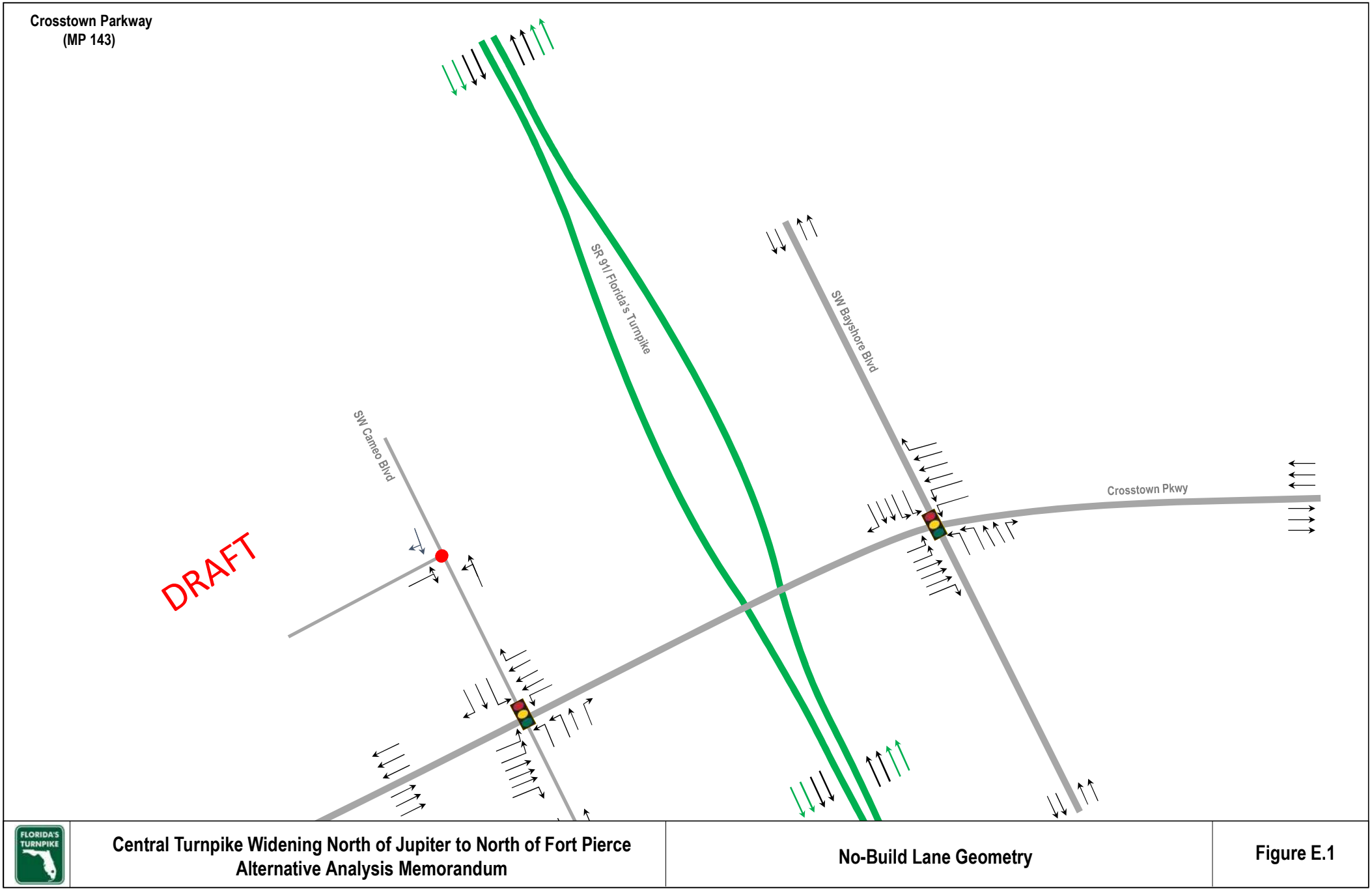


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 2 Lane Geometry	Figure D.6

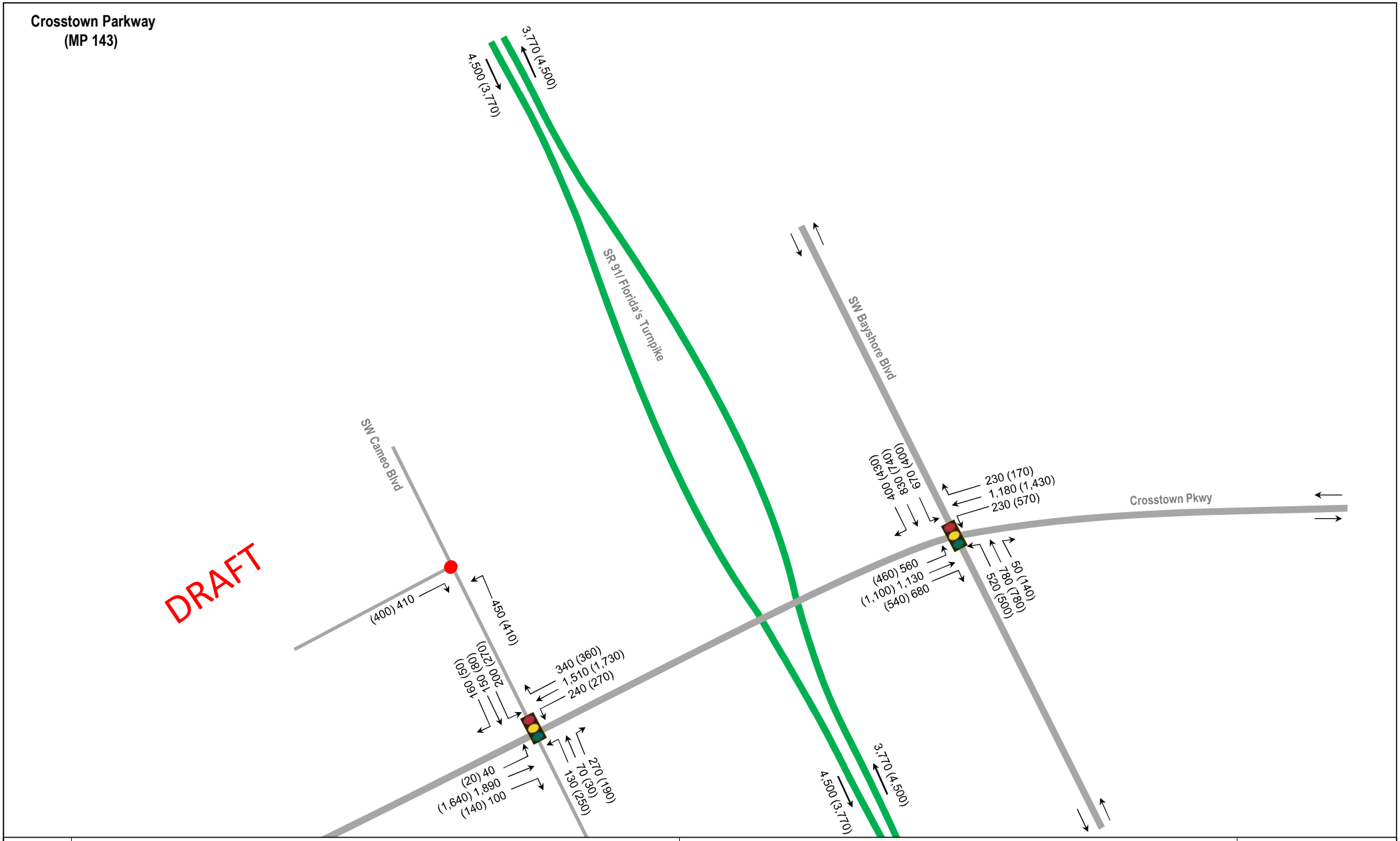
Attachment E

Crosstown Parkway

(MP 143)

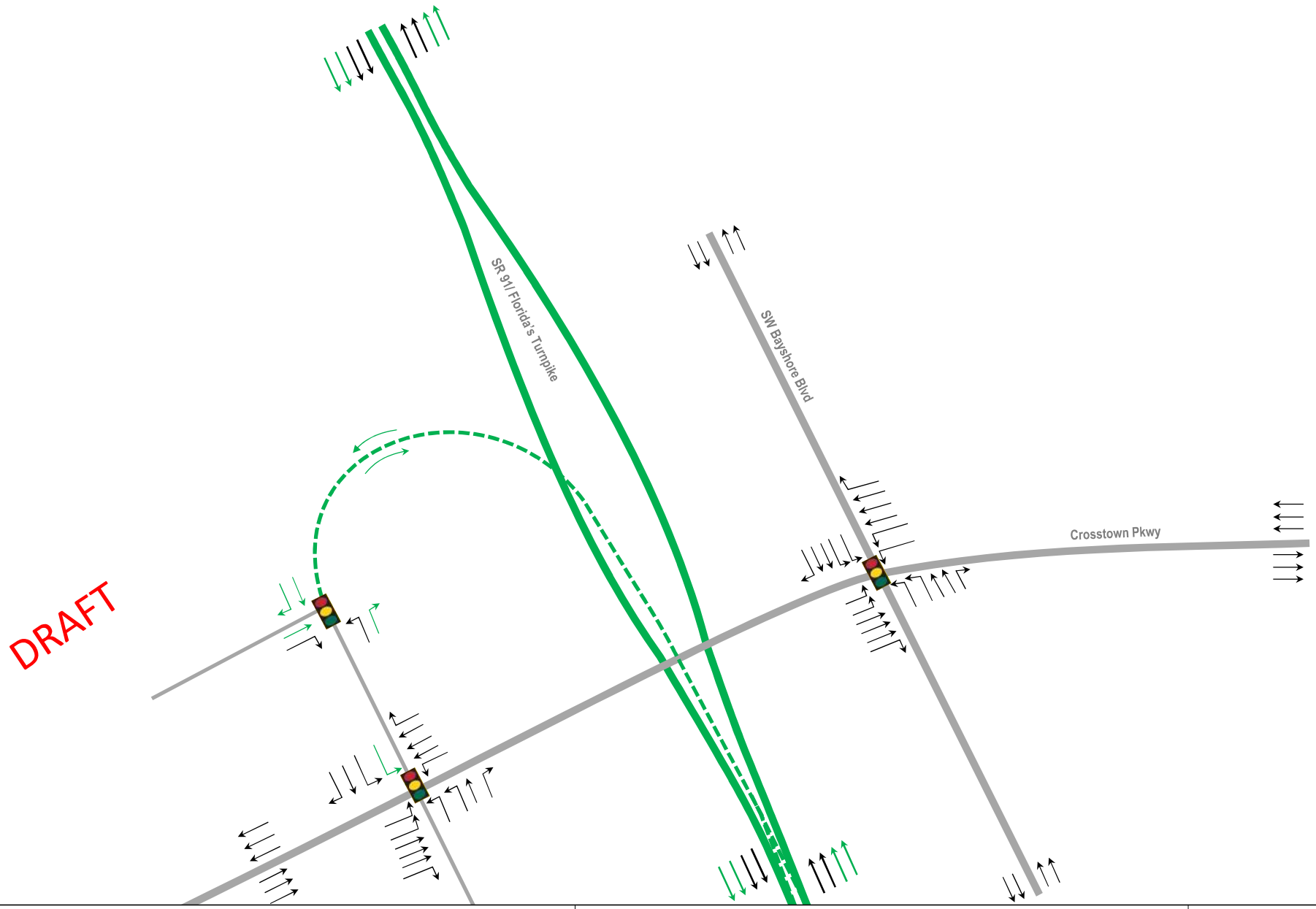


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure E.1



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure E.2

Crosstown Parkway
(MP 143)



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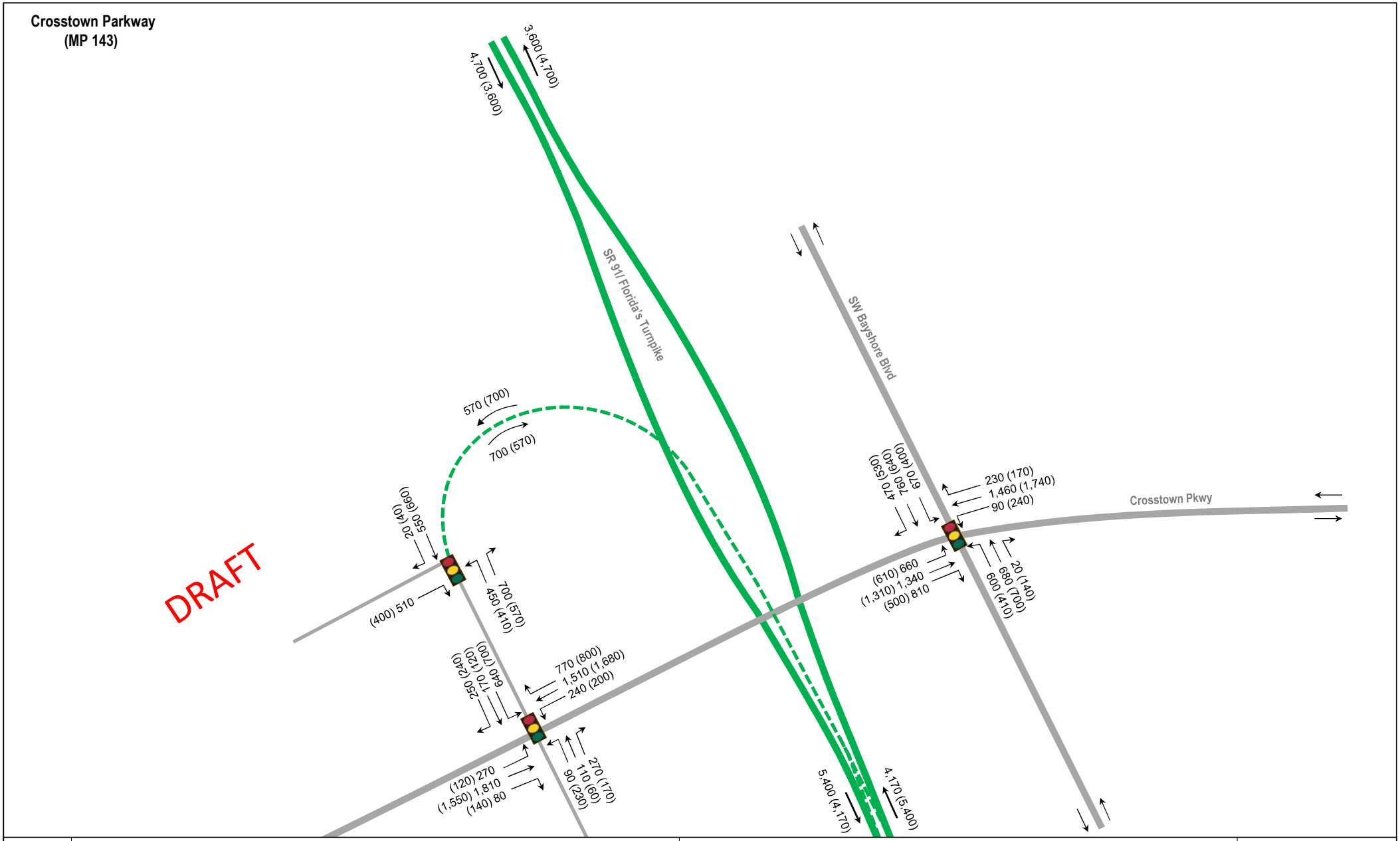
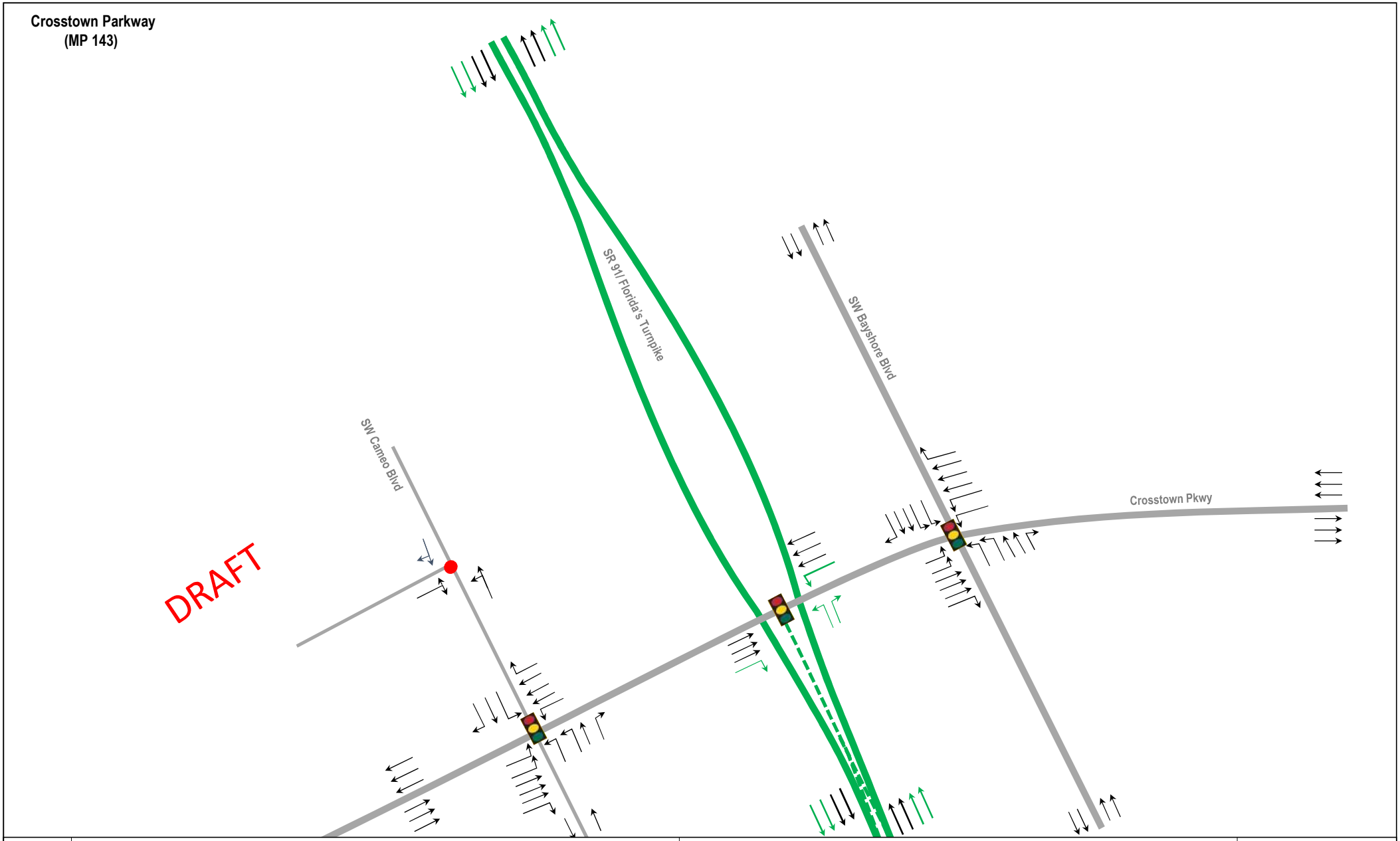
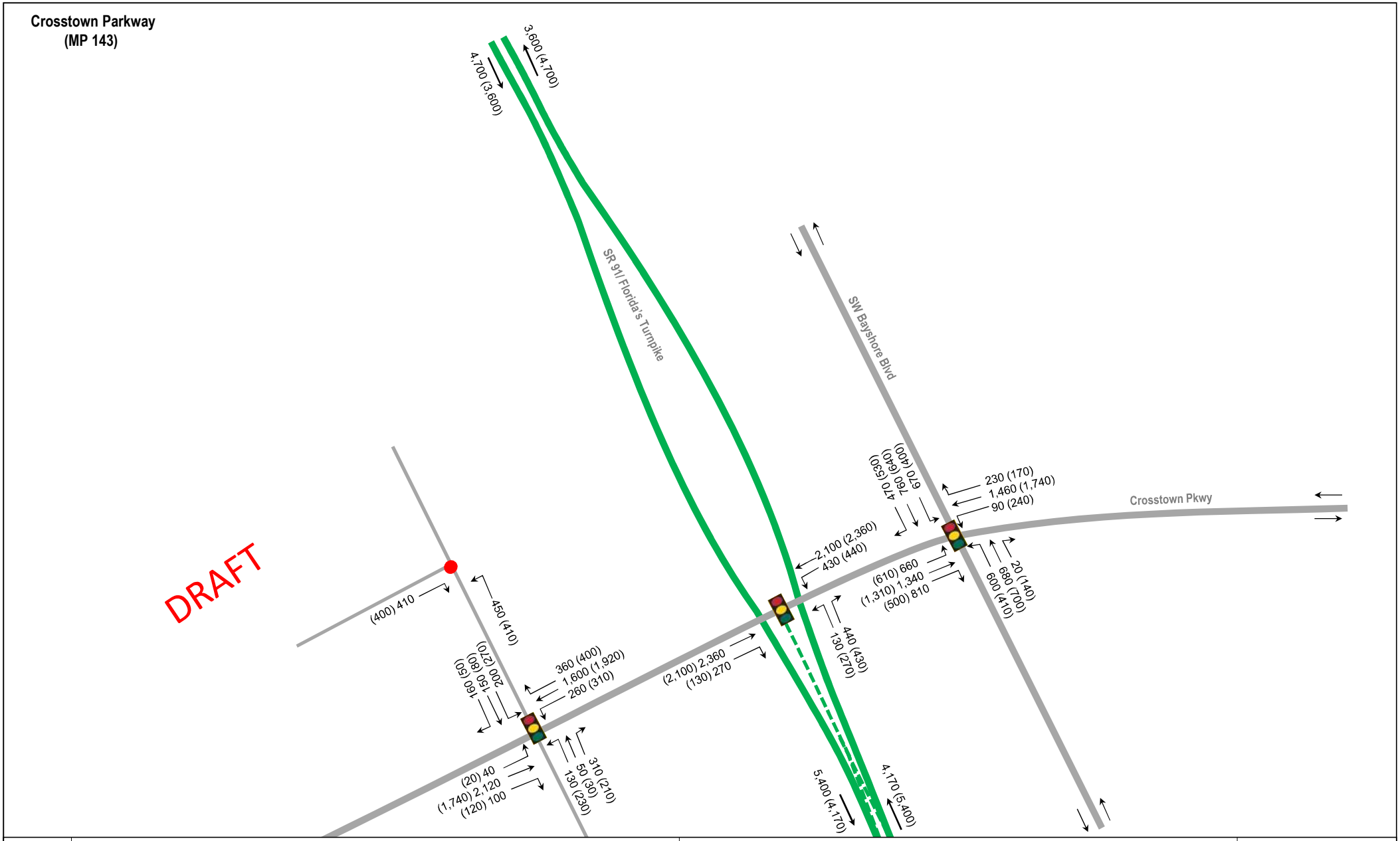
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 Lane Geometry	Figure E.3



FLORIDA'S TURNPIKE	Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 2045 DDHVs	Figure E.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 Lane Geometry	Figure E.5

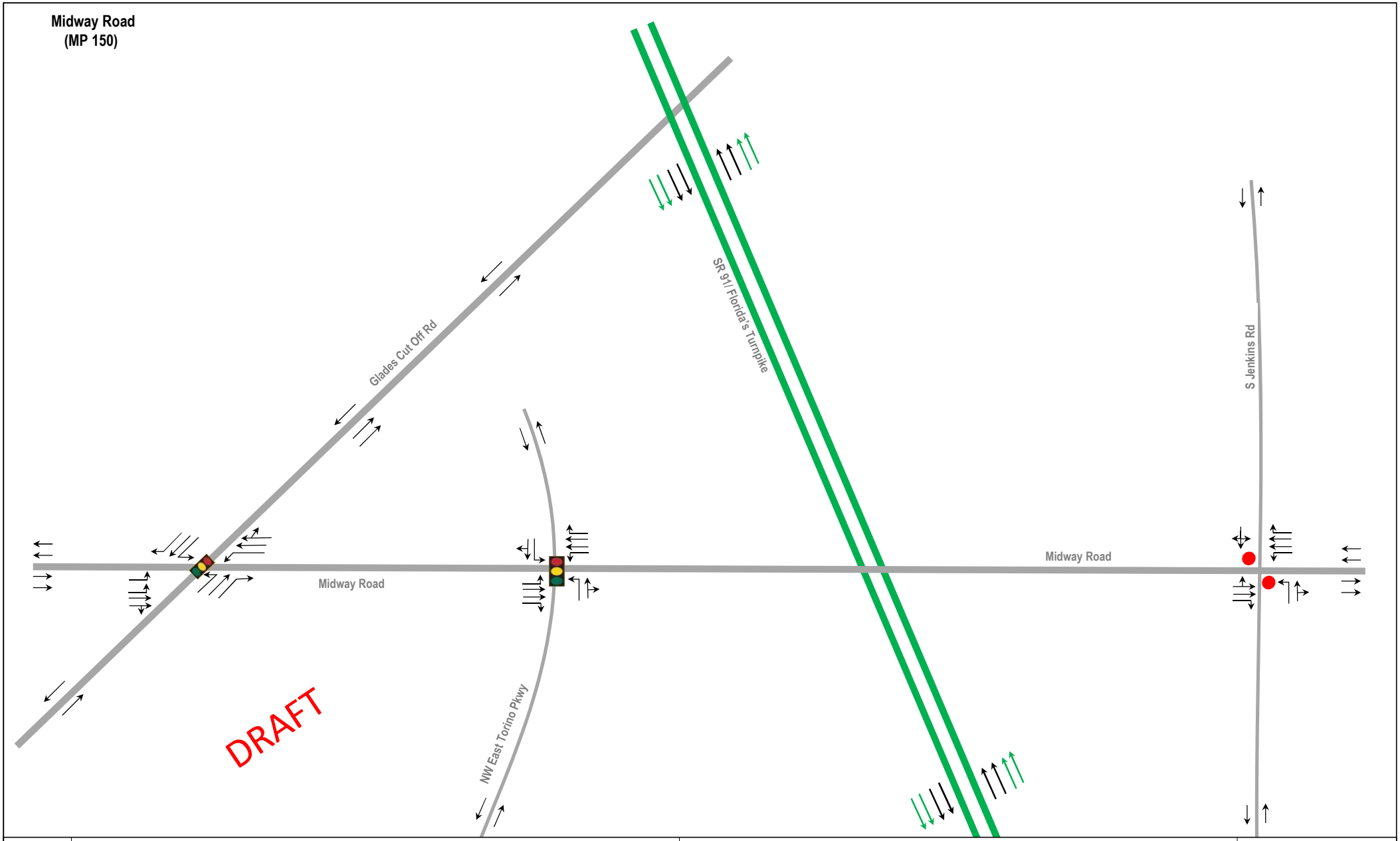


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 2045 DDHVs	Figure E.6

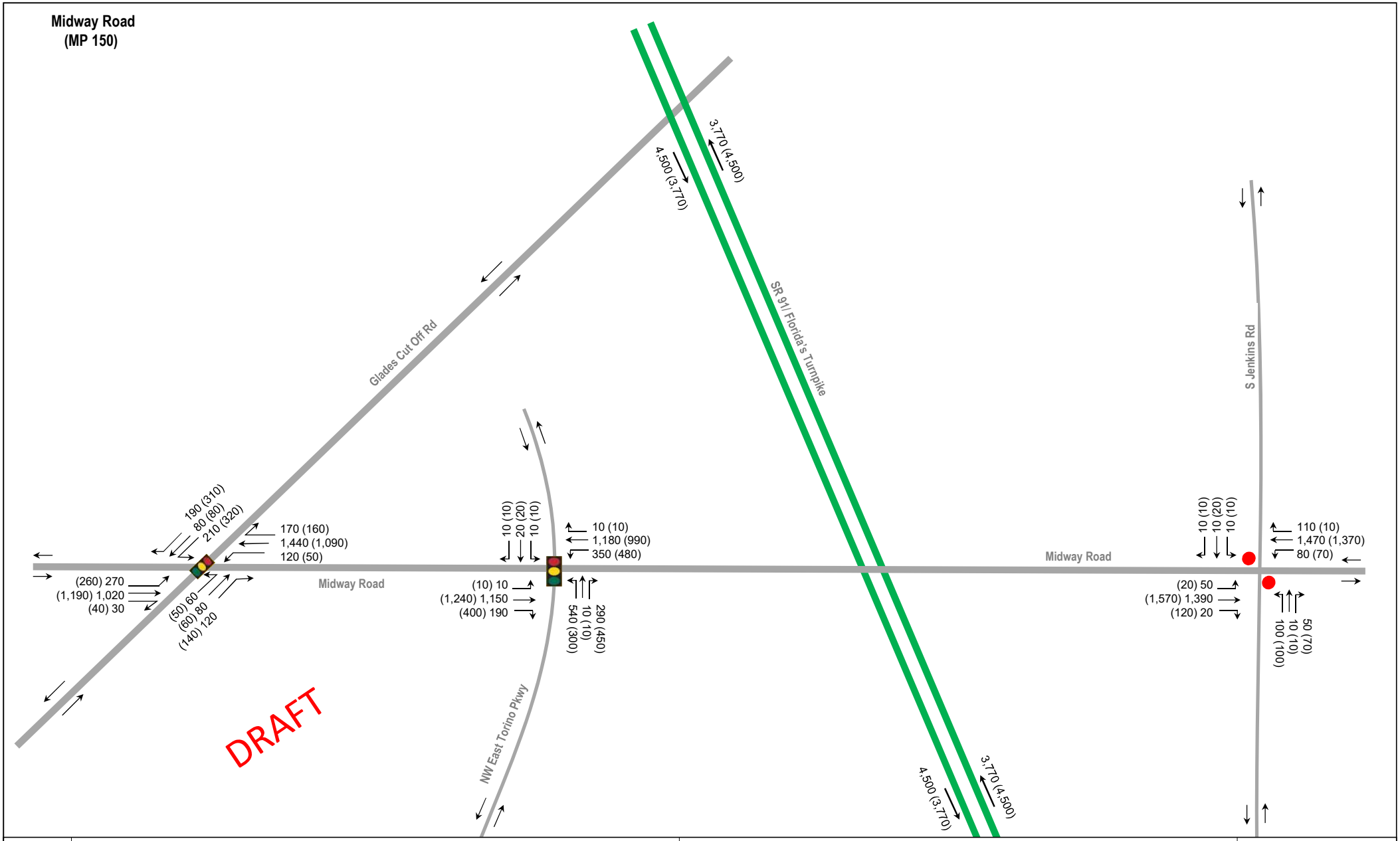
Attachment F

Midway Road

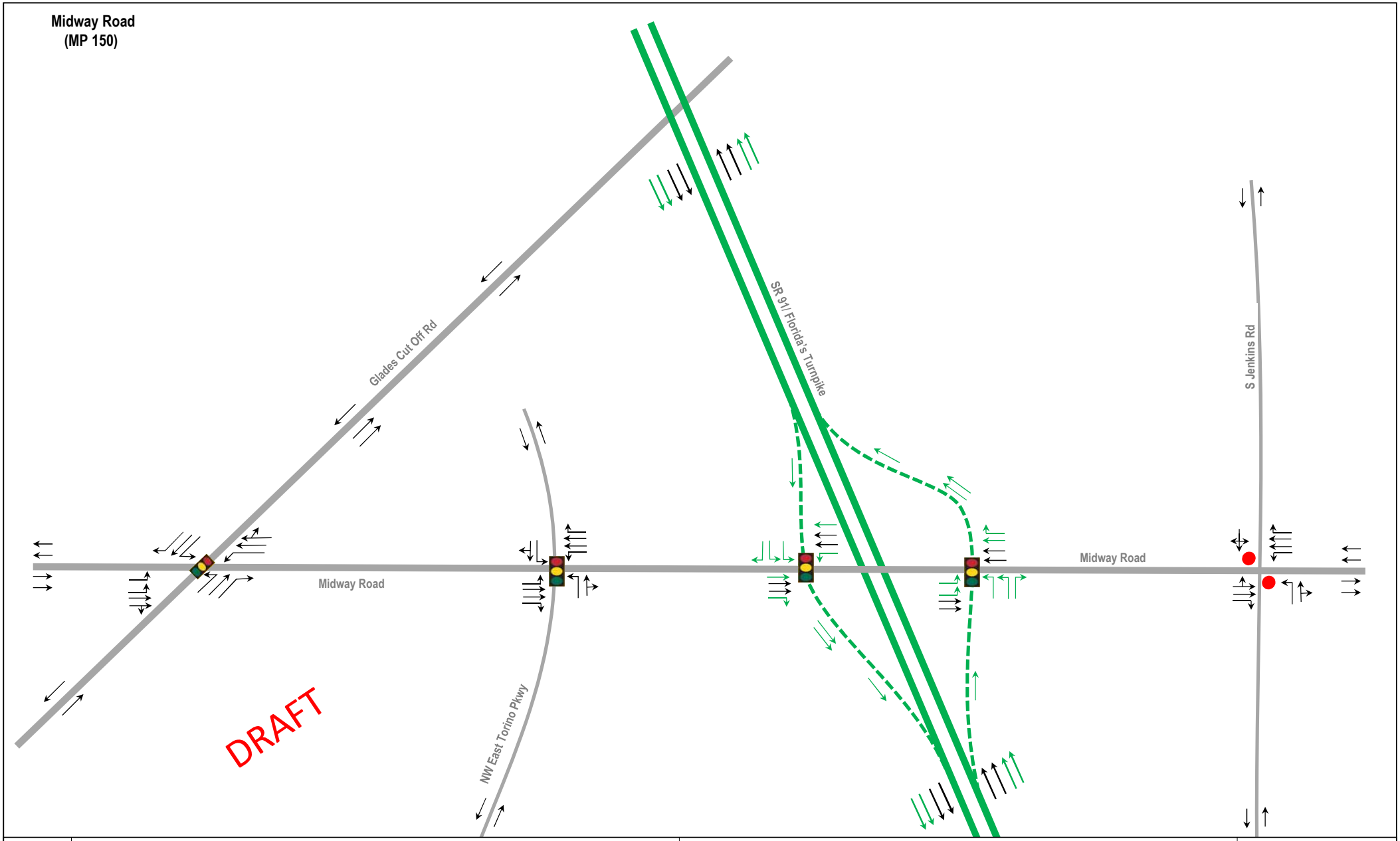
(MP 150)



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure F.1



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure F.2



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 Lane Geometry	Figure F.3

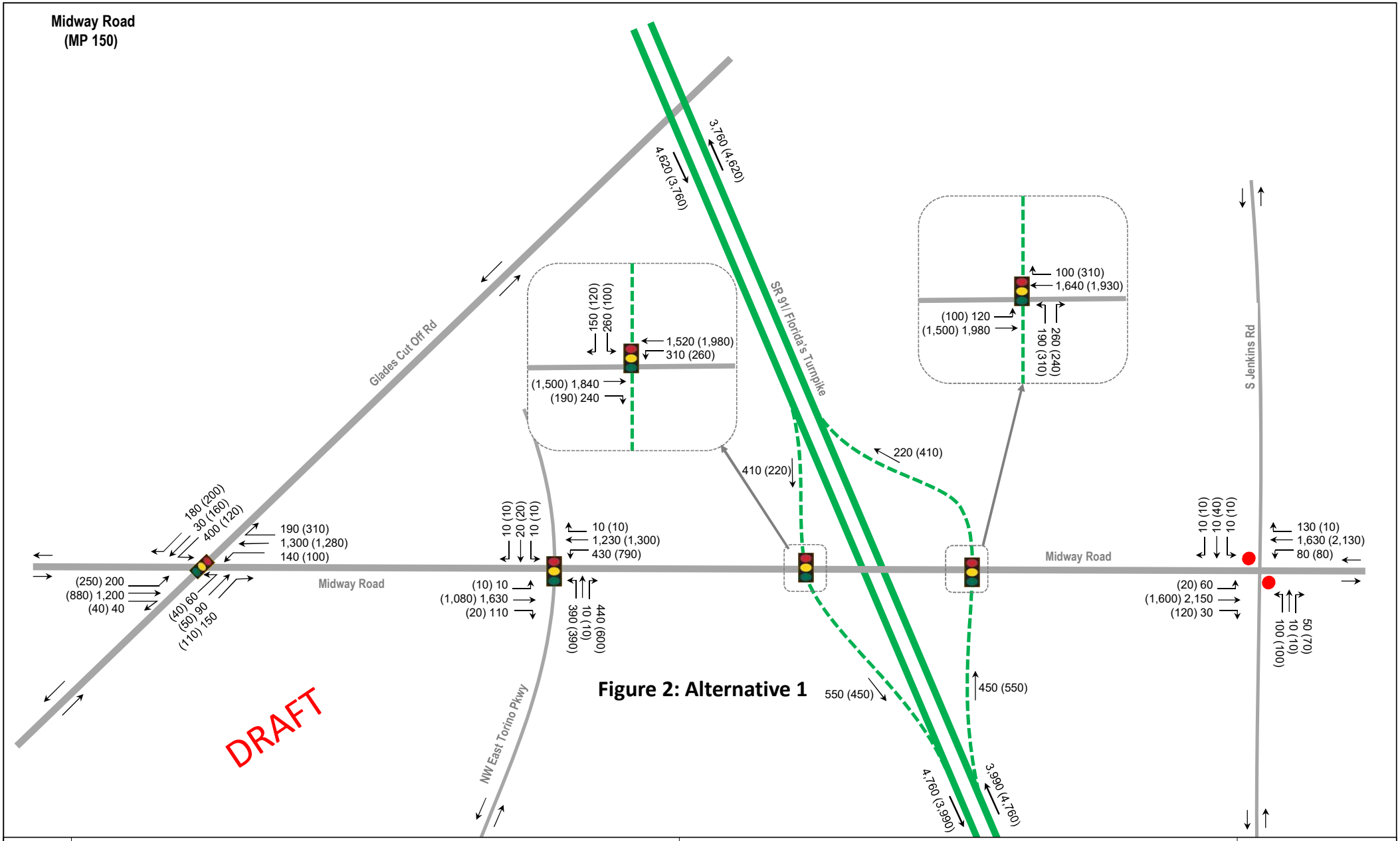
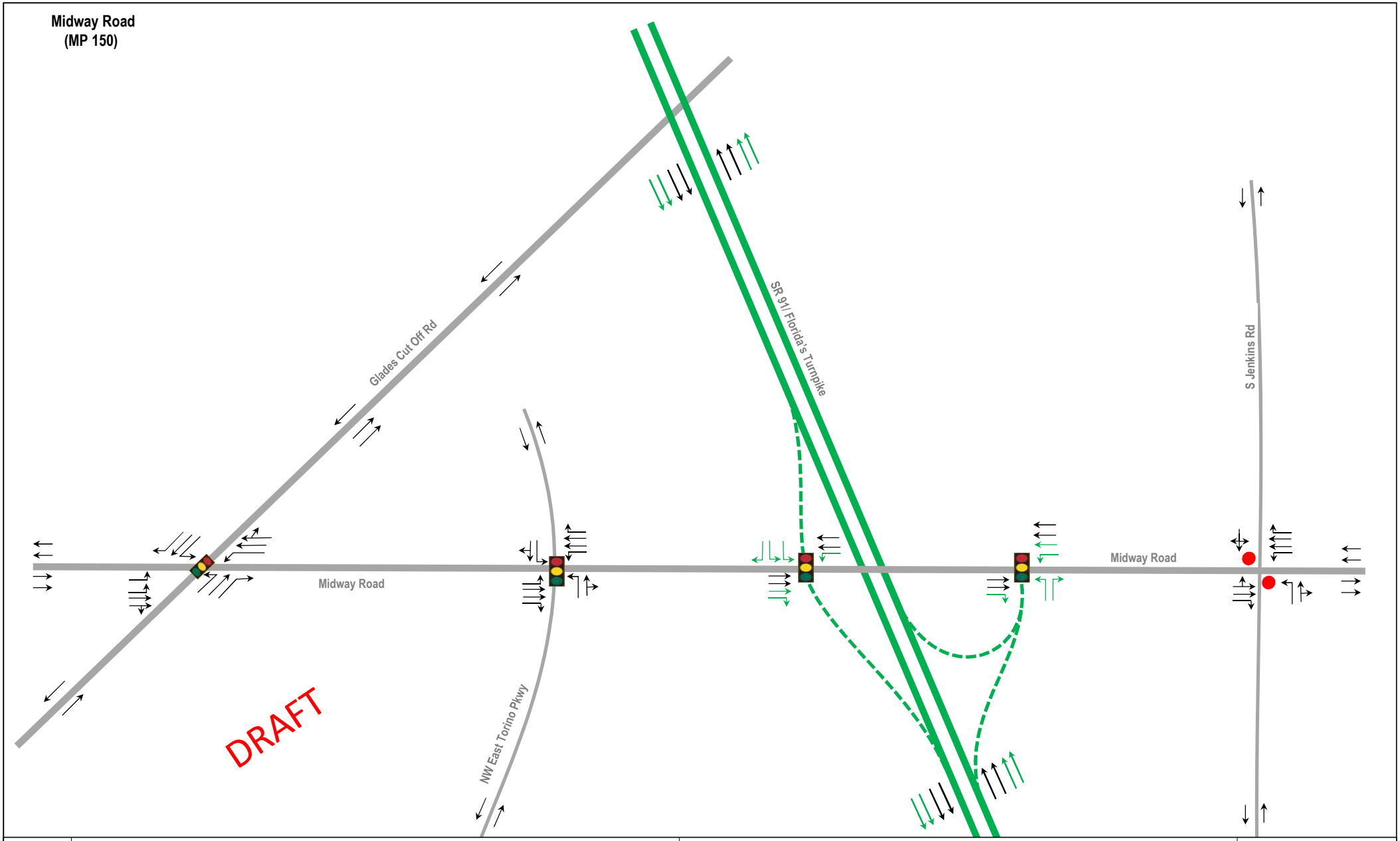
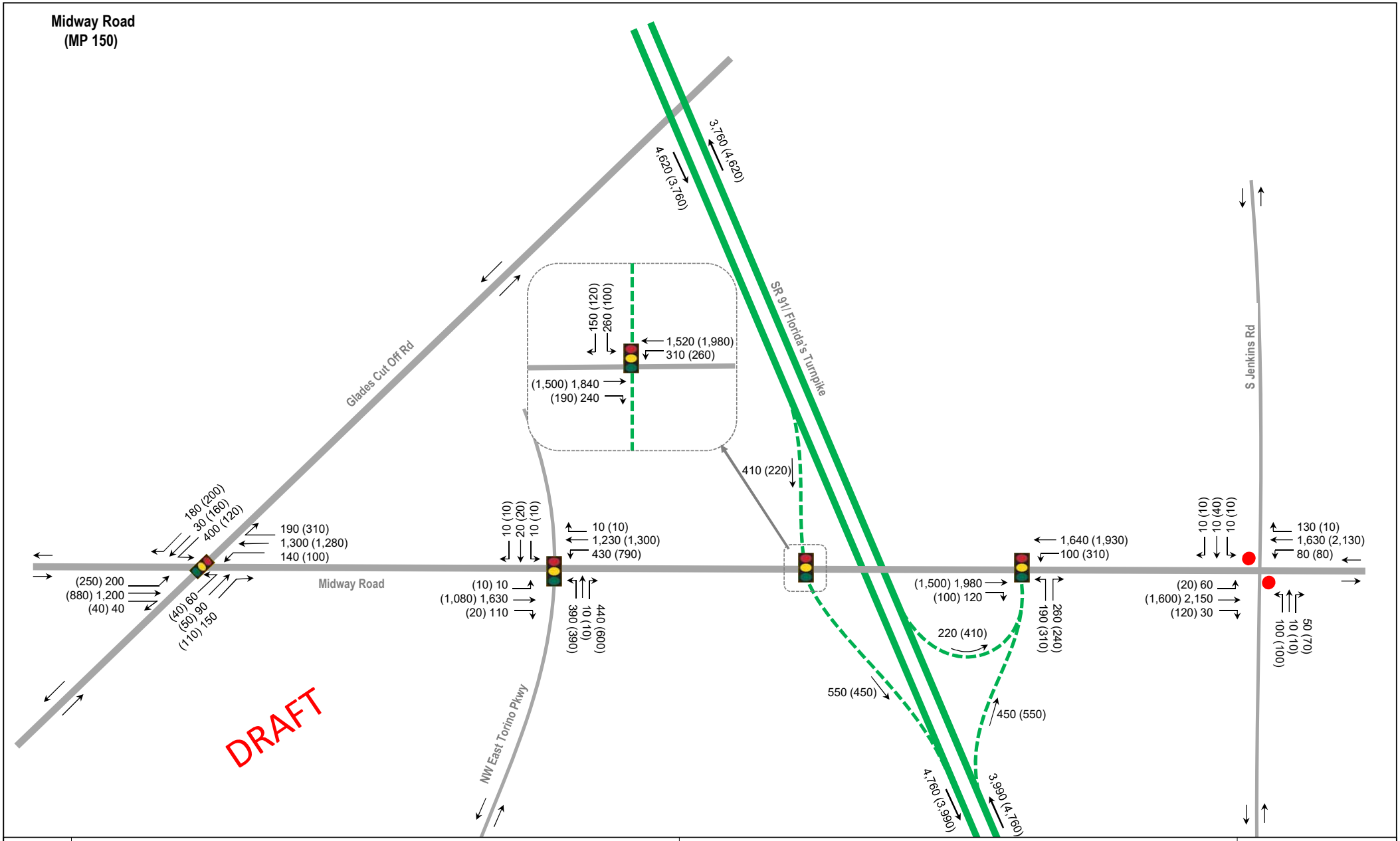


Figure 2: Alternative 1

FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**Alternative 1** **2045 DDHVs**	**Figure F.4**



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 Lane Geometry	Figure F.5

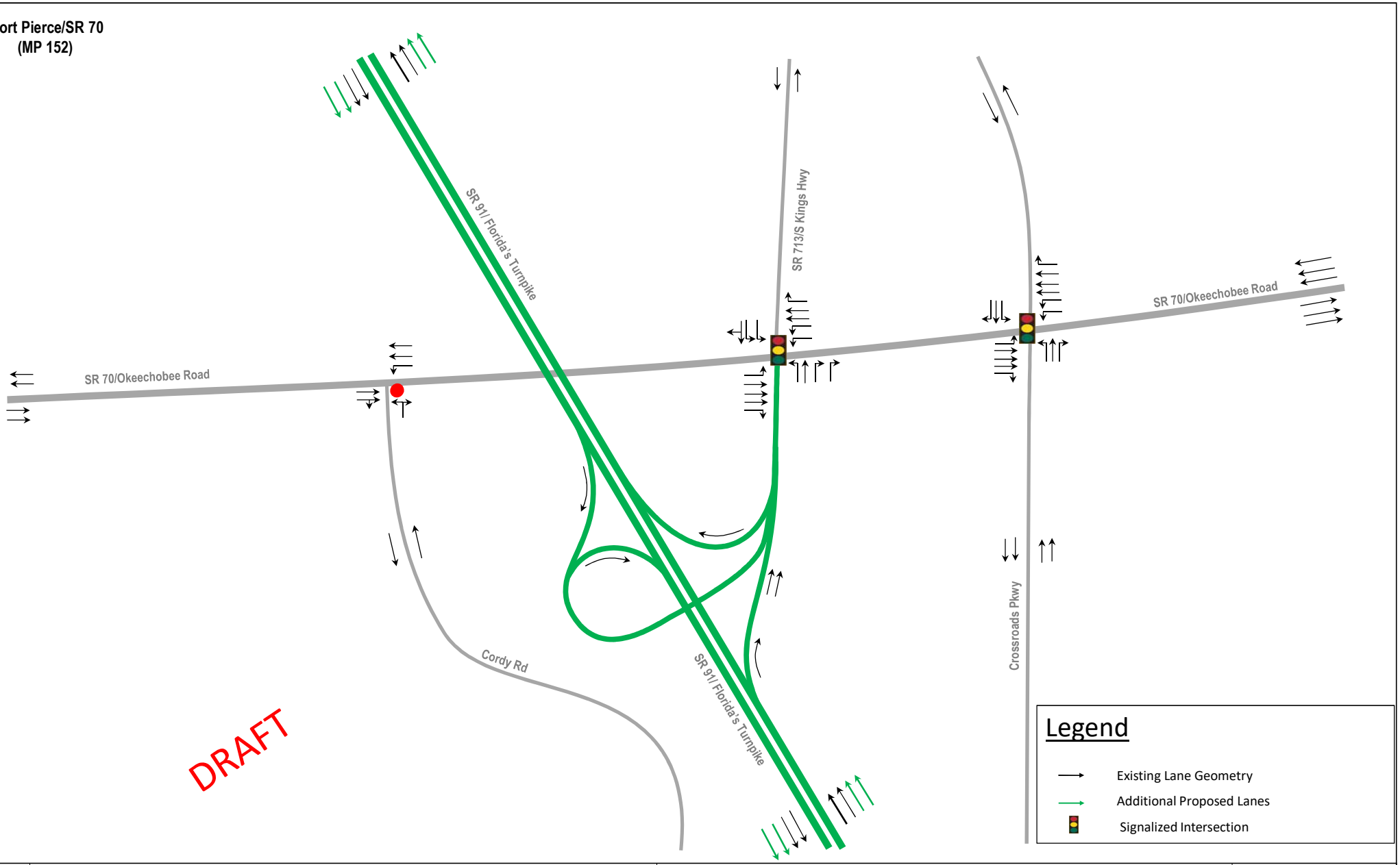


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 2045 DDHVs	Figure F.6

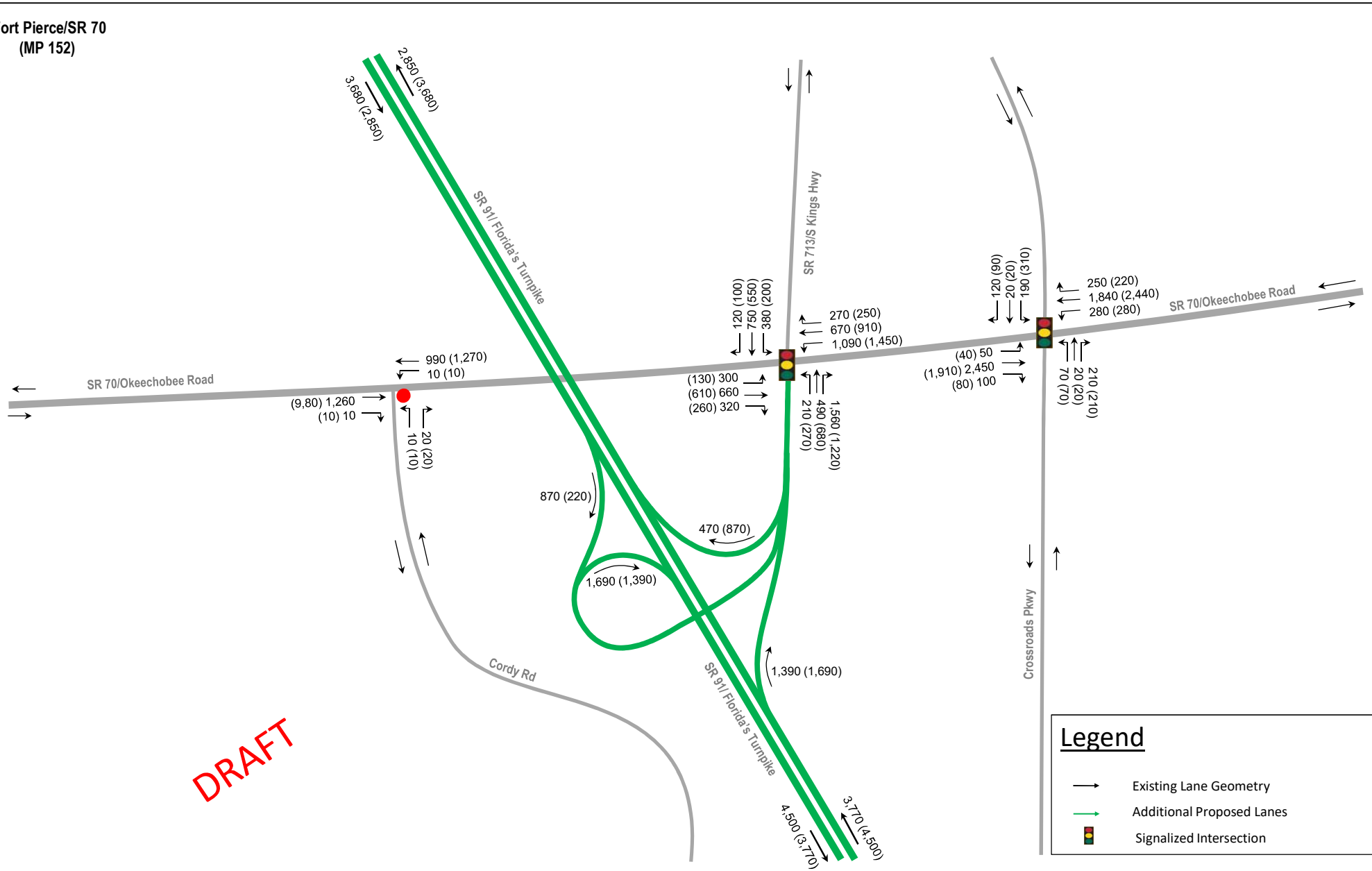
Attachement G

Fort Pierce (S.R. 70)

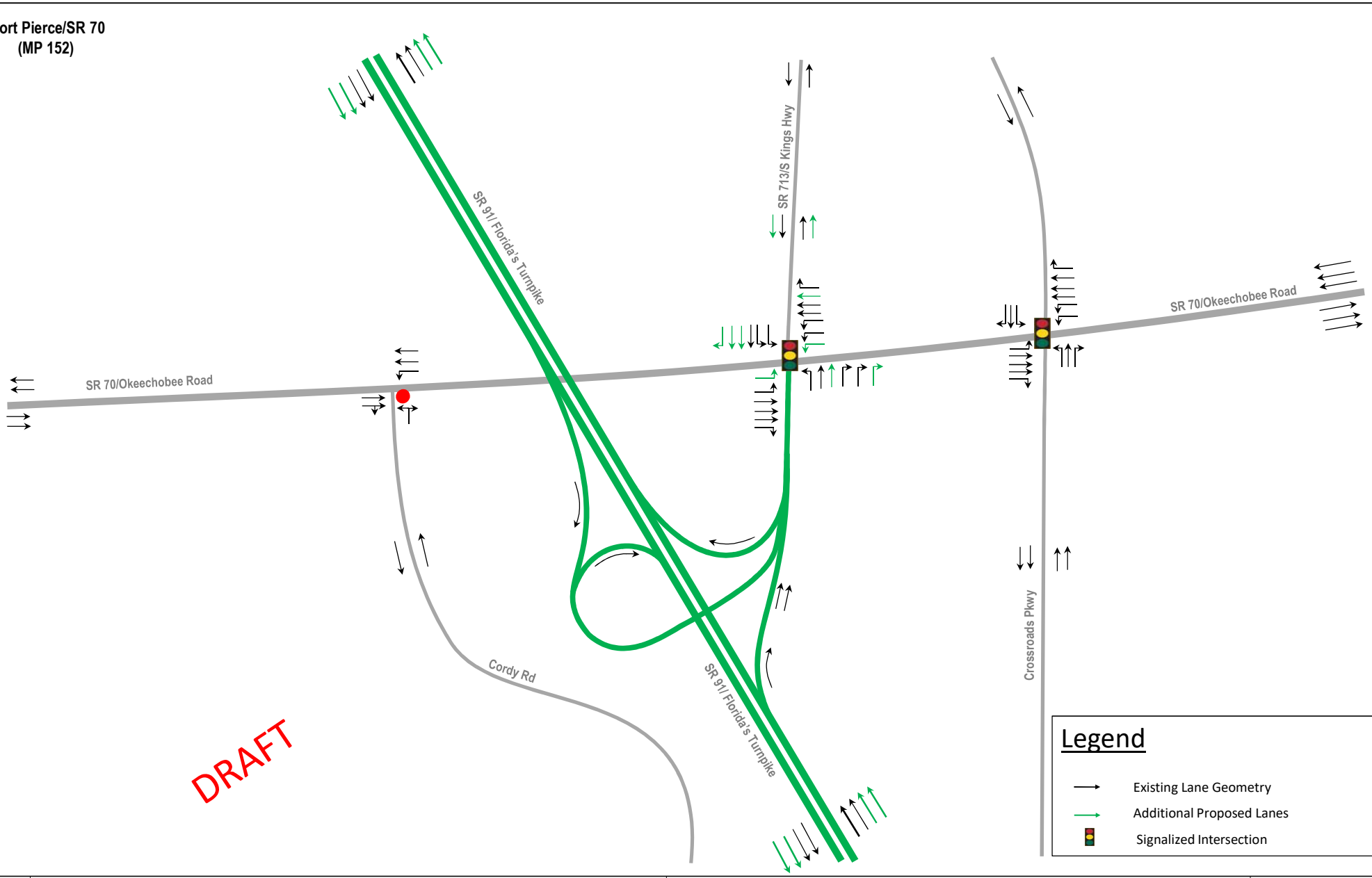
(MP 152)



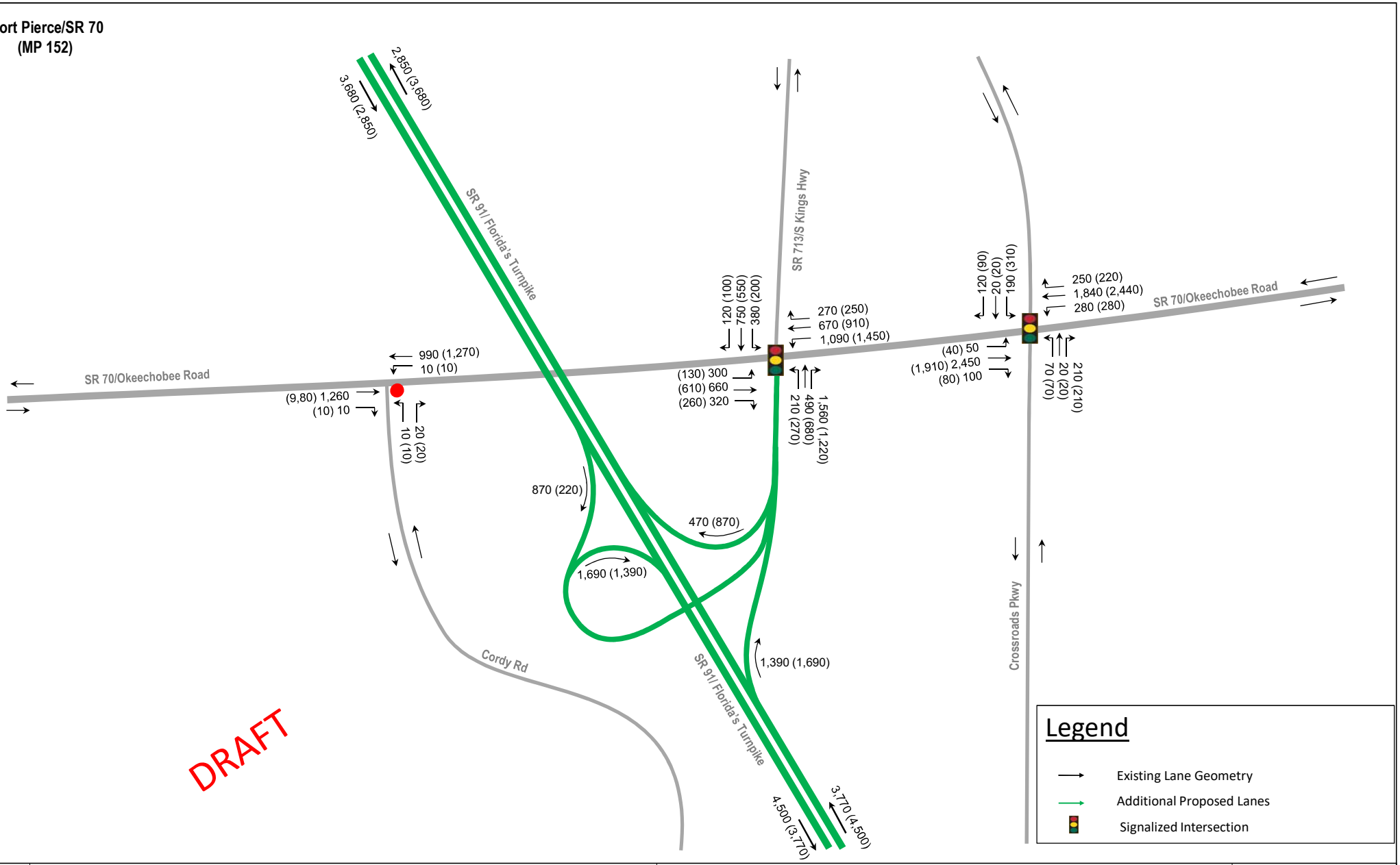
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure G.1



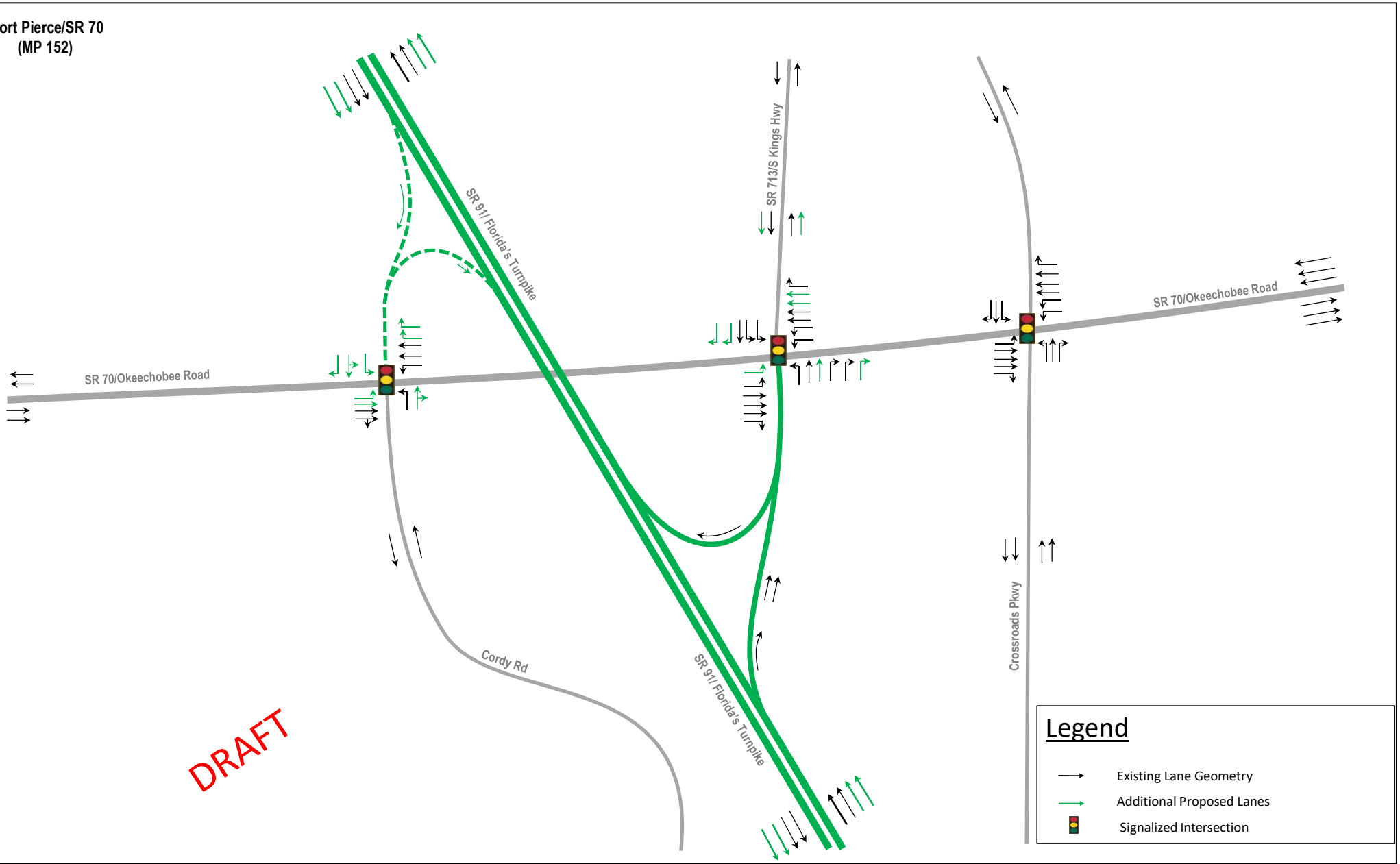
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure G.2



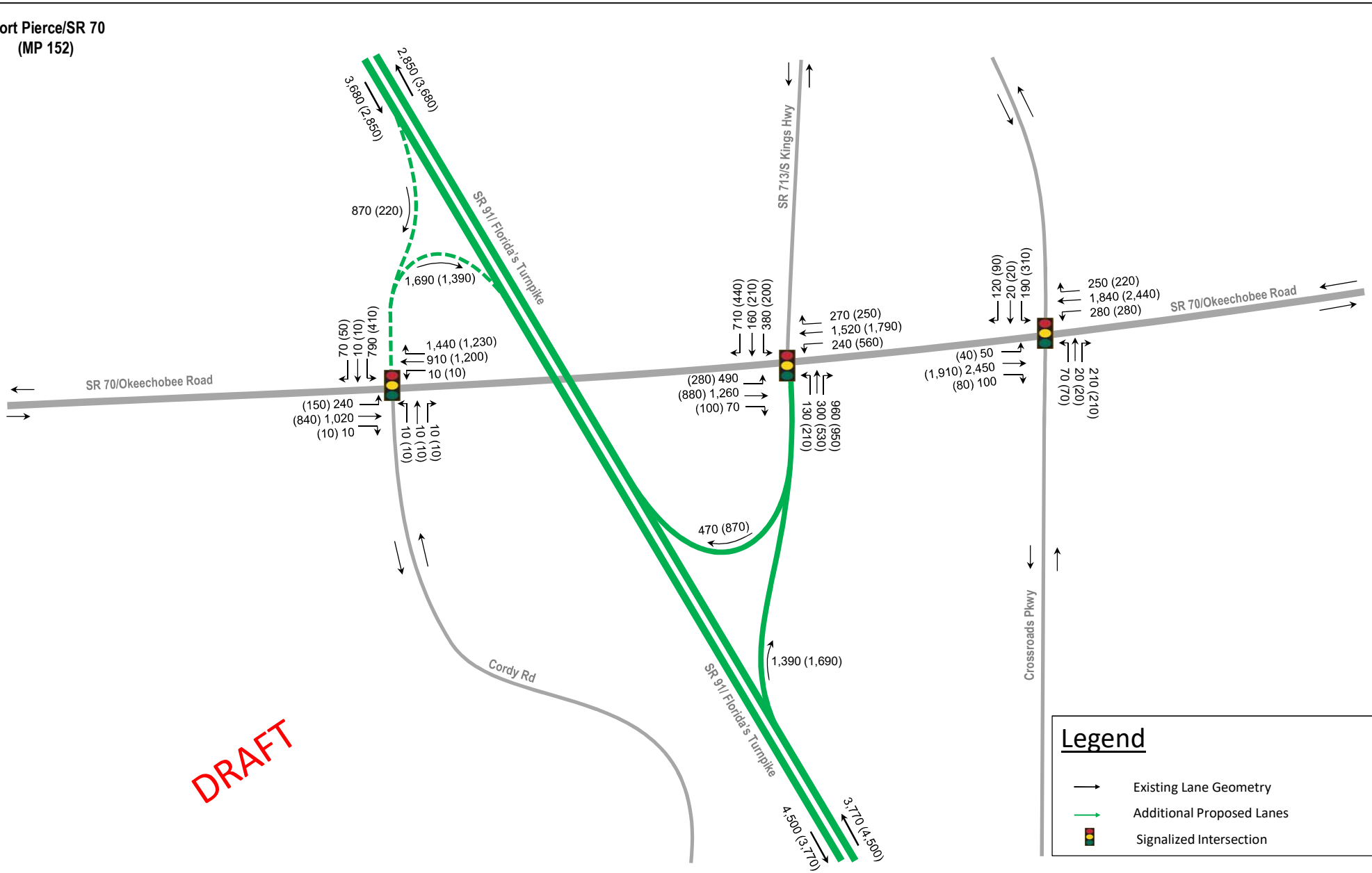
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 Lane Geometry	Figure G.3



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 2045 DDHVs	Figure G.4

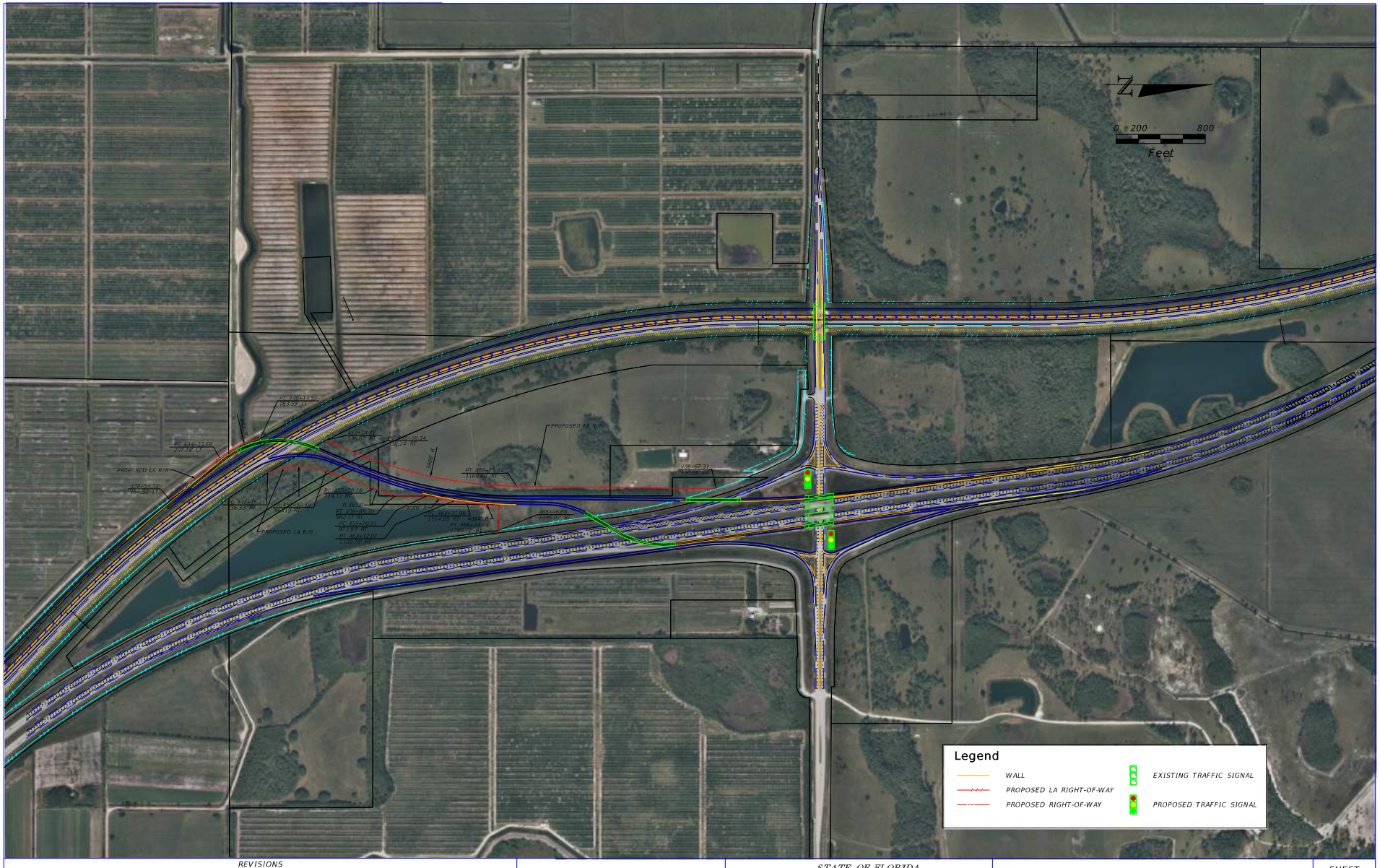


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 Lane Geometry	Figure G.5



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 2045 DDHVs	Figure G.6

Appendix D
Interchange Conceptual Design Alternatives



REVISIONS			
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

I-95 / SR 91
INTERCHANGE ALTERNATIVE 1

SHEET NO.

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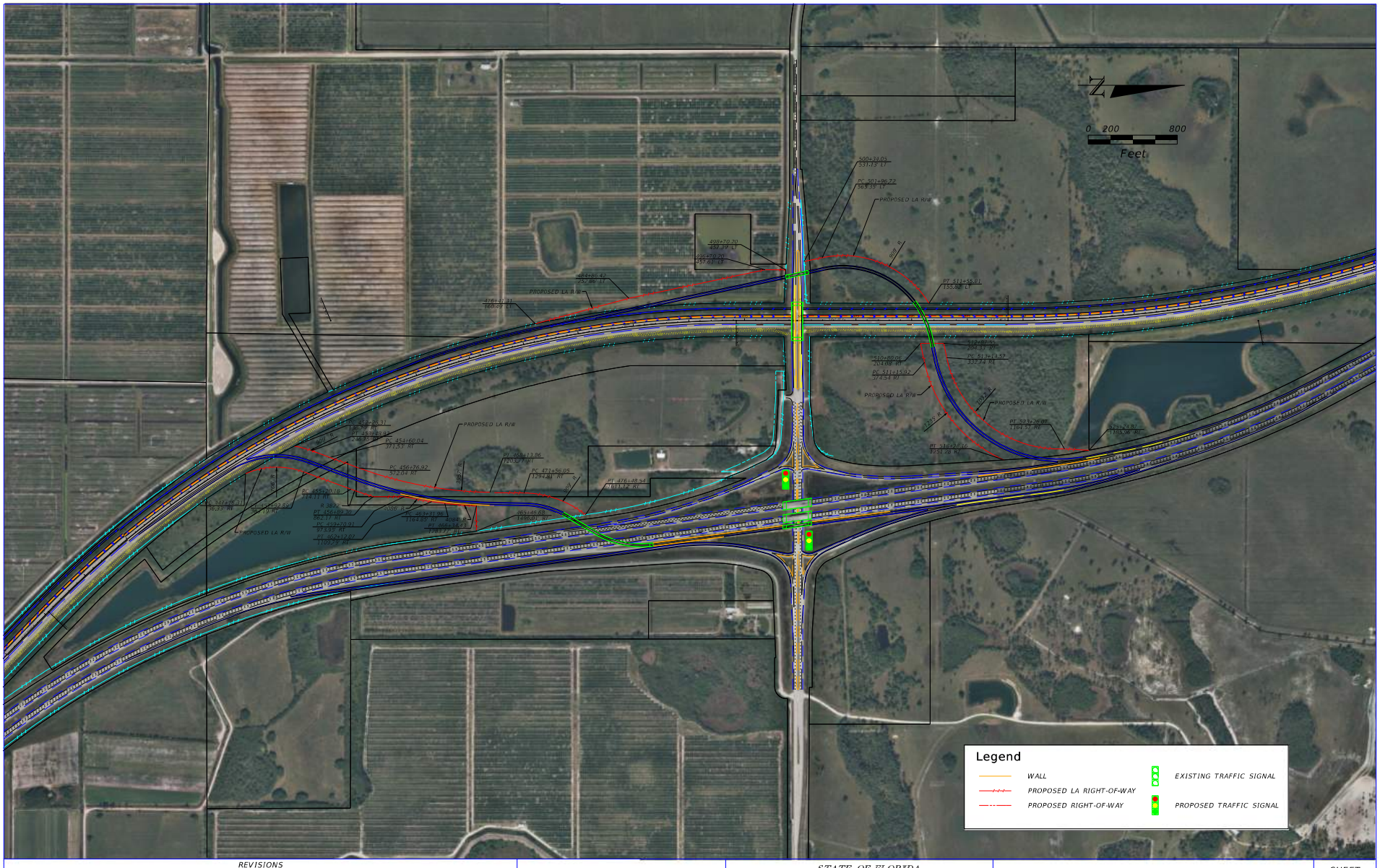

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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I-95 / SR 91
INTERCHANGE ALTERNATIVE 3

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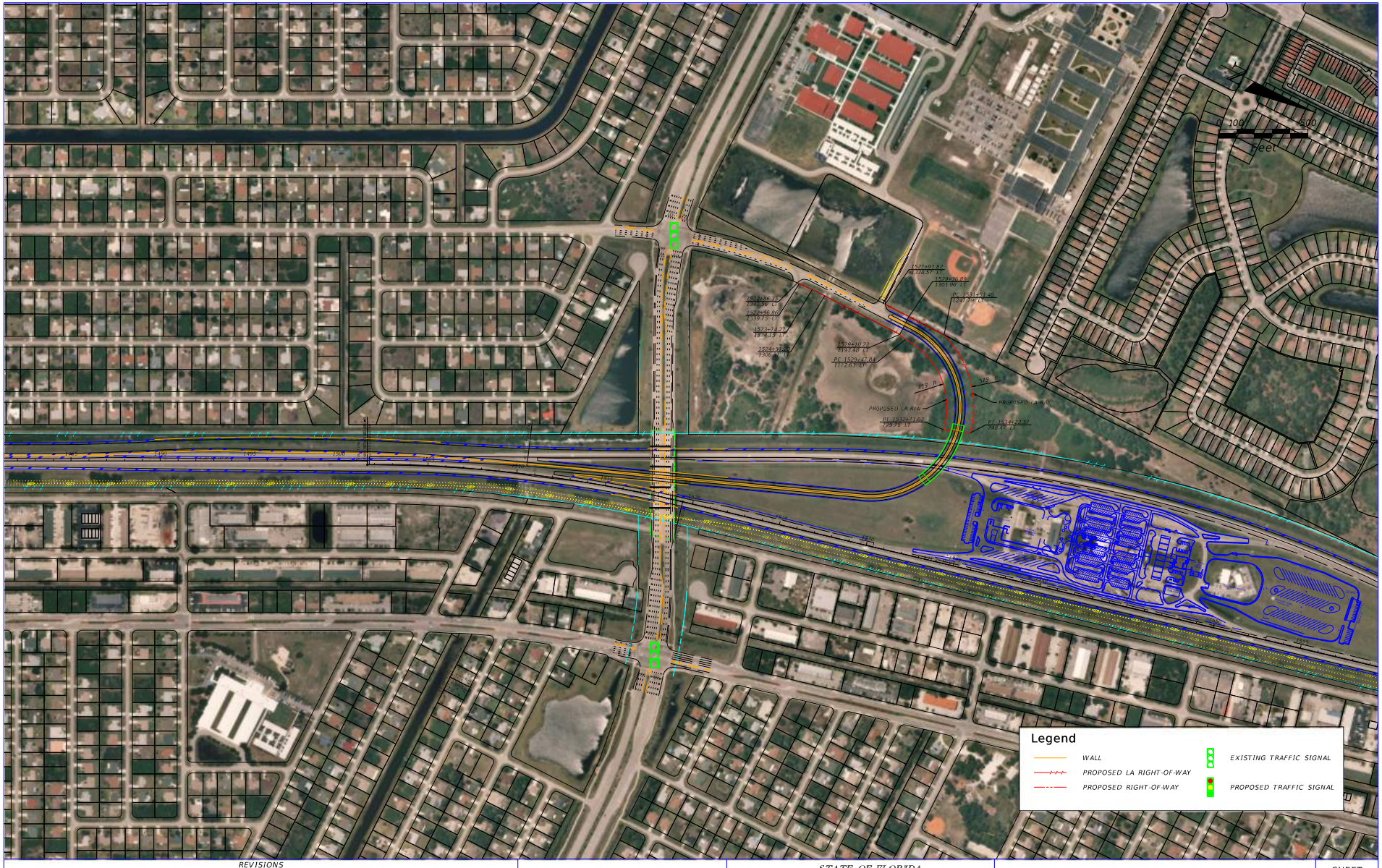

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CROSSTOWN PKWY INTERCHANGE ALTERNATIVE 3

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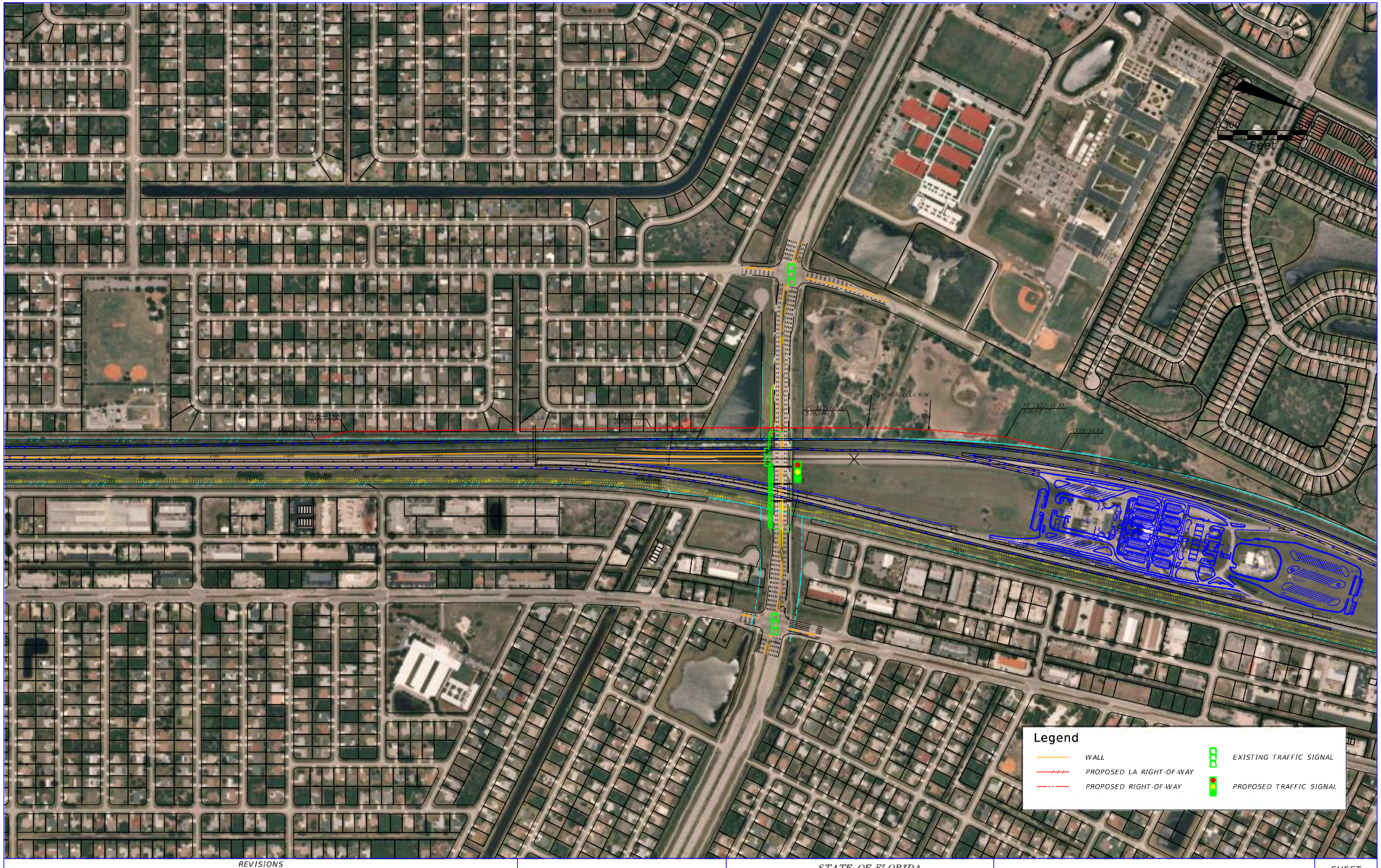

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CROSSTOWN PKWY INTERCHANGE ALTERNATIVE 4

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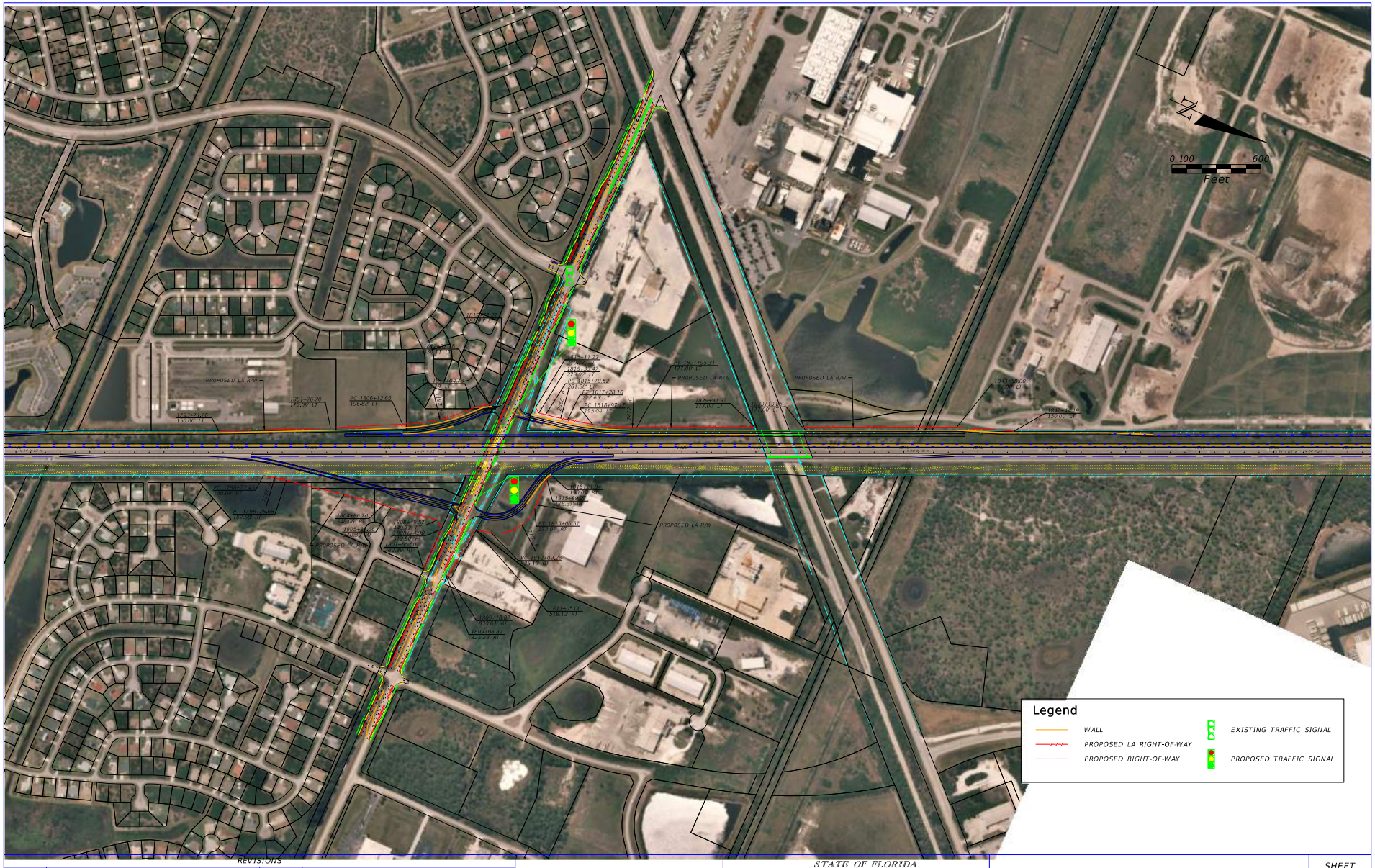

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

MIDWAY RD.
INTERCHANGE ALTERNATIVE 1

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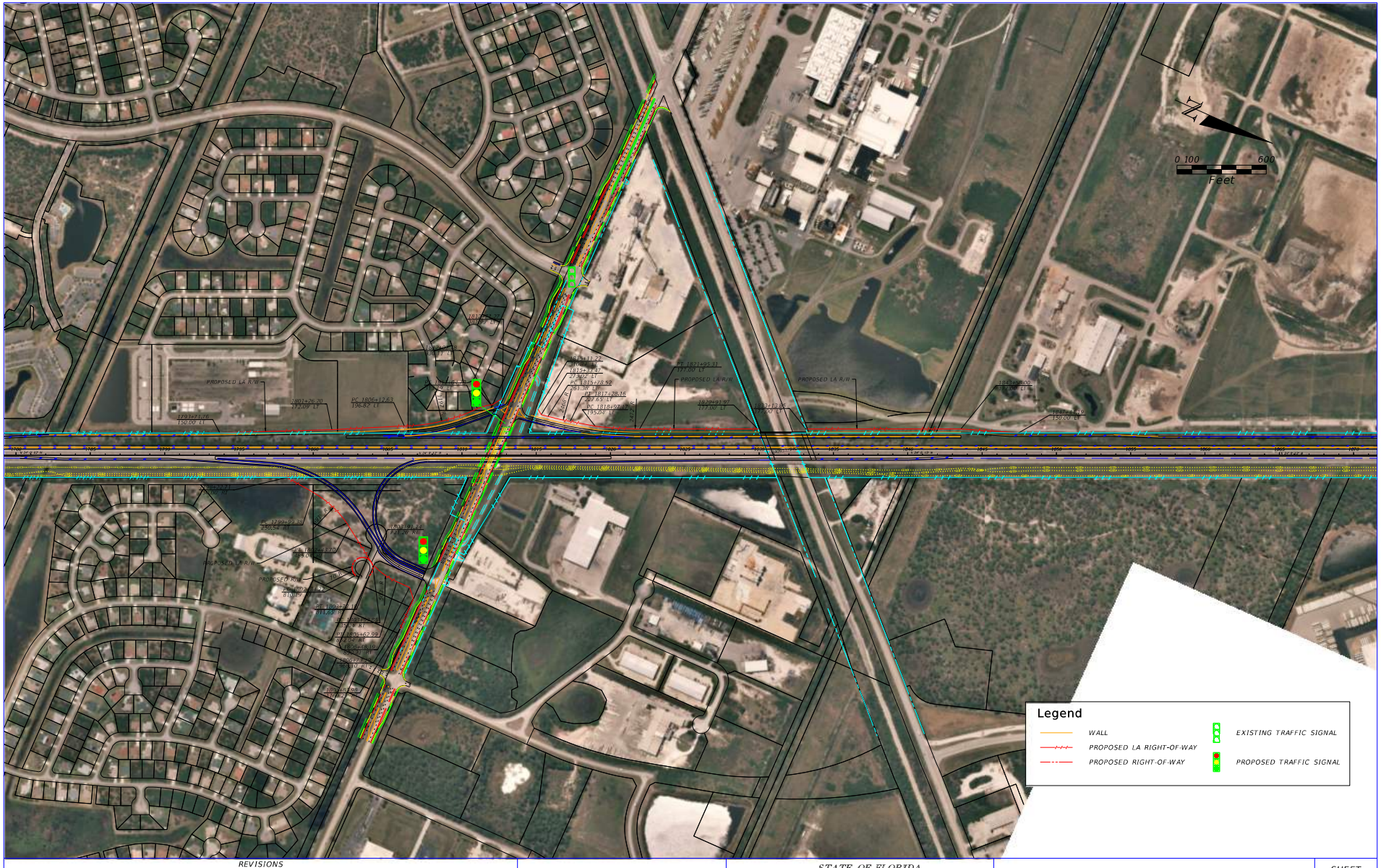

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

MIDWAY RD.
INTERCHANGE ALTERNATIVE 4

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Appendix E
Preliminary Interchange Alternatives Evaluation Matrix (Tier 3)

FTE PD&E / SR 91 PRELIMINARY INTERCHANGE ALTERNATIVES EVALUATION MATRIX

I-95 DIRECT CONNECTION near BRIDGE ROAD (MP 125.5)

	CATEGORY	DESIGN PARAMETERS	ALT. 1	ALT. 3
CRITERIA	ENGINEERING CONSIDERATIONS	Quality of Access Provided (Circuitous to Direct)	Direct access is provided	Direct access is provided
		Traffic Operations of Interchange Junctions (Low, Medium or High)	The I-95 SB off ramp to Turnpike SB on-ramp has flatter curves, resulting in smoother traffic operation (less speed reduction)	The I-95 SB off ramp to Turnpike SB on-ramp has sharper curves, resulting in more speed reductions
		Driver Expectancy / Weaving Issues / Ramp Backups	None is anticipated	None is anticipated
		MOT & Constructability Complexities (Low, Medium or High)	One structure crossing over the Turnpike, one structure crossing over SW Bridge Road and one structure crossing over the I-95 SB on-ramp; similar MOT and Constructability issues are expected	One structure crossing over the Turnpike and one structure crossing over SW Bridge Road; similar MOT and Constructability issues are expected
		Utilities Impacts (None, Low, Medium or High)	No major impacts are anticipated	Some utility impacts are anticipated
		Local Road Impacts or Traffic Patterns (None, Low, Medium or High)	N/A	N/A
		Overall Interchange Performance in relation to adjacent intersections & interchanges (Low, Medium or High)	No impacts to the adjacent intersections or interchanges are anticipated	No impacts to the adjacent intersections or interchanges are anticipated
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS	Floodplain Impacts (ac)	No areas within the "A" designated flood plains	No areas within the "A" designated flood plains
		Wetland Impacts (ac)	Approx. 1.7 acres of impacts to man-made channels (0.9 acres, mixed shrub (0.6 acre) and marsh 0.2 acres)	Approx. 2.1 acres of impacts to man-made channels (0.7 acres), mixed shrub (0.2 acre) and marsh (0.2 acres) and cypress (1.0 acre)
		Number of Potential Residential & Business Relocations	None is anticipated	None is anticipated
		Number of Potential Contamination Sites	(1) Adjacent Agricultural Row Crops	(1) On-Site Agricultural Row Crops
		Impacts to Parks & Conservation Areas (ac)	No impacts identified	No impacts identified
	COST CONSIDERATIONS	Construction Cost Estimates	$52,920,000	$48,250,000
		Right-of-Way Impacts (ac) / Number of Parcels Impacted	Most of area in between Turnpike & I-95, S. of Bridge Rd will have no impacts, and all area N. of Bridge Road has no impacts. No impacts to the two quadrants on the west side of Turnpike at Bridge Road. (20.1 ac. / 7 parcels; cost= $1,675,466)	Most of area between Turnpike & I-95, S. of Bridge Rd will have no impacts; however, will divide the open area N. of Bridge Road. Will also impact the two quadrants on west side of Turnpike at Bridge Road. (35.5 ac. / 7 parcels; cost= $3,579,342)
		Severity of Impacts to FGT (None, Low, Medium or High)	Similar minor impacts to FGT are anticipated (one at-grade ramp crossing and two bridge crossings that will span over FGT's corridor)	Similar minor impacts to FGT are anticipated (one at-grade ramp crossing and two bridge crossings that will span over FGT's corridor)
		Benefit-Cost Ratio	**5.40**	**5.90**

FTE PD&E / SR 91 PRELIMINARY INTERCHANGE ALTERNATIVES EVALUATION MATRIX

CROSSTOWN PARKWAY (MP 144.7)

	CATEGORY	DESIGN PARAMETERS	ALT. 3	ALT. 4
CRITERIA	ENGINEERING CONSIDERATIONS	Quality of Access Provided (Circuitous to Direct)	Access to Crosstown is provided through SW Cameo Blvd, which may not be a direct access, but will eliminate the need for a new signal on a bridge in between two closely spaced signals	Access is direct to Crosstown Parkway; however, a new signal is added on a bridge and in between two closely spaced signals which will have impacts on the Crosstown traffic
		Traffic Operations of Interchange Junctions (Low, Medium or High)	Ramp traffic has very long ramps that may be used as storage under extreme traffic conditions, and will minimize any impacts to the mainline	There are potentials where ramp traffic may queue back to the mainline due to shorter ramp lengths and create issues to the mainline traffic
		Driver Expectancy / Weaving Issues / Ramp Backups	Longer ramps are provided to avoid ramp backups on mainline	Ramp lengths are shorter and backup issues may be expected on mainline
		MOT & Constructability Complexities (Low, Medium or High)	A new structure spanning over the SB mainline is added and will have its MOT implications	Potential constructability issues may be expected when tying the new ramp to the existing bridge with a 90-degree connection
		Utilities Impacts (None, Low, Medium or High)	No major impacts are anticipated	No major impacts are anticipated
		Local Road Impacts or Traffic Patterns (None, Low, Medium or High)	Will avoid a new signal at Crosstown Pkwy. and its direct impact on a major cross road	Will add a new signal at Crosstown which will have direct impacts on a major cross road
		Overall Interchange Performance in relation to adjacent intersections & interchanges (Low, Medium or High)	Will maintain the existing signals and traffic operation on Crosstown Parkway, and no further impacts to the adjacent interchanges are expected	Will impact the existing signal and traffic operation on Crosstown Parkway and will further degrade the LOS of the SW Bayshore/Crosstown intersection to an LOS of "F". However, no further impacts to the adjacent interchanges are expected
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS	Floodplain Impacts (ac)	No areas within the "A" designated flood zone	No areas within the "A" designated flood zone
		Wetland Impacts (ac)	Approx. 0.1 acres of impacts to man-made drainage channels	Approx. 0.1 acres of impacts to man-made drainage channels
		Number of Potential Residential & Business Relocations	None is anticipated	5 (Residential) and 1 (Business)
		Number of Potential Contamination Sites	(1) Adjacent Port St. Lucie Service Plaza (nearby groundwater plume-active remediation)	(1) Adjacent Port St. Lucie Service Plaza (nearby groundwater plume)
		Impacts to Parks & Conservation Areas (ac)	Ramp in NW quadrant avoids area identified for future skate park	Proposed LA ROW in NW quadrant takes land along side of parcels identified as future recreational facilities/skate park
	COST CONSIDERATIONS	Construction Cost Estimates	$21,360,000	$19,920,000
		Right-of-Way Impacts (ac) / Number of Parcels Impacted	2.40 (ac) / 1 Parcel At cost = $1,222,789	7.23 (ac) / 30 Parcels At cost = $7,051,741
		Severity of Impacts to FGT (None, Low, Medium or High)	Impacts are minimized	Impacts are minimized
		Benefit-Cost Ratio	**2.00**	**2.40**

FTE PD&E / SR 91 PRELIMINARY INTERCHANGE ALTERNATIVES EVALUATION MATRIX

W MIDWAY ROAD (MP 150.4)

	CATEGORY	DESIGN PARAMETERS	ALT. 1	ALT. 4
CRITERIA	ENGINEERING CONSIDERATIONS	Quality of Access Provided (Circuitous to Direct)	Generally, no access implications, except for the relatively short distance between the ramps intersections which could impact timely access	Generally, no access implications
		Traffic Operations of Interchange Junctions (Low, Medium or High)	Traffic operation is closely similar. The short distance between the two ramps intersections has a potential for operational issues	Traffic operation is closely similar
		Driver Expectancy / Weaving Issues / Ramp Backups	Ramp back ups may result in peak hours due to the close proximity of the two ramp terminal intersections	No issues are noted
		MOT & Constructability Complexities (Low, Medium or High)	No MOT or Constructability issues are anticipated, however, construction of NB on-ramp will eliminate existing wet ponds	No MOT or Constructability issues are anticipated
		Utilities Impacts (None, Low, Medium or High)	Some, but not major impacts, are anticipated	Some, but not major impacts, are anticipated
		Local Road Impacts or Traffic Patterns (None, Low, Medium or High)	Potential impacts to Midway might result from the close proximity of the two ramp terminal junctions	No local road or traffic pattern impacts are anticipated
		Overall Interchange Performance in relation to adjacent intersections & interchanges (Low, Medium or High)	Effects on the adjacent intersections and interchanges are expected to be similar	Effects on the adjacent intersections and interchanges are expected to be similar
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS	Floodplain Impacts (ac)	No areas within the "A" designated flood zone	No areas within the "A" designated flood zone
		Wetland Impacts (ac)	Approx. 6.9 acres of impacts to man-made drainage channels (6.5 acres) and man-made ponds (0.4 acres)	Approx. 1.7 acres of impacts to man-made drainage channels
		Number of Potential Residential & Business Relocations	None is anticipated	None is anticipated
		Number of Potential Contamination Sites	(1) Adjacent CEMEX W. Ft. Pierce Ready-Mix & Block (2) Onsite Railroad Crossing (3) Adjacent St. Lucie County Glades Road Landfill/St. Lucie Co Bailing and Recycling Facility	(1) Adjacent CEMEX W. Ft. Pierce Ready-Mix & Block (2) Onsite Railroad Crossing (3) Adjacent St. Lucie County Glades Road Landfill/St. Lucie Co Bailing and Recycling Facility
		Impacts to Parks & Conservation Areas (ac)	Ramps in SW quadrant require small amount of ROW from parcels identified as future park.	Ramps in SW quadrant require small amount of ROW from parcels identified as future park.
	COST CONSIDERATIONS	Construction Cost Estimates	$25,890,000	$28,070,000
		Right-of-Way Impacts (ac) / Number of Parcels Impacted	11.6 ac. / 16 Parcels At cost = $5,147,557	15.1 ac. / 18 Parcels At cost = $6,517,211
		Severity of Impacts to FGT (None, Low, Medium or High)	Two at-grade crossings for the ramps	Two at-grade crossings for the ramps
		Benefit-Cost Ratio	**0.20**	**0.20**

APPENDIX E

Recommendation of Preferred Alternative Memorandum

Recommendation of Preferred Alternative Memorandum

Florida's Turnpike Enterprise

Florida's Turnpike (SR 91) Widening PD&E Study from Jupiter (Indiantown Road/SR 706) to Ft. Pierce (Okeechobee Road/SR 70) (MP 117 to 153.7)

Palm Beach, Martin and St. Lucie Counties, Florida

Financial Project No. 423374-1-22-01

February 2021

TABLE OF CONTENTS

Section **Page**

1.0 INTRODUCTION 1-1

1.1 Project Description 1-1

1.2 Purpose and Need 1-3

2.0 RECOMMENDATION OF PREFERRED ALTERNATIVE 2-1

2.1 Preferred Mainline Alternative 2-1

2.2 Evaluation of Proposed Interchange Alternatives 2-2

2.3 Recommended Preferred Interchange Alternatives 2-4

2.3.1 SW Martin Highway / SR 714 (Reconfiguration of Existing Interchange) 2-4

2.3.1.1 Alternative 7B 2-4

2.3.1.2 Alternative 7S 2-5

2.3.1.3 Comparative Analysis 2-6

2.3.1.4 Recommendation 2-6

2.3.2 SE Becker Road (Reconfiguration of Existing Interchange) 2-6

2.3.2.1 Alternative 1 2-6

2.3.2.2 Alternative 3 2-7

2.3.2.3 Comparative Analysis 2-7

2.3.2.4 Recommendation 2-8

2.3.3 SW Port St. Lucie Boulevard (Reconfiguration of Existing Interchange) 2-8

2.3.3.1 Alternative 1 2-8

2.3.3.2 Alternative 2 2-8

2.3.3.3 Comparative Analysis 2-9

2.3.3.4 Recommendation 2-10

2.3.4 Crosstown Parkway (New Partial Interchange) 2-10

2.3.4.1 Alternative 3 2-10

2.3.4.2 Alternative 4 2-10

2.3.4.3 Comparative Analysis 2-10

2.3.4.4 Recommendation 2-11

2.3.5 W Midway Road (New Full Interchange) 2-11

2.3.5.1 Alternative 1 2-11

2.3.5.2 Alternative 4 2-12

2.3.5.3 Comparative Analysis 2-12

2.3.5.4 Recommendation 2-13

2.3.6 Okeechobee Road (SR 70) (Reconfiguration of Existing Interchange) 2-13

2.3.6.1 Alternative 1 2-13

2.3.6.2 Alternative 4 2-14
2.3.6.3 Comparative Analysis 2-14
2.3.6.4 Recommendation 2-14
2.4 Summary 2-15

List of Figures

Figure **Page**

Figure 1-1 Project Location Map 1-2
Figure 2-1 Existing Roadway Typical Section 2-1
Figure 2-2 Preferred Ultimate Mainline Roadway Typical Section 2-2
Figure 2-3 Proposed Interchange Locations 2-3
Figure 2-4 Preferred Ultimate Mainline Roadway Typical Section 2-15

List of Tables

Table **Page**

Table 2-1 Preferred Interchange Alternatives 2-16

List of Appendices

Appendix A Interchange Conceptual Design Alternatives

Appendix B Preliminary Interchange Alternatives Evaluation Matrices

Appendix C Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation

Appendix D St Lucie County Resolution 20-267 & Letters of Support for Midway Road Interchange Alternative 1

1.0
INTRODUCTION

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. The project limits extend from north of Indiantown Road (SR 706) at Milepost (MP) 117 to north of Okeechobee Road (SR 70) at MP 153.7, a distance of 36.7 miles. Refer to **Figure 1-1** – Project Location Map.

1.1 Project Description

The project consists of the widening of SR 91 from four to eight lanes by adding two general toll lanes in each direction. Currently, SR 91 is a four (4) lane limited access toll facility. Numerous bridge structures are being evaluated for widening or reconstruction along with the roadway. The project corridor includes crossings of the Loxahatchee River and St. Lucie Canal.

Reconfiguration of existing interchanges and proposed new interchange access locations were evaluated as part of the PD&E study. The existing interchange at Indiantown Road (SR 706) at MP 116 is not included in this study. The existing interchange of SR 91 and SW Martin Highway (SR 714) at MP 133 is the only exit within Martin County. SR 91 has two existing interchanges in Port St. Lucie in St. Lucie County (one at SE Becker Road at MP 138 and the other at SW Port St. Lucie Boulevard (SR 716) at MP 142. The Port St. Lucie/Fort Pierce Service Plaza is at MP 144. The northernmost existing interchange within the project limits is at Okeechobee Road (SR 70) at MP 152 near Fort Pierce in St. Lucie County.

The proposed new interchange access locations are at Crosstown Parkway (MP 145) and W Midway Road (MP 150).

Figure 1-1
Project Location Map



1.2 Purpose and 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 will be 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 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 the Palm Beach, Martin and St. Lucie Counties. From April 1, 2018, the population in Palm Beach County is estimated to reach over 1.8 million by year 2045, which represents a 26.3% increase. From April 1, 2018, the population in St. Lucie County is expected to increase by 35.6% by year 2045 to nearly 410,000. From April 1, 2018, the population in Martin County is expected to increase by 22.7% by year 2045 to nearly 190,000. As the city and county populations increase, traffic will increase on area roadways as well. 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%, according to data compiled for the Treasure Coast Regional Planning Model. 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.

Within the project limits, existing roadway segments along SR 91 are all currently operating at an acceptable Level of Service (LOS) D or better and existing ramp roadways are currently operating under capacity with volume-to-capacity ratios less than 1.0. In the future, four lanes of travel in each direction will be required on SR 91 between SW Martin Highway and SE Becker Road by year 2033. SR 91 will require three lanes of travel in each direction by year 2025 south of SE Becker Road, by year 2042 between SE Becker Road and SW Port St. Lucie Boulevard, and by year 2035 north of SW Port St. Lucie Boulevard.

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.

A total of 516 crashes were observed for the study area within the 2012-2016 study period occurring along SR 91. 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 Florida's Turnpike within the project limits contain crash rates lower than the statewide average for similar facility types.

One intersection in the project area that will be impacted by proposed improvements at the SW Martin Highway interchange has a crash rate higher than the statewide average for similar facilities (1.572). This intersection is at SW Martin Highway and SW High Meadow Road and had 46 crashes. From 2012 to 2016, 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%). Sixteen of the 24 rear end crashes occurred during the AM and PM peak periods, indicating that congestion may be a leading cause of these crashes. 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, SR 91 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 the study corridor are identified as "critical segments with highest vehicle queues." For Evacuation Levels B through E Operational Scenarios (with E being the highest level of evacuation), all of the study area segments are identified as "critical segments with highest vehicle queues."

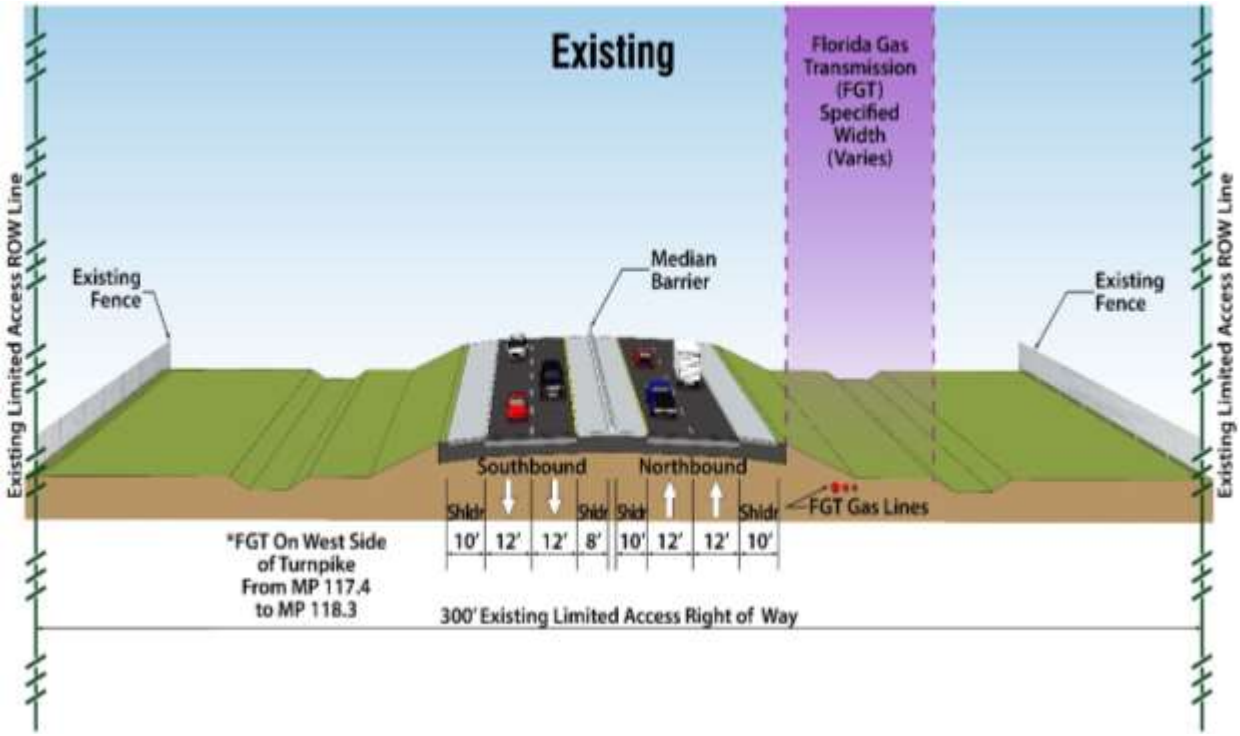
2.0
RECOMMENDATION OF PREFERRED ALTERNATIVE

The purpose of this Recommendation of Preferred Alternative Memorandum is to present the findings to date that support the recommendation of the Preferred Alternative following the Public Information Meetings.

2.1 Preferred Mainline Alternative

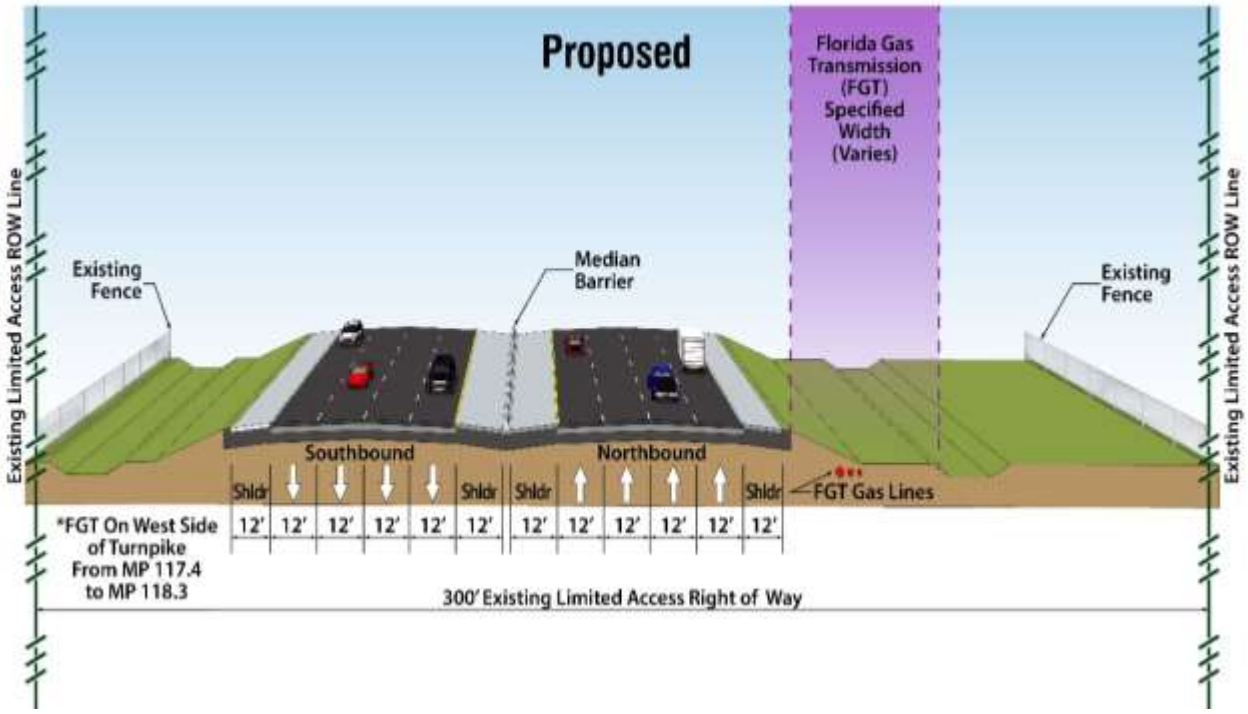
The existing Turnpike mainline is a four lane divided limited access expressway facility. The existing typical section consists of two 12-foot travel lanes and a 12-foot outside shoulder (10 feet paved). The existing median width is 20 feet paved with a 2-foot median barrier wall separating the travel lanes. The overall typical section width is 92 feet. **Figure 2-1** shows the existing roadway typical section.

Figure 2-1
Existing Roadway Typical Section



This PD&E study involves the widening of the 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 8-10 feet to 12 feet. Only one roadway typical section was deemed feasible in order to avoid the substantial costs of impacting Florida Gas Transmission (FGT) on the east side and hence was selected as the Preferred Alternative. **The preferred ultimate roadway typical section for the mainline is shown in Figure 2-2**.

Figure 2-2
Preferred Ultimate Mainline Roadway Typical Section



2.2 Evaluation of Proposed Interchange Alternatives

In addition to proposed operational improvement alternatives at the four existing interchange locations at 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 are at Crosstown Parkway (MP 145) and W Midway Road (MP 150). The *Interchange Feasibility Technical Memorandum – March 2020* prepared for this project provides more detail as to the development of alternatives for these two new interchange locations. Refer to the existing and proposed interchange locations that were carried forward for further evaluation in **Figure 2-3**.

Figure 2-3
Proposed Interchange Locations



2.3 Recommended Preferred Interchange Alternatives

Of the varying number of interchange alternatives developed for each location, two viable alternatives were ultimately selected for detailed evaluation at each of the six interchange locations. The conceptual designs for these twelve alternatives are shown in the Interchange Conceptual Design Alternatives provided in **Appendix A**.

The Preliminary Interchange Alternatives Evaluation Matrices (one per interchange location) are provided in **Appendix B**. All interchange alternatives were analyzed based on specific criteria. There are three categories and fifteen design parameters being evaluated for each alternative analysis. The categories include: Engineering Considerations; Environmental and Community Considerations; and Cost Considerations. The fifteen design parameters included traffic operations, local road impacts, overall interchange performance, floodplain impacts, wetland impacts, potential residential and business relocations, right-of-way impacts, Florida Gas Transmission (FGT) impacts, right-of-way and construction costs, just to name a few. The fifteen design parameters are distributed among the three categories as follows: Engineering Considerations (7 parameters); Environmental and Community Considerations (5 parameters); and Cost Considerations (3 parameters). Each design parameter was weighted and assigned a score between 1 and 10, with 1 being the worst score and 10 being the best score. The scores were accumulated to reflect a total score, and a ranking of either 1 or 2 was assigned based on the total score. Color coding was used to facilitate the interpretation of the results. A ranking of 1 reflects the Preferred Alternative of the two interchange alternatives compared for the interchange location under consideration.

The conceptual design for all interchange alternatives was developed utilizing the traffic data provided in the *Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation*, included in **Appendix C**. The lane geometry and DDHVs for these alternatives are included in Attachment A of **Appendix C**.

The two interchange alternatives evaluated for each of the six interchange locations are described and analyzed below, with a recommendation for a Preferred Interchange Alternative for each location proposed.

2.3.1 SW Martin Highway / SR 714 (Reconfiguration of Existing Interchange)

2.3.1.1 Alternative 7B

Approximately 3,500 feet south of SW Martin Highway, the northbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp splits into two, one lane ramps that intersect SW Martin Highway at SW Martin Downs Boulevard. The outside ramp provides drivers the ability to make a right turn onto SW Martin Highway, while the inside ramp provides drivers the ability to continue through onto SW Martin Downs Boulevard as well as turn left onto SW Martin Highway. The two lane northbound on-ramp begins approximately 800 feet south of the SW

Martin Highway and SW Martin Downs Boulevard intersection and loops from the south to the north, to tie into the Turnpike mainline approximately 1,900 feet north of SW Martin Highway. Approximately 750 feet north of SW Martin Highway, the southbound off-ramp diverts from the Turnpike mainline and curves to the right, splitting into a one lane ramp and a two lane ramp. A single lane ramp continues to the west until ending at SW Leighton Farm Avenue at a proposed roundabout. Leighton Farm Avenue will be realigned to intersect SW Martin Highway at SW Deggeller Court. Drivers can turn left or right onto SW Martin Highway or continue through on SW Deggeller Court. At the southbound off ramp split, a two lane ramp curves from the west to the east, crossing at a bridge over the Turnpike mainline, until it loops to the north to intersect SW Martin Highway at SW Martin Downs Boulevard. Drivers can continue through onto SW Martin Downs Boulevard or turn right onto SW Martin Highway. The southbound on-ramp begins approximately 800 feet south of SW Martin Highway and curves to the west, crossing at a bridge over the Turnpike mainline, before looping around to tie into the Turnpike mainline approximately 3,500 feet south of SW Martin Highway. Between SW High Meadow Avenue and SW Armellini Avenue, SW Martin Highway will be widened from the existing four lane typical section to a six lane typical section with three lanes in each direction. West of SW Armellini Avenue until SW Deggeller Court, SW Martin Highway will be widened from the existing two lane typical section to a six lane typical section with three lanes in each direction. The SW Martin Highway Bridge over the Turnpike mainline will be reconstructed to accommodate the widening. For a detailed graphic of SW Martin Highway Interchange Alternative 7B, see **Sheet No. A-1** of **Appendix A**.

2.3.1.2 Alternative 7S

Approximately 4,500 feet south of SW Martin Highway, the northbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues east until it intersects SW High Meadow Avenue at a proposed signalized intersection approximately 2,200 feet south of SW Martin Highway. The two lane northbound on-ramp begins approximately 800 feet south of the SW Martin Highway and SW Martin Downs Boulevard intersection and loops from the south to the north, to tie into the Turnpike mainline approximately 1,900 feet north of SW Martin Highway. Approximately 750 feet north of SW Martin Highway, the southbound off-ramp diverts from the Turnpike mainline and curves to the right, splitting into a one lane ramp and a two lane ramp. A single lane ramp continues to the west until ending at SW Leighton Farm Avenue at a proposed roundabout. SW Leighton Farm Avenue will be realigned to intersect SW Martin Highway at SW Deggeller Court. Drivers can turn left or right onto SW Martin Highway or continue through on SW Deggeller Court. At the southbound off ramp split, a two lane ramp curves from the west to the east, crossing at a bridge over the Turnpike mainline, until it loops to the north to intersect SW Martin Highway at SW Martin Downs Boulevard. Drivers can continue through onto SW Martin Downs Boulevard or turn left or right onto SW Martin Highway. The southbound on-ramp begins at the proposed signalized intersection on SW High Meadow Avenue, approximately 2,200 feet south of SW Martin Highway. The ramp curves from the west to the south, crossing at a bridge over the Turnpike mainline, until it ties into the Turnpike mainline approximately 5,700 feet south of SW Martin Highway. Along SW High Meadow Avenue, from the driveway entrance to the

Palm City Business Park until the proposed signalized intersection, the existing two lane undivided typical section will be widened to a four lane divided typical section with two lanes in each direction. From the proposed signalized intersection to SW Martin Highway, the existing two lane undivided typical section will be widened to a six lane divided typical section with three lanes in each direction. Between SW High Meadow Avenue and SW Armellini Avenue, SW Martin Highway will be widened from the existing four lane typical section to a six lane typical section with three lanes in each direction. West of SW Armellini Avenue until SW Deggeller Court, SW Martin Highway will be widened from the existing two lane typical section to a six lane typical section with three lanes in each direction. The SW Martin Highway Bridge over the Turnpike mainline will be reconstructed to accommodate the widening. For a detailed graphic of SW Martin Highway Interchange Alternative 7S, see **Sheet No. A-2** of **Appendix A**.

2.3.1.3 Comparative Analysis

Table 3 of **Appendix C** shows the Synchro intersection analysis results summary for the 2045 No-Build and Build Alternatives. Alternative 7S is a hybrid of Alternative 7B with an additional new ramp terminal introduced at SW High Meadow Avenue for Turnpike traffic to/from the south. The results for both alternatives are very similar. The biggest difference is at the intersection of SW Martin Highway and SW High Meadow Avenue where the north-south approaches to this intersection match existing geometry. At this intersection, Alternative 7S provides Level of Service (LOS) E compared to LOS F with Alternative 7B.

Refer to the Preliminary Interchange Alternatives Evaluation Matrix for SW Martin Highway in **Appendix B**. Alternative 7B has scores equal to or greater than Alternative 7S in almost every category. Alternative 7B provides direct access to the SW Martin Highway, while Alternative 7S splits interchange access between SW Martin Highway and SW High Meadow Avenue. Alternative 7B also minimizes weaving, has fewer bridge crossings, minimizes local road impacts, and reduces potential impacts to FGT compared to Alternative 7S. Construction costs and right-of-way costs and impacts for Alternative 7B are markedly less expensive than for Alternative 7S.

2.3.1.4 Recommendation

Alternative 7B scored equal to or better in almost every category and is markedly less expensive and has fewer right-of-way impacts than Alternative 7S. **Hence, Alternative 7B is recommended as the Preferred Interchange Alternative for SW Martin Highway.**

2.3.2 SE Becker Road (Reconfiguration of Existing Interchange)

2.3.2.1 Alternative 1

The alignment of the northbound off-ramp will remain as existing. Approximately 700 feet north of SE Becker Road, the northbound off-ramp approach will be widened to accommodate a dedicated right turn lane. The alignment of the northbound on-ramp will remain as existing. The initial 415 feet of the northbound on-ramp will be widened to accommodate an additional lane before tapering down to one lane. Approximately 3,000 feet north of SE Becker Road, the

southbound off-ramp diverts from the Turnpike mainline and curves to the right until it intersects SE Becker Road at a directional median opening, approximately 325 feet west of the Turnpike mainline. The southbound on-ramp begins at the same location and provides a two lane ramp for approximately 900 feet before tapering down to one lane. The southbound on-ramp ties into the Turnpike mainline approximately 1,265 feet south of SE Becker Road. The alignment of SE Becker Road, between the St. Lucie County Fire Station Number 13 and SW Bradshaw Circle, will shift approximately 38 feet to the north to accommodate the construction of a new bridge over the Turnpike mainline. For a detailed graphic of SE Becker Road Interchange Alternative 1, see **Sheet No. A-3** of **Appendix A**.

2.3.2.2 Alternative 3

The alignment of the northbound off-ramp will remain as existing. Approximately 700 feet north of SE Becker Road, the northbound off-ramp approach will be widened to accommodate a dedicated right turn lane. The alignment of the northbound on-ramp will remain as existing. The initial 415 feet of the northbound on-ramp will be widened to accommodate an additional lane before tapering down to one lane. Approximately 1,600 feet north of SE Becker Road, the southbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues south until it intersects SE Becker Road, at a directional median opening, approximately 800 feet west of the Turnpike mainline. For drivers travelling west, the southbound on-ramp begins at the same location and curves from north to south and ties into the Turnpike mainline approximately 3,100 feet south of SE Becker Road. For drivers travelling east, the southbound on-ramp begins approximately 350 feet west of the Turnpike mainline and continues south until it ties into the Turnpike mainline approximately 3,100 feet south of SE Becker Road. The alignment of SE Becker Road, between the St. Lucie County Fire Station Number 13 and SW Bradshaw Circle, will shift approximately 38 feet to the north to accommodate the construction of a new bridge over the Turnpike mainline. For a detailed graphic of SE Becker Road Interchange Alternative 3, see **Sheet No. A-4** of **Appendix A**.

2.3.2.3 Comparative Analysis

Table 4 of **Appendix C** shows the Synchro intersection analysis results summary for the 2045 No-Build and Build Alternatives. Both Alternatives 1 and 3 offer improved operations at SE Becker Road and the northbound Turnpike ramps over the No Build Alternative, and keep the southbound ramp terminals at acceptable operating conditions.

Refer to the Preliminary Interchange Alternatives Evaluation Matrix for SE Becker Road in **Appendix B**. Scores and impacts for Alternative 1 and Alternative 3 are very similar in most categories. For Alternative 3, the distance between the new southbound off-ramp terminal on the west side of SW Bradshaw Circle intersection is reduced by 550 feet, which may cause some impacts to the SW Bradshaw Circle intersection. Construction costs and right-of-way costs and impacts for Alternative 1 are markedly less expensive than for Alternative 3.

2.3.2.4 Recommendation

While both alternatives provide acceptable operating conditions from a traffic standpoint, construction costs and right-of-way costs and impacts are markedly less expensive for Alternative 1 compared to Alternative 3. Alternative 1 also provides better operating conditions at the intersection of SE Becker Road and SW Bradshaw Circle than Alternative 3. **Hence, Alternative 1 is recommended as the Preferred Interchange Alternative for SE Becker Road.**

2.3.3 SW Port St. Lucie Boulevard (Reconfiguration of Existing Interchange)

2.3.3.1 Alternative 1

Approximately 2,750 feet south of SW Port St. Lucie Boulevard, the northbound off-ramp diverts from the Turnpike mainline and travels parallel to the mainline until it intersects SW Port St. Lucie Boulevard at a proposed signalized intersection. Approximately 1,500 feet south of SW Port St. Lucie Boulevard, the off-ramp will begin to rise in elevation in order to intersect the elevated bridge section of SW Port St. Lucie Boulevard. The northbound on-ramp begins at a proposed signalized intersection on SW Bayshore Boulevard, approximately 1,250 feet north of SW Port St. Lucie Boulevard. The ramp begins travelling west and curves to the north, tying into the Turnpike mainline approximately 1,950 feet north of SW Port St. Lucie Boulevard. The southbound off-ramp diverts from the Turnpike mainline approximately 2,200 feet north of SW Port St. Lucie Boulevard and curves to the right. The ramp then curves from the south to the east, crossing at a bridge over the Turnpike mainline before intersecting SW Bayshore Boulevard at a proposed signalized intersection approximately 1,250 feet north of SW Port St. Lucie Boulevard. For drivers travelling east, the southbound on-ramp begins approximately 900 feet west of the Turnpike mainline and curves to the south. The ramp continues south until it ties into the Turnpike mainline approximately 2,800 feet south of SW Port St. Lucie Boulevard. For drivers travelling west, the southbound on-ramp begins approximately 650 feet east of the Turnpike mainline. Crossing the SW Port St. Lucie Boulevard Bridge west over the Turnpike mainline, the ramp loops around and continues south until it intersects the Turnpike mainline approximately 2,800 feet south of SW Port St. Lucie Boulevard. Between SW Bayshore Boulevard and SW Cameo Boulevard, SW Port St. Lucie Boulevard will be widened to accommodate seven foot buffered bicycle lanes in each direction. The alignment of SW Port St. Lucie Boulevard will shift approximately 20 feet to the north to accommodate the construction of a new bridge over the Turnpike mainline. The bridge will be extended both to the west and to the east, with the eastern extension spanning over the FGT gas lines (the westernmost gas main must be relocated to the east to provide sufficient horizontal clearance from the new bridge per). For a detailed graphic of SW Port St. Lucie Boulevard Interchange Alternative 1, see **Sheet No. A-5** of **Appendix A**.

2.3.3.2 Alternative 2

Approximately 2,750 feet south of SW Port St. Lucie Boulevard, the northbound off-ramp diverts from the Turnpike mainline and travels parallel to the mainline for approximately 1,500 feet before curving to the right and tying into the existing SW Bayshore Boulevard on the south side of SW

Port St. Lucie Boulevard. The northbound on-ramp begins at a proposed signalized intersection on SW Bayshore Boulevard, approximately 1,250 feet north of SW Port St. Lucie Boulevard. The ramp begins travelling west and curves to the north, tying into the Turnpike mainline approximately 1,950 feet north of SW Port St. Lucie Boulevard. The southbound off-ramp diverts from the Turnpike mainline approximately 2,200 feet north of SW Port St. Lucie Boulevard and curves to the right. The ramp then curves from the south to the east, crossing at a bridge over the Turnpike mainline before intersecting SW Bayshore Boulevard at a proposed signalized intersection approximately 1,250 feet north of SW Port St. Lucie Boulevard. For drivers travelling east, the southbound on-ramp begins approximately 900 feet west of the Turnpike mainline and curves to the south. The ramp continues south until it ties into the Turnpike mainline approximately 2,800 feet south of SW Port St. Lucie Boulevard. For drivers travelling west, the southbound on-ramp begins approximately 650 feet east of the Turnpike mainline. Crossing the SW Port St. Lucie Boulevard Bridge west over the Turnpike mainline, the ramp loops around and continues south until it intersects the Turnpike mainline approximately 2,800 feet south of SW Port St. Lucie Boulevard. Between SW Bayshore Boulevard and SW Cameo Boulevard, SW Port St. Lucie Boulevard will be widened to accommodate seven foot buffered bicycle lanes in each direction. The alignment of SW Port St. Lucie Boulevard will shift approximately 20 feet to the north to accommodate the construction of a new bridge over the Turnpike mainline. The bridge will be extended both to the west and to the east, with the eastern extension spanning over the FGT gas lines (the westernmost gas main must be relocated to the east to provide sufficient horizontal clearance from the new bridge per). For a detailed graphic of SW Port St. Lucie Boulevard Interchange Alternative 2, see **Sheet No. A-6** of **Appendix A**.

2.3.3.3 Comparative Analysis

Table 5 of **Appendix C** shows the Synchro intersection analysis results summary for the 2045 No-Build and Build Alternatives. Both Alternatives 1 and 2 accommodate future growth and alleviate the existing operational failure at the existing interchange where traffic congestion has been observed on the westbound left-turn lanes during the AM peak period and on the northbound approach during the PM peak period. Both alternatives offer similar operating conditions from a traffic standpoint.

Refer to the Preliminary Interchange Alternatives Evaluation Matrix for SW Port St. Lucie Boulevard in **Appendix B**. Scores and impacts for Alternative 1 and Alternative 2 are similar for all environmental and community considerations. Alternative 1 adds one new signalized intersection for the northbound on-ramp which is close proximity to the existing signalized intersection at SW Port St. Lucie Boulevard and SW Bayshore Boulevard. The northbound off-ramp has greater potential to back up onto the mainline due to its shorter length compared to Alternative 2. The northbound off-ramp for Alternative 1 will be connected to the SW Port St. Lucie Boulevard overpass bridge and will have the typical complications associated with a 90-degree road to bridge connection. Impacts to FGT are minimized under Alternative 2, while

Alternative 1 requires relocation of three FGT gas mains for approximately ½ mile with no right-of-way availability within Florida's Turnpike right-of-way.

2.3.3.4 Recommendation

Alternative 1 has a more complicated road to bridge connection where the Northbound off-ramp connects to the SW Port St. Lucie Boulevard overpass bridge. Alternative 1 also has more severe impacts to FGT, which translates into higher gas main relocation costs. **Hence, Alternative 2 is recommended as the Preferred Interchange Alternative for SW Port St. Lucie Boulevard.**

2.3.4 Crosstown Parkway (New Partial Interchange)

2.3.4.1 Alternative 3

Approximately 1,500 feet south of Crosstown Parkway, the northbound off-ramp diverts from the Turnpike mainline, to the inside, and continues north for approximately 2,900 feet. The ramp then curves to the left, crossing at a bridge over the southbound Turnpike mainline until it ties into the existing SW Cameo Boulevard. The southbound on-ramp begins at the same tie in point at SW Cameo Boulevard and curves to the right, crossing at a bridge over the southbound Turnpike mainline. The ramp continues south, in between the northbound and southbound Turnpike mainlines until it ties into the Turnpike mainline, from the inside, approximately 1,275 feet south of Crosstown Parkway. For a detailed graphic of Crosstown Parkway Interchange Alternative 3, see **Sheet No. A-7** of **Appendix A**.

2.3.4.2 Alternative 4

Approximately 2,000 feet south of Crosstown Parkway, the northbound off-ramp diverts from the Turnpike mainline, to the inside, and continues north until it intersects Crosstown Parkway at a proposed signalized intersection. The northbound off-ramp gradually rises in elevation until it matches the elevation of the Crosstown Parkway Bridge over the Turnpike mainline. The southbound on-ramp begins at the same proposed signalized intersection and gradually decreases in elevation until it matches the existing elevation of the Turnpike mainline. The southbound on-ramp ties into the Turnpike mainline, from the inside, approximately 1,650 feet south of Crosstown Parkway. For a detailed graphic of Crosstown Parkway Interchange Alternative 4, see **Sheet No. A-8** of **Appendix A**.

2.3.4.3 Comparative Analysis

Table 6 of **Appendix C** shows the Synchro intersection analysis results summary for the 2045 No-Build and Build Alternatives. At the SW Cameo Boulevard/Crosstown Parkway intersection, a LOS of D is observed in the AM and PM for both the No-Build and Build scenarios, except for Alternative 3 which operates at a LOS of E during the AM peak period. The proposed T-intersection with the existing Crosstown Parkway overpass bridge will add a new signal on the bridge which will impact the existing signals and traffic operations on the Crosstown Parkway and will further degrade the LOS of the SW Bayshore Boulevard/Crosstown Parkway intersection. At

this intersection, a LOS of E is observed in the AM and PM for both the No-Build and Build scenarios, except for Alternative 4 which operates at a LOS of F during the PM peak period.

Alternative 4 provides direct access to the Crosstown Parkway while Alternative 3 has a more circuitous access via SW Cameo Boulevard, an arterial roadway located to the west of SR 91. However, Alternative 4 contains significant differences on a few engineering and operation parameters including: traffic operations, potential relocations, local road, park, and right-of-way impacts. The introduction of a new signal on the existing bridge between two existing and closely spaced signals has direct impacts on the Crosstown Parkway traffic, a major local arterial. Also, due to the shorter ramp lengths being proposed, there is the potential that traffic may queue back, creating issues for the mainline traffic. In addition, right-of-way impacts affect a high number of parcels, including parcels identified for a future skate park and six potential relocations. Refer to the Preliminary Interchange Alternatives Evaluation Matrix for Crosstown Parkway in **Appendix B**.

2.3.4.4 Recommendation

The intersection of SW Bayshore Boulevard and Crosstown Parkway is LOS F under Alternative 4 in the PM peak period. The potential for queues on the ramps spilling back into the mainline are greater with Alternative 4 compared to Alternative 3 due to the shorter ramp lengths. Right-of-way costs, parcel impacts, and business and residential relocations are substantially more severe with Alternative 4 compared to Alternative 3. **Hence, Alternative 3 is recommended as the Preferred Interchange Alternative for Crosstown Parkway.**

2.3.5 W Midway Road (New Full Interchange)

2.3.5.1 Alternative 1

Approximately 1,900 feet south of W Midway Road, the northbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues north until it intersects W Midway Road at a proposed signalized intersection, approximately 1,900 feet east of the Turnpike mainline. The northbound on-ramp begins at the same proposed signalized intersection and initially curves from north to west to avoid the Packers of Indian River property. The ramp then curves to the north and ties into the Turnpike mainline approximately 1,300 feet north of W Midway Road. Approximately 3,600 feet north of W Midway Road, the southbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues south until it intersects W Midway Road at a proposed signalized intersection, approximately 285 feet west of the Turnpike mainline. The southbound on-ramp begins at the same proposed signalized intersection and continues south until it ties into the Turnpike mainline approximately 1,875 feet south of W Midway Road. From Jenkins Road to NW East Torino Parkway, W Midway Road will be widened from the existing two lane undivided typical section to a four lane divided typical section with seven foot buffered bicycle lanes in each direction. The bridge over the Turnpike mainline will be reconstructed to

accommodate the widening of W Midway Road. For a detailed graphic of W Midway Road Interchange Alternative 1, see **Sheet No. A-9** of **Appendix A**.

2.3.5.2 Alternative 4

Approximately 2,150 feet south of W Midway Road, the northbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues north until it intersects W Midway Road at NW Corporate Way with a proposed signalized intersection. The northbound on-ramp begins at the same proposed signalized intersection and curves from south to north, travelling parallel to the Turnpike mainline, before tying into the Turnpike mainline approximately 1,500 feet north of W Midway Road. Approximately 3,600 feet north of W Midway Road, the southbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues south until it intersects W Midway Road at a proposed signalized intersection, approximately 285 feet west of the Turnpike mainline. The southbound on-ramp begins at the same proposed signalized intersection and continues south until it ties into the Turnpike mainline approximately 1,875 feet south of W Midway Road. From Jenkins Road to NW East Torino Parkway, W Midway Road will be widened from the existing two lane undivided typical section to a four lane divided typical section with seven foot buffered bicycle lanes in each direction. The bridge over the Turnpike mainline will be reconstructed to accommodate the widening of W Midway Road. For a detailed graphic of W Midway Road Interchange Alternative 4, see **Sheet No. A-10** of **Appendix A.**

2.3.5.3 Comparative Analysis

The Synchro intersection analysis results summary for the 2045 No-Build and Build Alternatives is shown in **Table 7** of **Appendix C**. At the W Midway Road/Glades Cut-Off Road intersection, a LOS of D is observed in the AM and PM for both the No-Build and Build scenarios. At the W Midway Road/NW E Torino Parkway intersection, a LOS of F is observed in the AM for both the No-Build and Build scenarios, except that Alternatives 1 and 4 display the same slight reduction in delay. However, improvements are observed in the PM where the LOS goes from F in the No-Build scenario to a LOS of E in the PM for Alternatives 1 and 4. At the W Midway Road/SB ramp intersection, Alternative 1 and 4 operate at a LOS of C and D in the AM respectively with the PM operating at a LOS of C for both. At the W Midway Road/NB ramps intersection, Alternative 1 and 4 operate at a LOS of D and C in the AM, respectively, with the PM operating at a LOS of D for both.

Refer to the Preliminary Interchange Alternatives Evaluation Matrix for W Midway Road in **Appendix B**. These two alternatives are similar in several engineering and impact parameters, including the minor impacts to Florida Gas Transmission (FGT), three potential contamination sites, and that the proposed on-ramp in the southwest quadrant will require the taking of land identified as a future park. However, Alternative 1 key differences are the traffic operations at the interchange junction, local road and wetland impacts. Potential traffic operational issues and impacts to W Midway Road may result from the proximity of the two signals at the ramp terminal

intersections, including a timely access and potential ramp back-ups during peak hours. In addition, the proposed northbound on-ramp will impact the existing wet ponds in the northeast quadrant requiring their relocation. Alternative 4 has higher construction costs and right-of-way impacts than Alternative 1. However, St. Lucie County and the St. Lucie Transportation Planning Organization (TPO) believe that Alternative 1 will have less of a negative impact on the local roadway network than Alternative 4, especially on the planned intersection at W Midway Road and the future Jenkins Road extension. The St. Lucie County Board of County Commissioners passed Resolution 20-267 on December 1, 2020 that requests that the Preferred Alternative for the W Midway Road interchange be Alternative 1. In respective letters, the St. Lucie Transportation Planning Organization, the City of Fort Pierce and the City of Port St. Lucie all expressed their support for the County's Resolution 20-267 and the recommendation of Alternative 1 as the Preferred Alternative for W Midway Road. Copies of the County's resolution and the letters of support are provided in **Appendix D**.

2.3.5.4 Recommendation

Alternative 1 is less expensive in terms of construction costs and right-of-way impacts than Alternative 4, but has more wetland impacts. Alternative 1 also has strong local support over Alternative 4. **Hence, Alternative 1 is recommended as the Preferred Interchange Alternative for W Midway Road.**

2.3.6 Okeechobee Road (SR 70) (Reconfiguration of Existing Interchange)

2.3.6.1 Alternative 1

The existing northbound off-ramp and on-ramp will not be modified with the proposed interchange alternative. The northbound approach leg of the S Kings Highway and Okeechobee Road intersection will be widened to accommodate three dedicated right turn lanes, two through lanes, and a dedicated left turn lane. Approximately 250 feet south of the existing ramp toll gantry, the southbound on ramp begins. The ramp curves to the west, crossing at a bridge over the Turnpike mainline. After crossing over the Turnpike mainline, the ramp curves from west to south and ties into the Turnpike mainline approximately 2,750 feet south of Okeechobee Road. Approximately 1,115 feet north of Okeechobee Road, the southbound off-ramp diverts from the mainline and curves to the right. The ramp continues over Okeechobee Road before curving further to the west. The ramp then curves west to east, crossing at a bridge over the Turnpike mainline, before curving to the north to tie into S Kings Highway, approximately 350 feet south of the existing ramp toll gantry. East of S Rock Road, Okeechobee Road will be widened from the existing two lane typical section to a three lane typical section with three lanes in each direction and seven foot buffered bicycle lanes. West of S Rock Road, the south side of Okeechobee Road will be widened from the existing two lane roadway to a three lane roadway with a seven foot buffered bicycle lane. For a detailed graphic of Okeechobee Road (SR 70) Interchange Alternative 1, see **Sheet No. A-11** of **Appendix A.**

2.3.6.2 Alternative 4

The existing northbound off-ramp and on-ramp will not be modified with the proposed interchange alternative. The northbound approach leg of the S Kings Highway and Okeechobee Road intersection will be widened to accommodate three dedicated right turn lanes, two through lanes, and a dedicated left turn lane. Approximately 2,600 feet north of Okeechobee Road, the southbound off-ramp diverts from the Turnpike mainline and curves to the right. The ramp continues south until it intersects Okeechobee Road at a proposed signalized intersection, approximately 75 feet west of Gordy Road. Gordy Road will be realigned to tie into this proposed signalized intersection. The southbound on-ramp begins at the same proposed signalized intersection. The ramp curves north to south, travelling over Okeechobee Road before tying into the Turnpike mainline approximately 1,750 feet south of Okeechobee Road. East of S Rock Road, Okeechobee Road will be widened from the existing two lane typical section to a three lane typical section with three lanes in each direction and seven foot buffered bicycle lanes. West of S Rock Road, the south side of Okeechobee Road will be widened from the existing two lane roadway to a three lane roadway with a seven foot buffered bicycle lane. For a detailed graphic of Okeechobee Road (SR 70) Interchange Alternative 4, see **Sheet No. A-12** of **Appendix A.**

2.3.6.3 Comparative Analysis

Table 8 of **Appendix C** shows the Synchro intersection analysis results summary for the 2045 No-Build and Build Alternatives. Alternative 4 operates marginally better than Alternative 1 at the existing Turnpike ramps and S Kings Highway, with both alternatives providing LOS D. Alternative 4 adds a new ramp terminal with a partial cloverleaf configuration at Gordy Road for the Southbound on- and off-ramps. This new signalized intersection operates at LOS D in the AM peak period and at LOS C in the PM peak period.

Refer to the Preliminary Interchange Alternatives Evaluation Matrix for Okeechobee Road (SR 70) in **Appendix B**. Alternative 4 is clearly superior to Alternative 1 in terms of engineering considerations. Alternative 4 separates access into two junctions to ease congestion and enhance access, while Alternative 1 concentrates access into one junction, exacerbating congestion. This congestion will impact the operation of Okeechobee Road (SR 70). Alternative 1 requires one large structure spanning over Florida's Turnpike, while Alternative 4 has no large structures spanning over Florida's Turnpike. Alternative 4 does require one residential relocation, while Alternative 1 does not require any relocations. Right-of-way costs and impacts for Alternative 4 are substantially greater than Alternative 1. Impacts to FGT are minimized under Alternative 4 compared to Alternative 1.

2.3.6.4 Recommendation

Alternative 4 separates the northbound on and off movements from Florida's Turnpike from the northbound on and off movements, which provides congestion relief and minimizes backups at the S Kings Highway intersection and impacts to the operation of Okeechobee Road (SR 70). However, while both alternatives are similar in term of construction costs, Alternative 4 is

substantially higher in right-of-way cost and parcel impacts, and requires one residential relocation. Alternative 4 avoids the construction of a new large structure spanning over Florida's Turnpike. **Hence, Alternative 4 is recommended as the Preferred Interchange Alternative for Okeechobee Road (SR 70).**

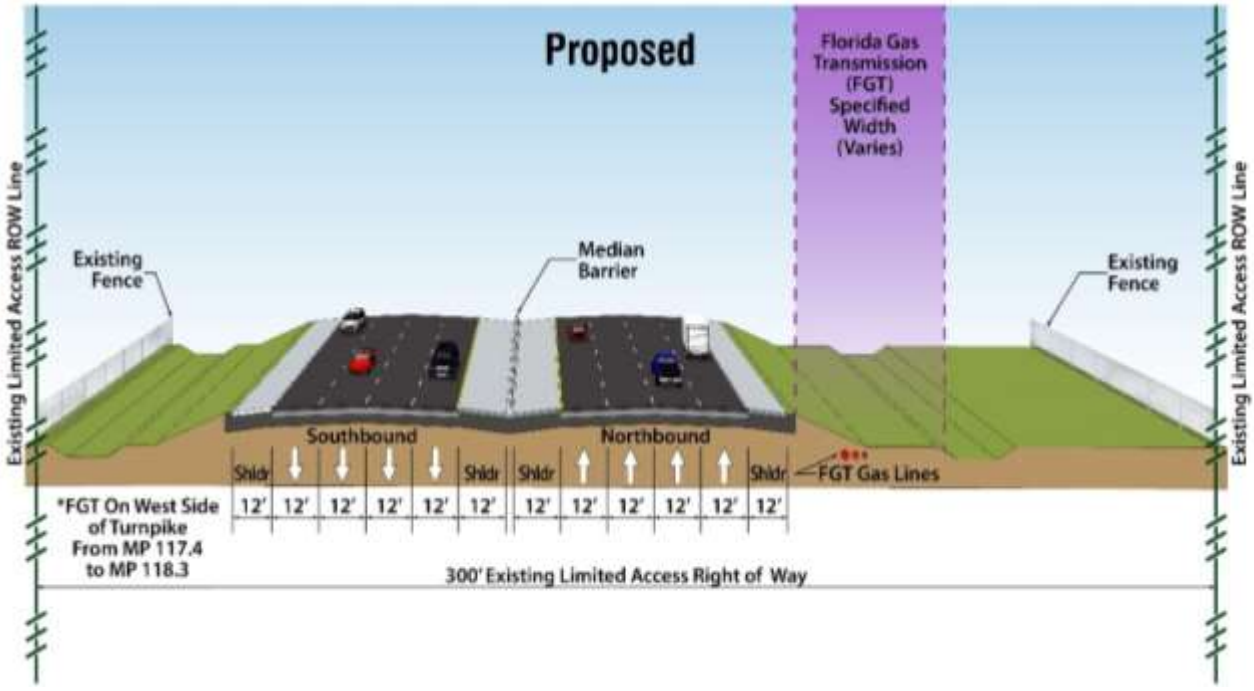
2.4 Summary

Based on consideration of engineering and environmental factors, preliminary construction and right of way costs, and input received from the public, local governments, and environmental agencies during the evaluation of the alternatives presented above, this report recommends the following as the Preferred Alternative:

Mainline Roadway

Widen the 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). **The preferred ultimate roadway typical section for the mainline is shown in Figure 2-4**.

Figure 2-4
Preferred Ultimate Mainline Roadway Typical Section



Interchange Locations

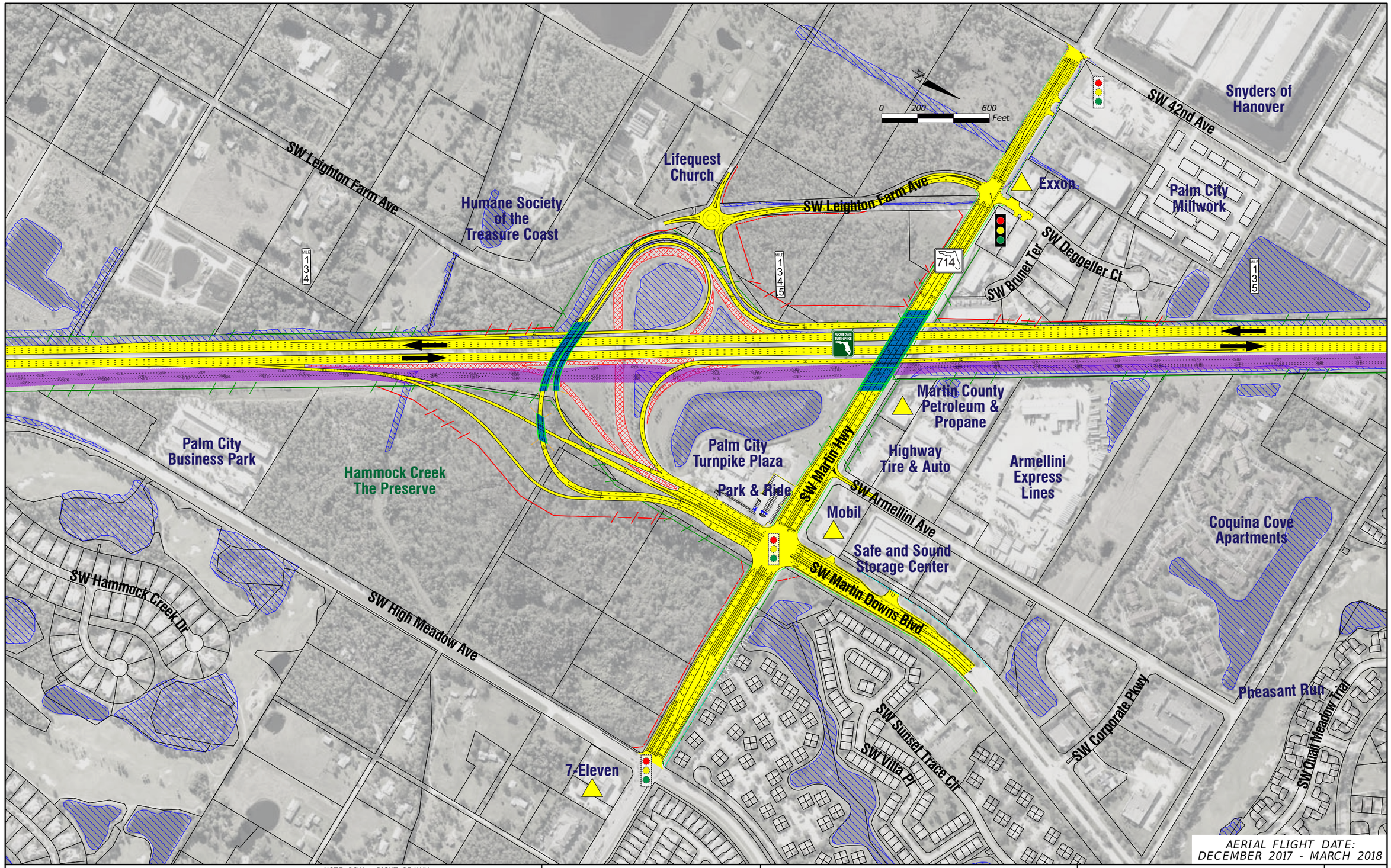
Table 2-1 presents the interchange alternatives for each interchange location recommended as the Preferred Alternative.

Table 2-1
Preferred Interchange Alternatives

Interchange Location	Milepost (MP)	Preferred Interchange Alternative
SW Martin Highway	MP 133	Alternative 7B
SE Becker Road	MP 138	Alternative 1
SW Port St. Lucie Boulevard	MP 142	Alternative 2
Crosstown Parkway	MP 145	Alternative 3
W Midway Road	MP 150	Alternative 1
Okeechobee Road (SR 70)	MP 152	Alternative 4

APPENDICES

Appendix A
Interchange Conceptual Design Alternatives



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE

NOTE: ROW = RIGHT OF WAY

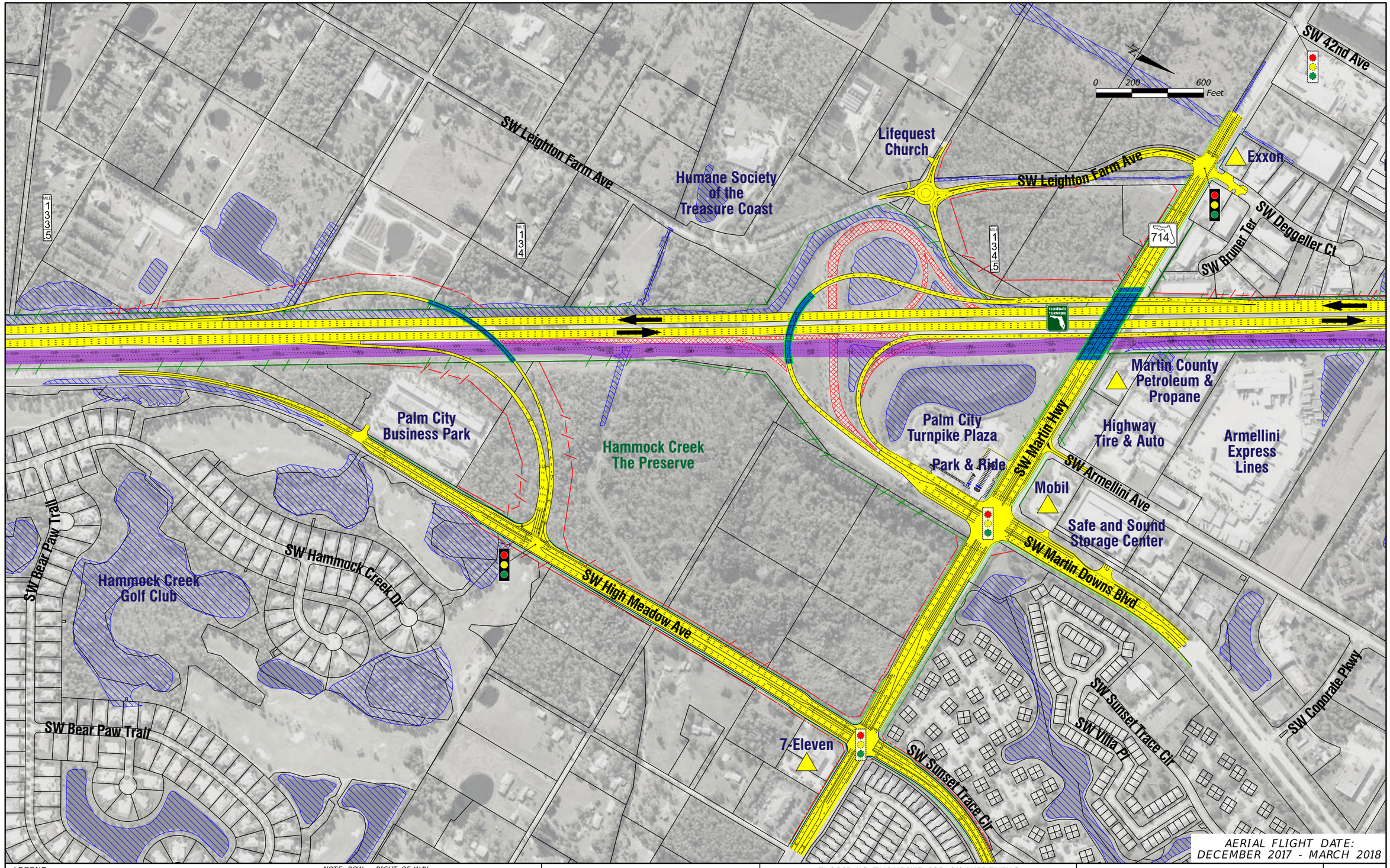
- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- FUTURE TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

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

SR 714 / SW MARTIN HWY INTERCHANGE ALT. 7B

SHEET NO.
A-1



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE
- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- FUTURE TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

NOTE: ROW = RIGHT OF WAY

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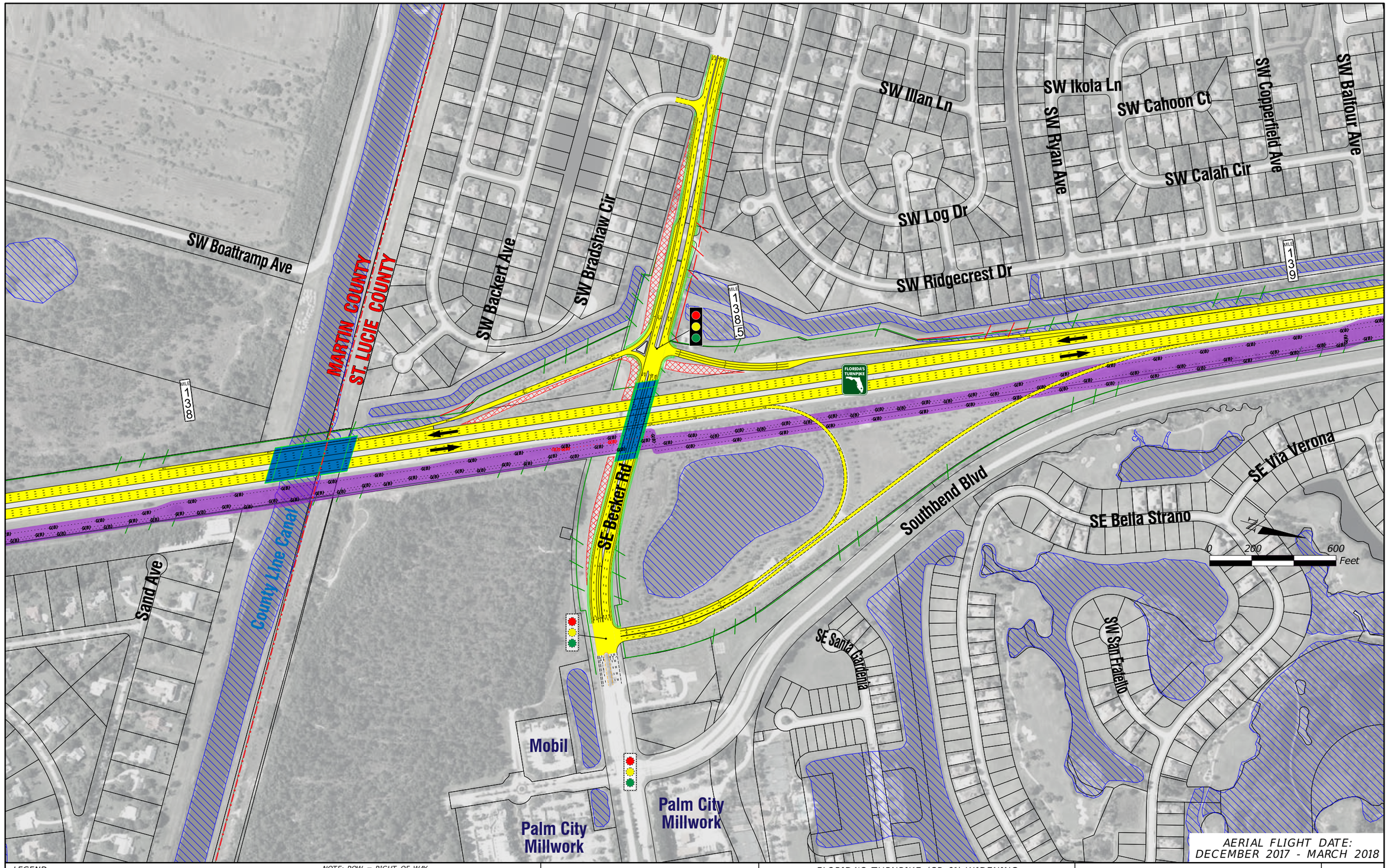
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

SR 714 / SW MARTIN HWY INTERCHANGE ALT. 7S

SHEET NO.
A-2



LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE

NOTE: ROW = RIGHT OF WAY

- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- FUTURE 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

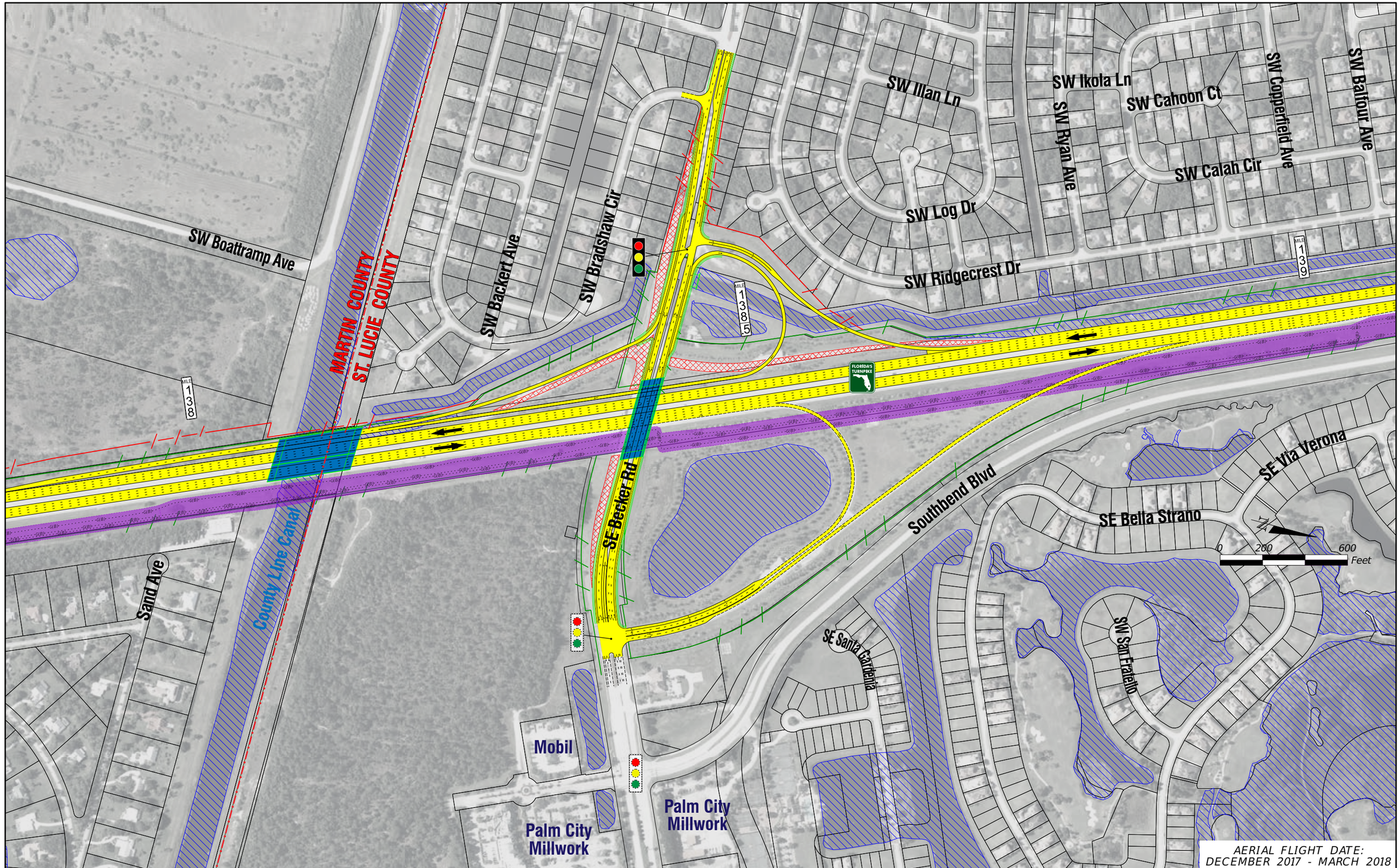
FLORIDA'S TURNPIKE (SR 91) WIDENING
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY

FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

SE BECKER ROAD INTERCHANGE ALT. 1

SHEET NO.

A-3



LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE

NOTE: ROW = RIGHT OF WAY

- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
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- EXISTING TRAFFIC SIGNAL
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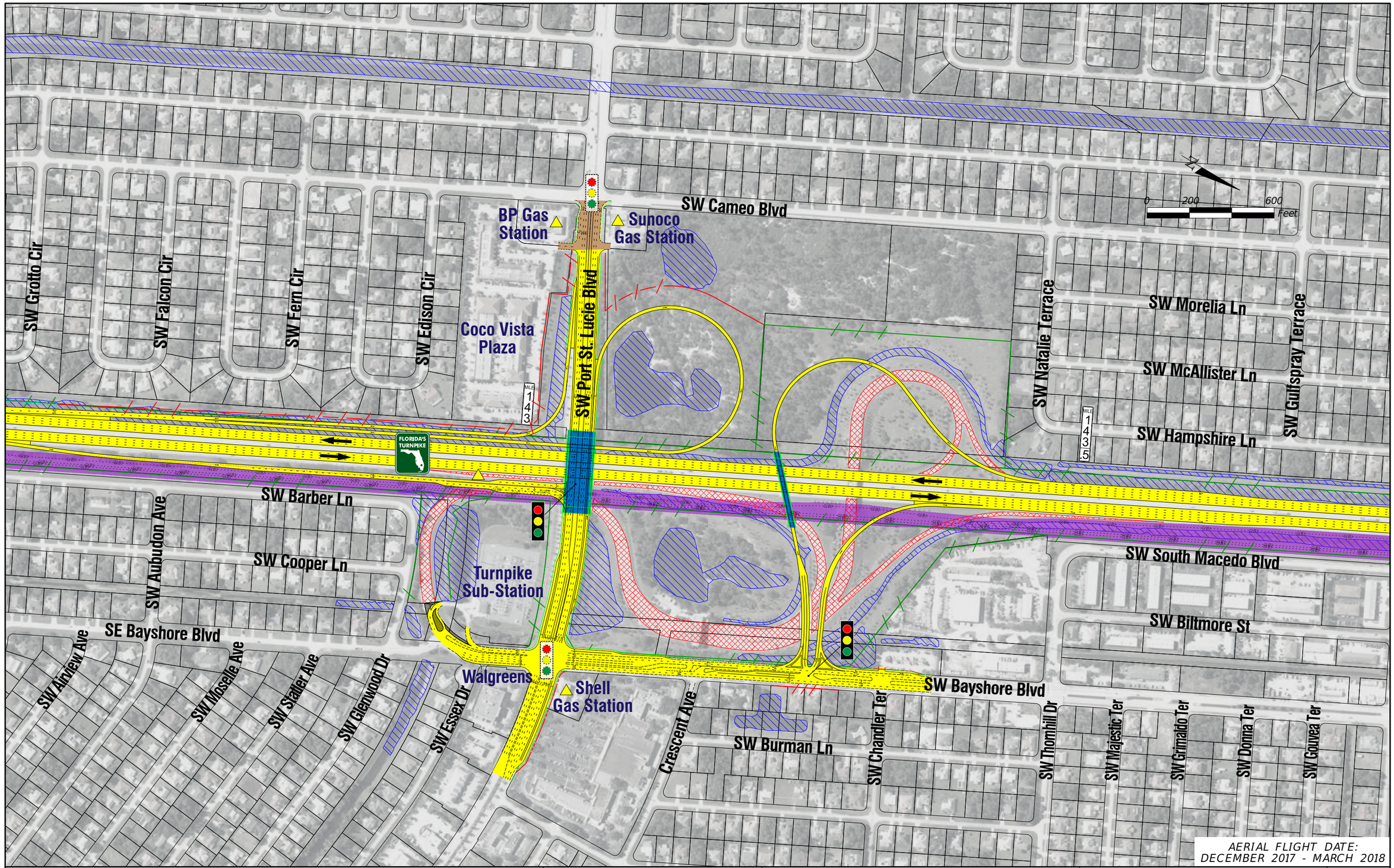
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY

FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

SE BECKER ROAD INTERCHANGE ALT. 3

SHEET NO.

A-4



LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE

NOTE: ROW = RIGHT OF WAY

- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
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- EXISTING TRAFFIC SIGNAL
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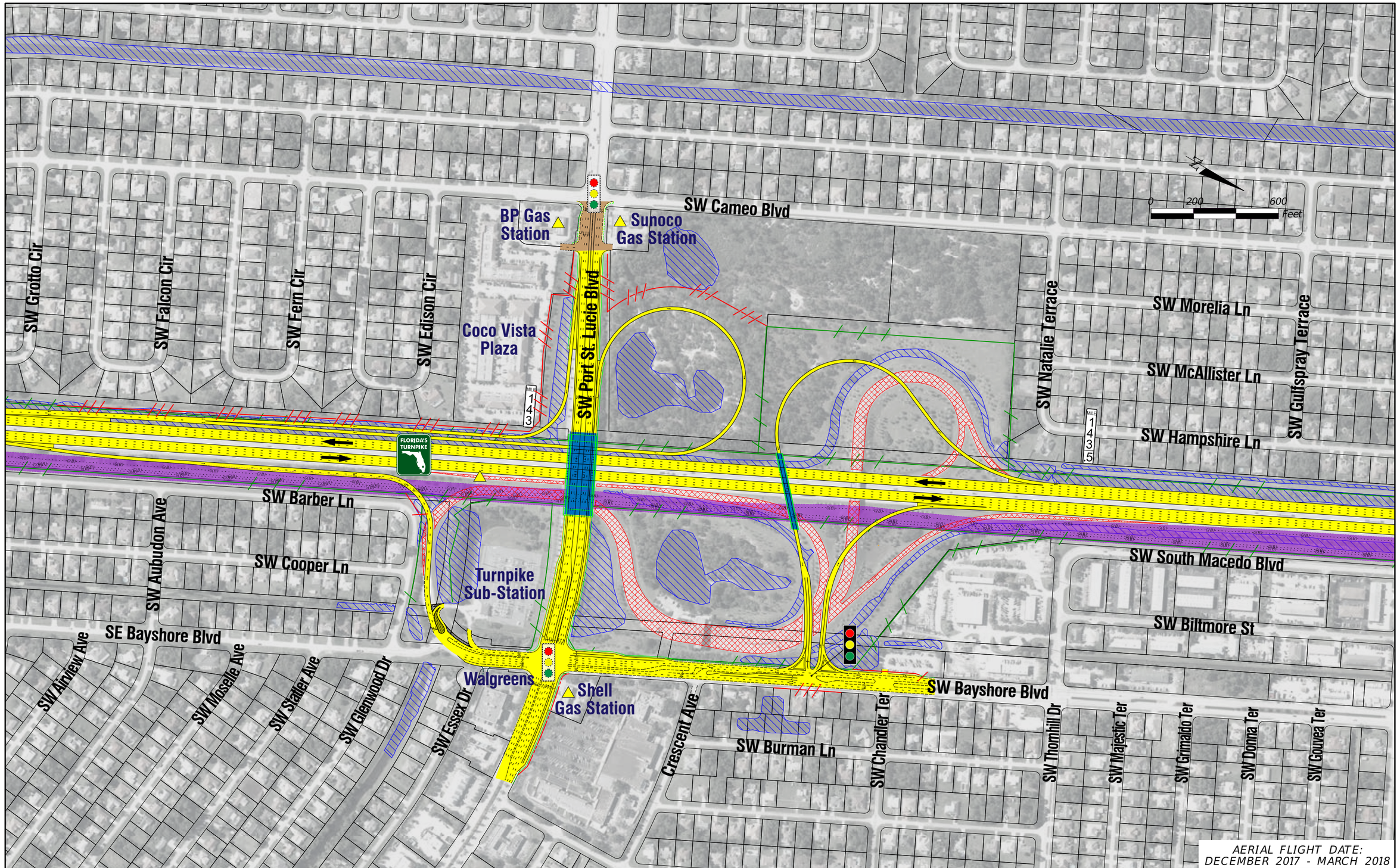
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

SW PORT ST. LUCIE BLVD INTERCHANGE ALT. 1

SHEET NO.
A-5



LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE

NOTE: ROW = RIGHT OF WAY

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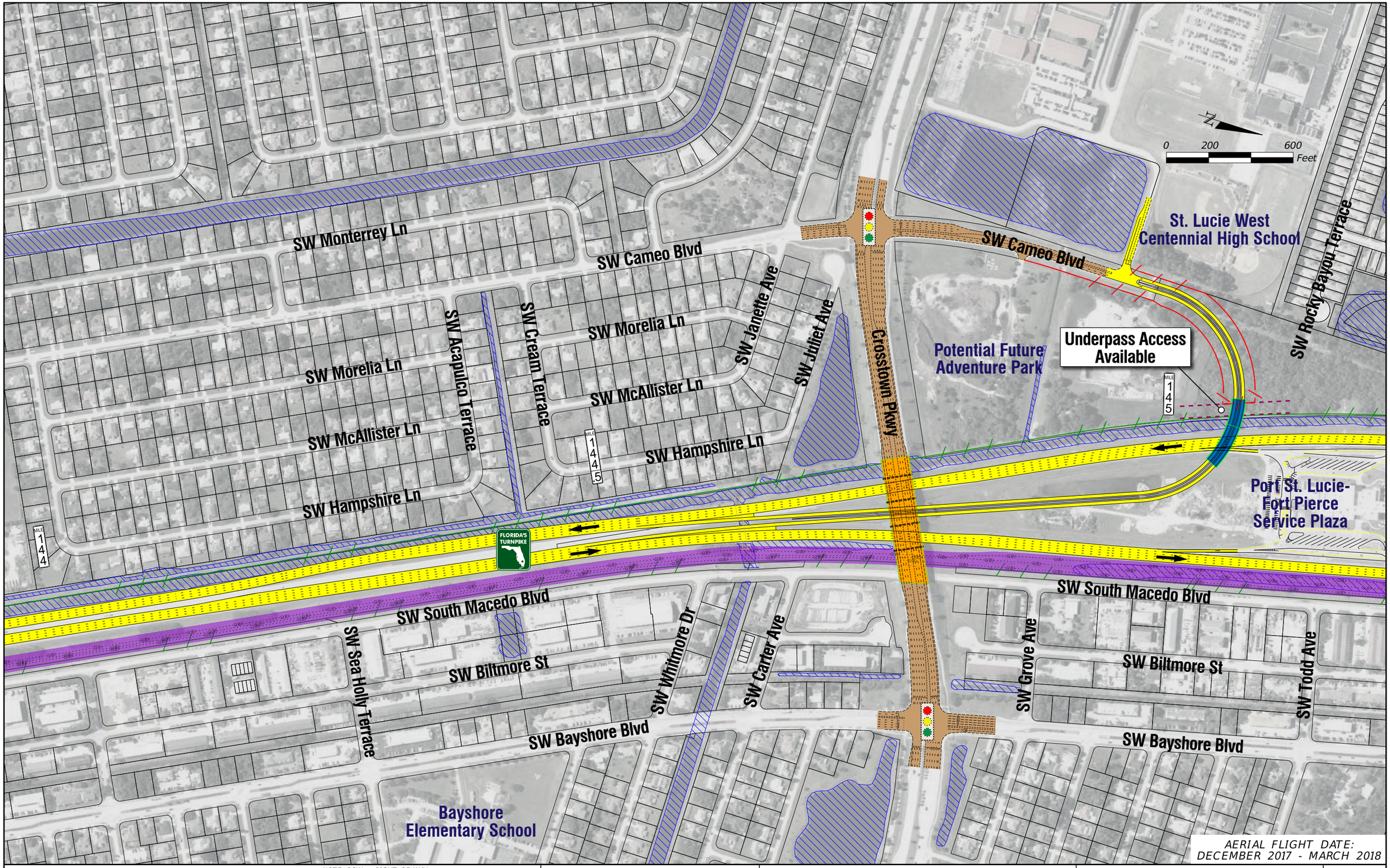
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

SW PORT ST. LUCIE BLVD INTERCHANGE ALT. 2

SHEET NO. A-6



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE

NOTE: ROW = RIGHT OF WAY

- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
- POTENTIAL NEW TRAFFIC SIGNAL
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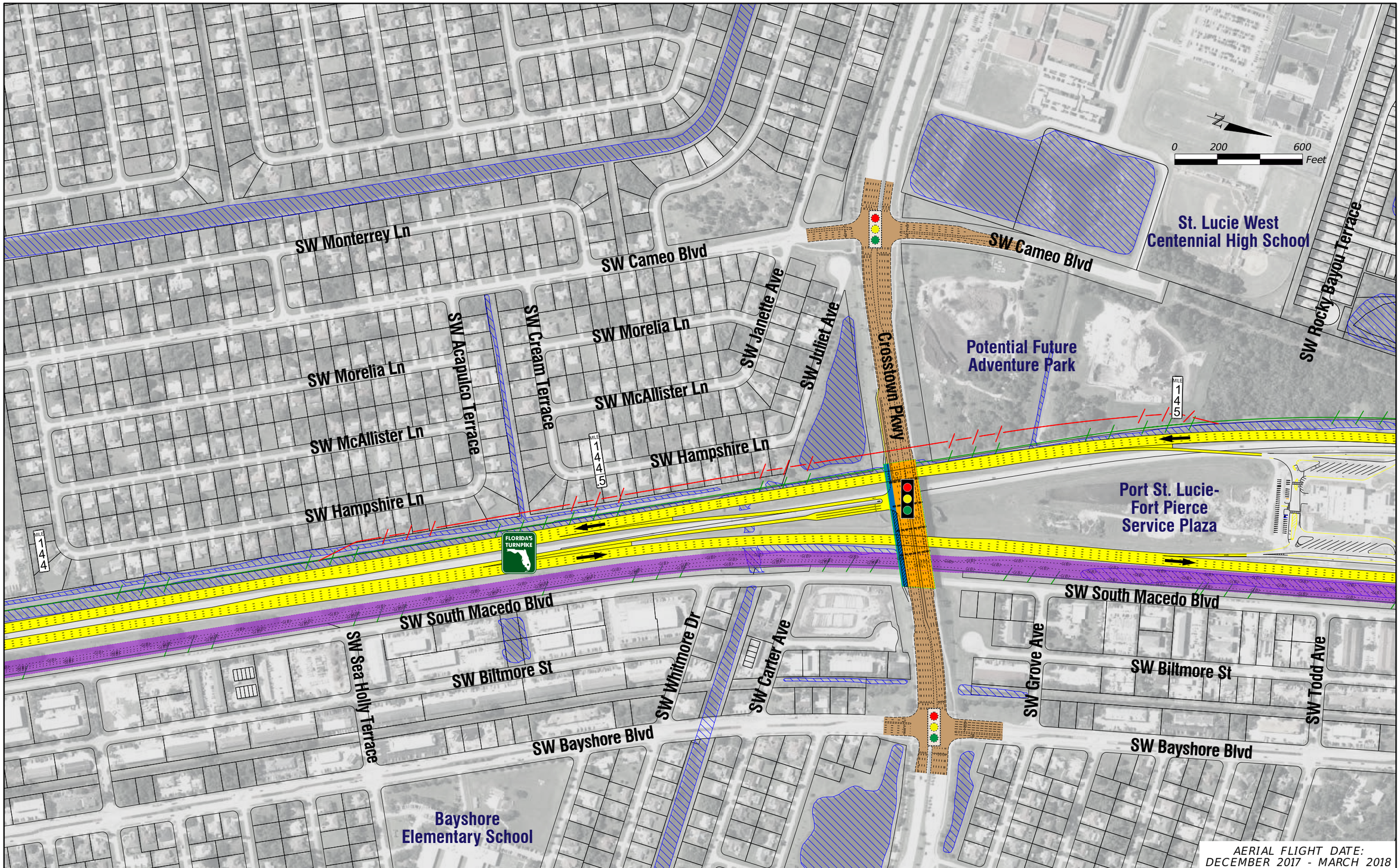
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY

FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

CROSSTOWN PARKWAY INTERCHANGE ALT. 3

SHEET NO.
A-7



LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE

NOTE: ROW = RIGHT OF WAY

- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
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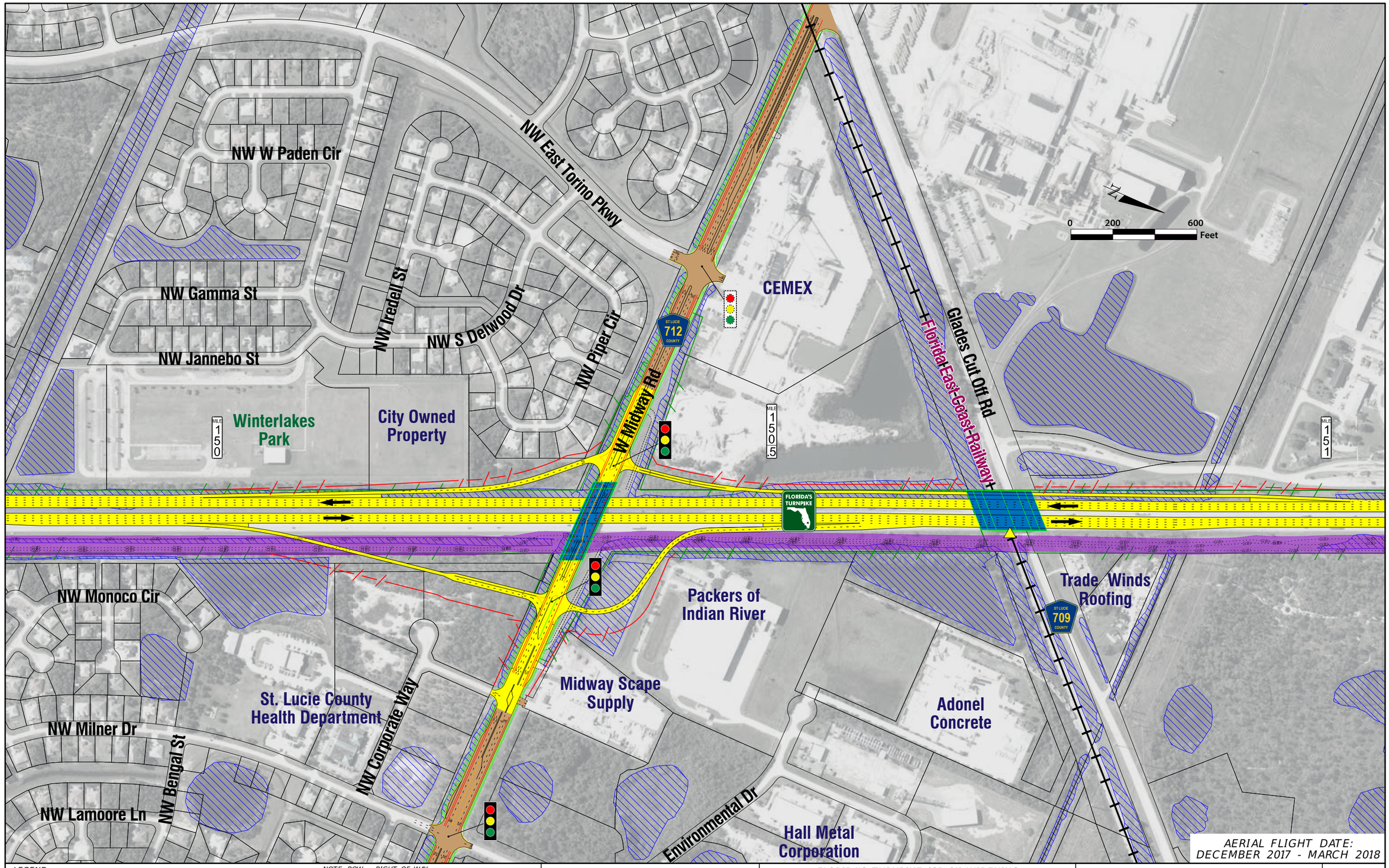
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

CROSSTOWN PARKWAY INTERCHANGE ALT. 4

SHEET NO.
A-8



AERIAL FLIGHT DATE:
DECEMBER 2017 - MARCH 2018

LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE
- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
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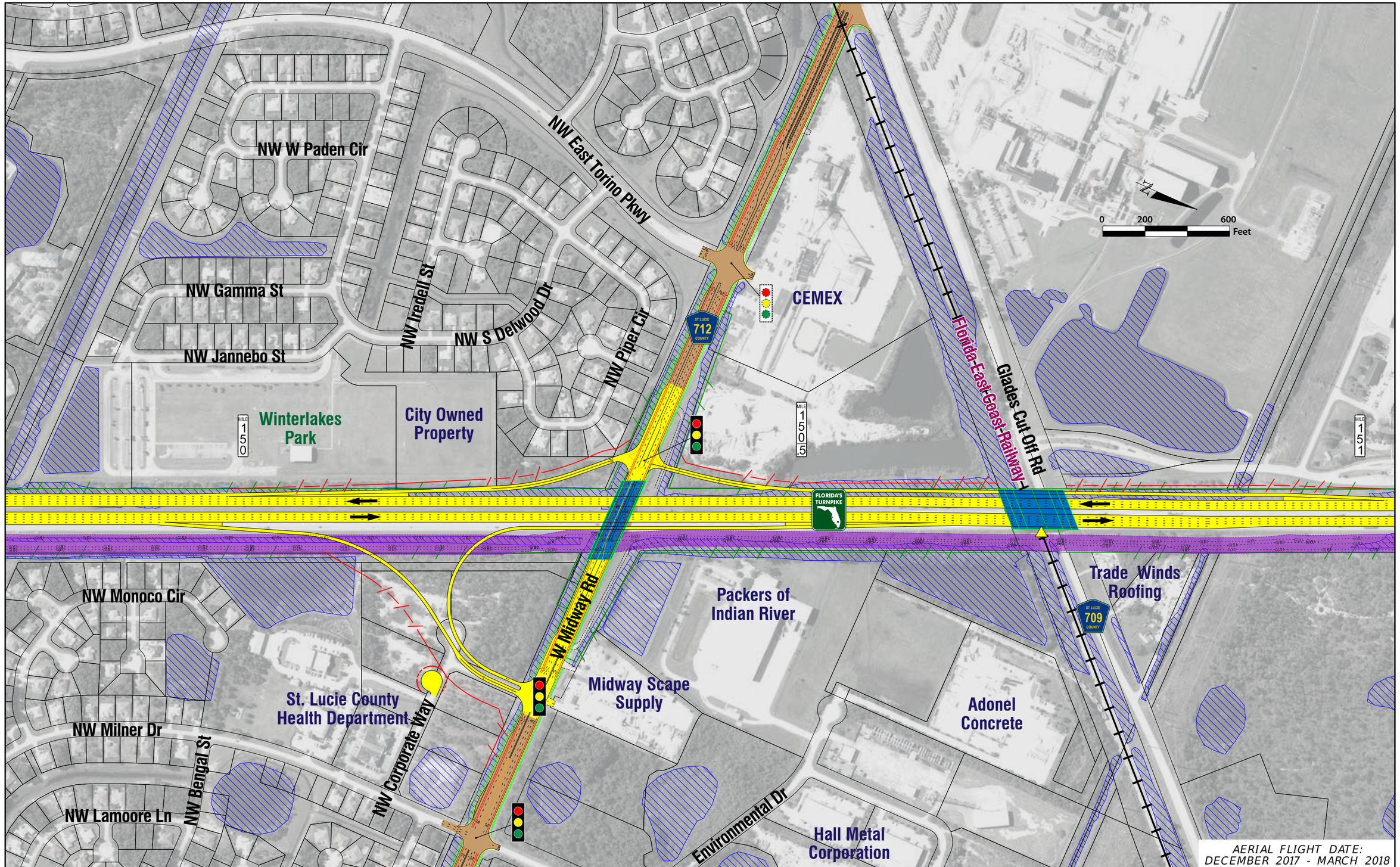
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

W MIDWAY ROAD INTERCHANGE ALT. 1

SHEET NO.
A-9



LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE
- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
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- EXISTING TRAFFIC SIGNAL
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NOTE: ROW = RIGHT OF WAY

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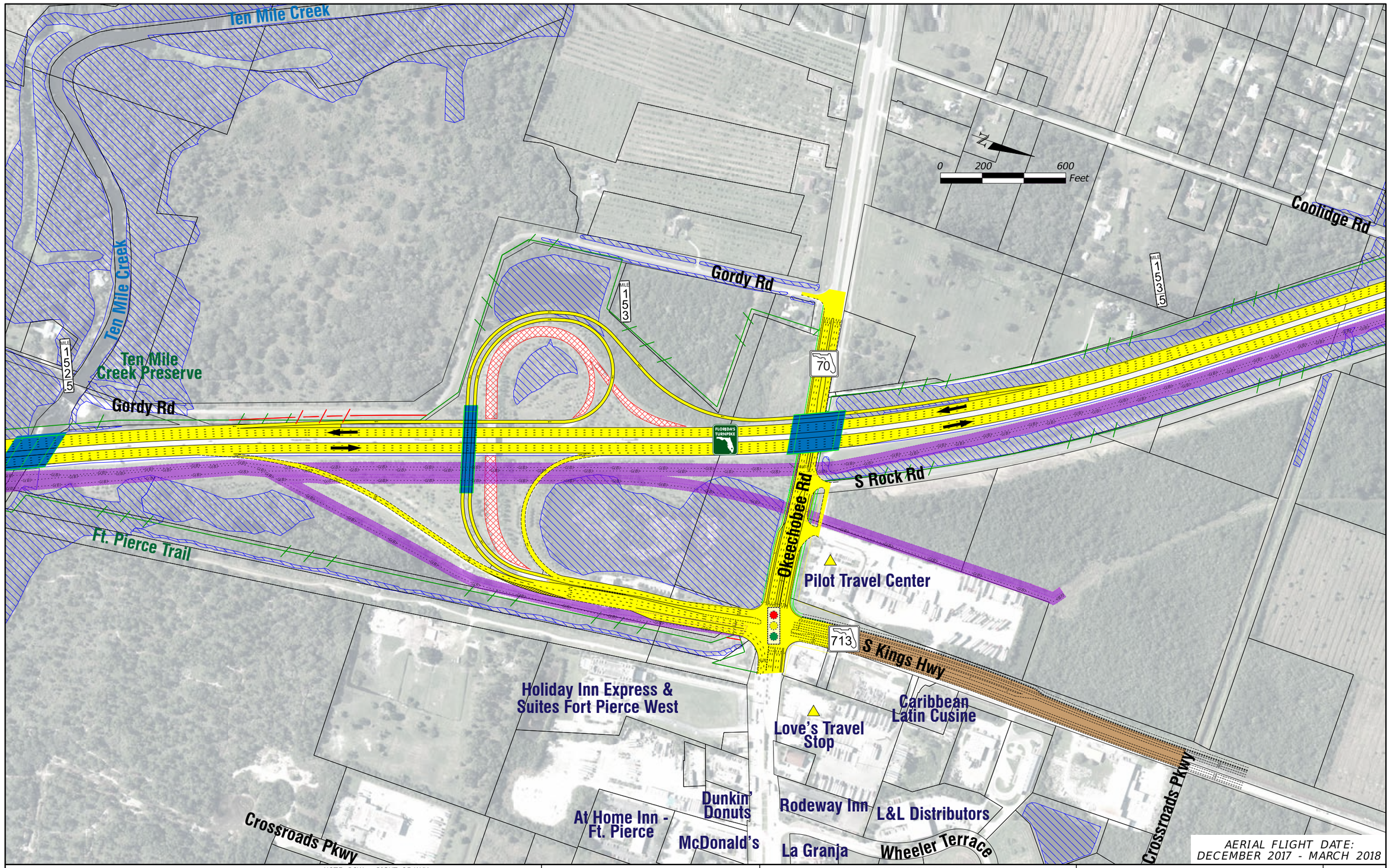
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

W MIDWAY ROAD INTERCHANGE ALT. 4

SHEET NO.
A-10



LEGEND

NOTE: ROW = RIGHT OF WAY

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE
- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
- POTENTIAL NEW TRAFFIC SIGNAL
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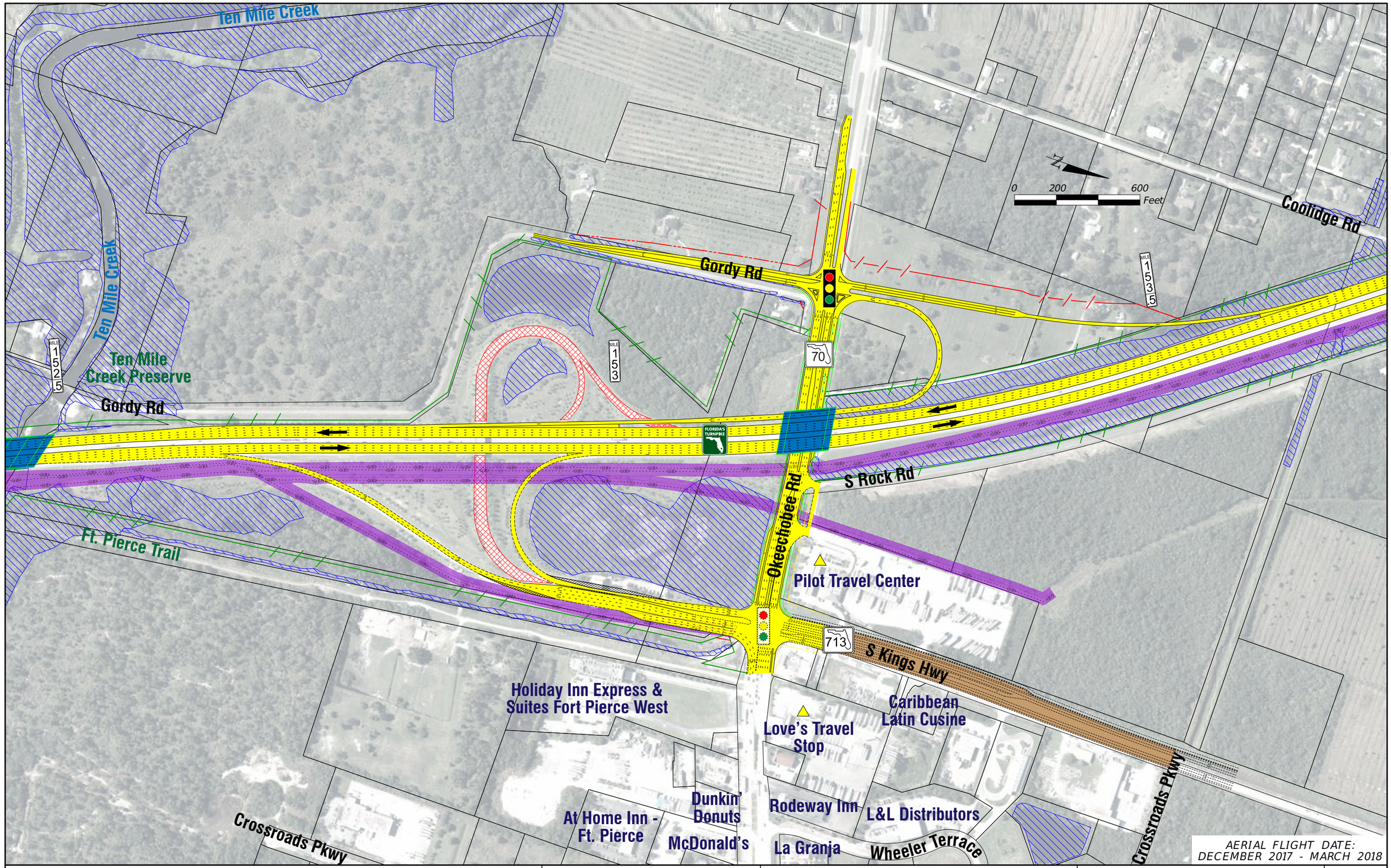
FROM JUPITER (INDIANTOWN ROAD/SR 706)
TO FT. PIERCE (OKEECHOBEE ROAD/SR 70)
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 423374-1

OKEECHOBEE ROAD / SR 70 INTERCHANGE ALT. 1

SHEET NO. A-11



LEGEND

- PROPERTY LINES
- EXISTING ROW LINE
- EXISTING LIMITED ACCESS ROW LINE
- POTENTIAL ROW LINE
- POTENTIAL LIMITED ACCESS ROW LINE
- RAILROAD
- WETLANDS/OTHER SURFACE WATERS
- PAVEMENT REMOVAL
- PROPOSED ROADWAY
- PROPOSED BRIDGE
- EXISTING BRIDGE
- OTHER PROJECTS (BRIDGE)
- OTHER PROJECTS (ROADS)
- FLORIDA GAS TRANSMISSION (FGT) SPECIFIED WIDTH
- POTENTIAL NEW TRAFFIC SIGNAL
- EXISTING TRAFFIC SIGNAL
- FUTURE TOLL GANTRY
- POTENTIAL MEDIUM/HIGH CONTAMINATION SITES

NOTE: ROW = RIGHT OF WAY

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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

OKEECHOBEE ROAD / SR 70 INTERCHANGE ALT. 4

SHEET NO. A-12

Appendix B
Preliminary Interchange Alternatives Evaluation Matrices

FTE PD&E / SR 91 PRELIMINARY INTERCHANGE ALTERNATIVES EVALUATION MATRIX

SW MARTIN HIGHWAY INTERCHANGE (MP 135.0)

CRITERIA	CATEGORY	DESIGN PARAMETERS	ALT. 7B		ALT. 7S		NOTES
CRITERIA	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Direct access provided to SW Martin Hwy. as currently exists		Interchange access split into two major points (SB-off and NB-on at SW Martin Hwy, and NB-off and SB-on from SW High Meadow Ave.)		
		1 to 10 (Wt.= 5)	**9.00**	90.0	**7.00**	70.0	
		Traffic Operations Issues (Year 2045)	- Provides adequate capacity for expected traffic - SW High Meadow Ave. Intersection will require upgrade (by others)		- Provides adequate capacity for expected traffic		
		1 to 10 (Wt.= 8)	**7.50**	75.0	**8.00**	80.0	
		Driver Expectancy / Weaving Issues / Ramp Backups	Weaving has been minimized		Access to/from the interchange has been split into two major points; some movements may become circuitous		
		1 to 10 (Wt.= 4)	**9.00**	90.0	**7.00**	70.0	
		MOT and Constructability Complexities	One major bridge crossing over the Turnpike mainline and FGT		Two major bridge crossings over the Turnpike mainline and FGT. Additional construction on a large section of High Meadows Ave.		
		1 to 10 (Wt.= 4)	**8.00**	80.0	**4.00**	40.0	
		Utilities Impacts/Magnitude	- OE distribution S. side of 714 impacted - Comm tower site possibly impacted - Possibly misses OE Transmission pole at NB ramp, but then pole is in FTE ROW - UAO facilities along SW Martin Downs Blvd and SW Martin Hwy impacted, likely significant impacts		- OE distribution S. side of 714 impacted - Comm tower site possibly impacted - Likely OE Transmission pole at SB ramp impacted - UAO facilities along SW Martin Downs Blvd and SW Martin Hwy impacted, likely significant impacts		
		1 to 10 (Wt.= 5)	**7.00**	70.0	**5.00**	50.0	
		Local Road Impacts or Traffic Patterns	Local road impacts are minimized		Traffic diversion and major addition/widening to SW High Meadow Ave. will be required		
		1 to 10 (Wt.= 4)	**8.00**	80.0	**6.00**	60.0	
		Overall Interchange Performance in relation to adjacent intersections & interchanges	Major access point at SW Martin Hwy/SW Martin Downs Blvd Intersection is adequate for expected traffic. Improvements to the SW High Meadow Ave Intersection are required (by others)		The two major access points for the interchange will operate at acceptable LOS. Split of traffic may help congestion, but some circuitous maneuvers may be required		
		1 to 10 (Wt.= 5)	**7.50**	75.0	**7.50**	75.0	
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	Approx. 41.3 acres within the "AE" designated floodplains		Approx. 41.3 acres within the "AE" designated floodplains		
		1 to 10 (Wt.= 6)	**3.00**	30.0	**3.00**	30.0	
		Wetland Impacts (ac)	Approx. 18.8 acres of impacts to wetlands and man-made surface waters 0.1 acre of wetland scrub 10.7 acres of man-made channels/ditches 8.0 acres of man-made ponds		Approx. 21.0 acres of impacts to wetlands and man-made surface waters 0.2 acre of hydric pine 0.6 acre of wetland scrub 12.2 acres of man-made channels/ditches 8.0 acres of man-made ponds		
		1 to 10 (Wt.= 6)	**6.00**	60.0	**5.50**	55.0	
		Number of Potential Residential & Business Relocations	+/- 2 (Business)		+/- 2 (Business)		
		1 to 10 (Wt.= 5)	**8.00**	80.0	**8.00**	80.0	
		Number of Potential Contamination Sites	(1) Adjacent Como Oil Co. of FL/Martin County Petroleum (plume within ROW) (2) Adjacent Palm City Lube/Highway Enterprise Inc. (two documented petroleum discharges; SRCO 2012; operational gas station) (3) Adjacent Mobil gas station (documented petroleum discharge; SRCO 2012; operational gas station) (4) Adjacent 7-Eleven gas station (documented petroleum discharge; SRCO 2010; operational gas station)		(1) Adjacent Como Oil Co. of FL/Martin County Petroleum (plume within ROW) (2) Adjacent Palm City Lube/Highway Enterprise Inc. (two documented petroleum discharges; SRCO 2012; operational gas station) (3) Adjacent Mobil gas station (documented petroleum discharge; SRCO 2012; operational gas station) (4) Adjacent 7-Eleven gas station (documented petroleum discharge; SRCO 2010; operational gas station) (5) On-site former agricultural (row crops/groves)		Contaminants of Concern: Petroleum, Hazardous Materials, Herbicides, Pesticides Level II testing is recommended
		1 to 10 (Wt.= 6)	**2.00**	20.0	**2.00**	20.0	
		Impacts to Parks & Conservation Areas (ac)	No impacts identified		No impacts identified		
		1 to 10 (Wt.= 7)	**10.00**	100.0	**10.00**	100.0	
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$61,850,361		$70,446,467		
		1 to 10 (Wt.= 15)	**7.00**	70.0	**5.70**	57.0	
		Right-of-Way Impacts (ac) / Number of Parcels Impacted	17.266 ac. / 27 Parcels At cost = $12,650,329		22.267 ac. / 44 Parcels At cost = $18,179,196		
		1 to 10 (Wt.= 10)	**6.00**	60.0	**3.00**	30.0	
		Severity and Magnitude of Impacts to FGT	Two at-grade ramps and one overpass crossing, similar to existing with some relocation at overpass		Increased FGT involvement/crossing (a second overpass bridge crossing is added)		
		1 to 10 (Wt.= 10)	**7.00**	70.0	**4.00**	40.0	
SCORE			**68.85**		**55.80**		**Max. Score = 100**
RANK			**1**		**2**		

	XX	**Criteria Weighting (1 worst to 10 best)**
75-100%		**Least Impacts/Best Operation/Least Cost/Best Benefits**
60-75%		**Below than Avg. Impacts & Cost & Above Avg. Operation**
40-60%		**Avg. Impacts/Avg. Operation/Avg. Cost**
25-40%		**Above Avg. Impacts & Cost, Below than Avg. Operation**
0-25%		**Most Impacts/Worst Operation/Most Cost/Least Benefits**

FTE PD&E / SR 91 PRELIMINARY INTERCHANGE ALTERNATIVES EVALUATION MATRIX

SE BECKER ROAD (MP 138.4)

CRITERIA	CATEGORY	DESIGN PARAMETERS	ALT. 1		ALT. 3		NOTES
CRITERIA	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	No impacts are anticipated to the access		The distance between the new ramp terminal on the west side to the next intersection (SW Bradshaw Cir) is reduced by 550 ft.		
		1 to 10 (Wt.= 5)	7.50	75.0	6.00	60.0	
		Traffic Operations Issues (Year 2045)	Traffic operations are acceptable. Slight improvements in the SE Becker Rd/SB Ramp terminal operation		Traffic operations are acceptable		
		1 to 10 (Wt.= 8)	7.50	75.0	7.00	70.0	
		Driver Expectancy / Weaving Issues / Ramp Backups	No issues are anticipated		No issues are anticipated		
		1 to 10 (Wt.= 4)	7.50	75.0	7.50	75.0	
		MOT and Constructability Complexities	Similar typical MOT or Constructability issues are anticipated		Similar typical MOT or Constructability issues are anticipated		
		1 to 10 (Wt.= 4)	7.50	75.0	7.50	75.0	
		Utilities Impacts/Magnitude	- FGT impacts are similar - OE distribution N. side of SE Becker Rd impacted - UAO facilities along SE Becker Rd will likely be impacted		- FGT impacts are similar - OE distribution N. side of SE Becker Rd impacted - UAO facilities along SE Becker Rd will likely be impacted		
		1 to 10 (Wt.= 5)	7.50	75.0	7.50	75.0	
		Local Road Impacts or Traffic Patterns	No local road or traffic pattern impacts are anticipated		The SE Becker Rd/SW Bradshaw Cir. intersection may experience some impacts due to the close proximity of the new SE Becker Rd/SB off-ramp terminal		
		1 to 10 (Wt.= 4)	7.00	70.0	6.00	60.0	
		Overall Interchange Performance in relation to adjacent intersections & interchanges	Acceptable traffic operation with no anticipated impacts on adjacent intersections or interchanges		Acceptable traffic operation with some potential impacts to the SE Becker Rd/SW Bradshaw Cir. intersection		
		1 to 10 (Wt.= 5)	7.00	70.0	6.00	60.0	
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	Approx. 1.0 acre within the "AH" flood zone		Approx. 0.7 acre within the "AH" flood zone		
		1 to 10 (Wt.= 6)	7.00	70.0	7.00	70.0	
		Wetland Impacts (ac)	Approx. 1.1 acres of impacts to man-made drainage channels		Approx. 1.2 acres of impacts to man-made drainage channels		
		1 to 10 (Wt.= 6)	8.00	80.0	8.00	80.0	
		Number of Potential Residential & Business Relocations	None is anticipated		None is anticipated		
		1 to 10 (Wt.= 5)	10.00	100.0	10.00	100.0	
		Number of Potential Contamination Sites	None is anticipated		None is anticipated		
		1 to 10 (Wt.= 6)	10.00	100.0	10.00	100.0	
		Impacts to Parks & Conservation Areas (ac)	No impacts identified		No impacts identified		
		1 to 10 (Wt.= 7)	10.00	100.0	10.00	100.0	
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$31,710,000		$39,620,000		
		1 to 10 (Wt.= 15)	9.00	90.0	7.00	70.0	
		Right-of-Way Impacts (ac) / Number of Parcels Impacted	1.25 (ac) / 11 Parcels At cost = $1,220,841		11.08 (ac) / 14 Parcels At cost = $5,243,321		
		1 to 10 (Wt.= 10)	6.00	60.0	3.00	30.0	
		Severity and Magnitude of Impacts to FGT	New overpass crossing to replace existing bridge; minor FGT relocation (similar impacts in both options)		New overpass crossing to replace existing bridge; minor FGT relocation (similar impacts in both options)		
		1 to 10 (Wt.= 10)	7.50	75.0	7.50	75.0	
SCORE			**79.80**		**71.75**		**Max. Score = 100**
RANK			**1**		**2**		

XX	**Criteria Weighting (1 worst to 10 best)**
75-100%	**Least Impacts/Best Operation/Least Cost/Best Benefits**
60-75%	**Below than Avg. Impacts & Cost & Above Avg. Operation**
40-60%	**Avg. Impacts/Avg. Operation/Avg. Cost**
25-40%	**Above Avg. Impacts & Cost, Below than Avg. Operation**
0-25%	**Most Impacts/Worst Operation/Most Cost/Least Benefits**

FTE PD&E / SR 91 PRELIMINARY INTERCHANGE ALTERNATIVES EVALUATION MATRIX

SW PORT ST. LUCIE BLVD. (MP 143.1)

	CATEGORY	DESIGN PARAMETERS	ALT. 1		ALT. 2		NOTES
CRITERIA	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Turnpike NB off traffic wishing to access SW Bayshore Blvd must make a right-turn and an immediate left-turn		Turnpike NB off traffic wishing to access SW Bayshore Blvd can proceed direct at the SW Port St. Lucie Blvd/SW Bayshore Blvd intersection		
		1 to 10 (Wt.= 5)	**7.00**	70.0	**8.00**	80.0	
		Traffic Operations Issues (Year 2045)	One new signalized intersection (for NB off Ramp) is added in close proximity to an existing signalized intersection (Port St. Lucie Blvd/SW Bayshore Blvd)		No added intersections		
		1 to 10 (Wt.= 8)	**6.50**	65.0	**8.50**	85.0	
		Driver Expectancy / Weaving Issues / Ramp Backups	The NB off ramp has more potentials to back up onto the mainline due to its length being substantially less than the ramp length in Alt. 2		The NB off ramp in this alternative is substantially longer than same ramp in Alt. 1; thus, it has less potential of backing up onto the mainline		
		1 to 10 (Wt.= 4)	**7.00**	70.0	**8.50**	85.0	
		MOT and Constructability Complexities	The NB off ramp terminal will be connected to the mainline bridge and will have the typical complications associated with a 90-degree road to bridge connection		Typical MOT and construction		
		1 to 10 (Wt.= 4)	**6.00**	60.0	**8.50**	85.0	
		Utilities Impacts/Magnitude	Potential utility impacts anticipated at: - OE Transmission W side of SW Bayshore Blvd - UAO facilities along SW PSL Blvd and SW Bayshore Blvd - FPL substation is in the in-field, requires extra consideration		Potential utility impacts anticipated at: - OE Transmission W side of SW Bayshore Blvd - UAO facilities along PSL Blvd and SW Bayshore Blvd - FPL substation is in the in-field, requires extra consideration		
		1 to 10 (Wt.= 5)	**8.00**	80.0	**8.00**	80.0	
		Local Road Impacts or Traffic Patterns	Will separate the NB off-ramp traffic from the local traffic on SE Bayshore Blvd		Will not separate the NB off-ramp traffic from the local traffic on SE Bayshore Blvd		
		1 to 10 (Wt.= 4)	**8.00**	80.0	**6.50**	65.0	
		Overall Interchange Performance in relation to adjacent intersections & interchanges (Low, Medium or High)	This alternative will add a new signalized intersection which will have operational impacts on the adjacent intersection at SW Port St. Lucie Blvd/SW Bayshore Blvd.		No impacts are anticipated		
		1 to 10 (Wt.= 5)	**7.00**	70.0	**8.50**	85.0	
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	No impacts anticipated		No impacts anticipated		
		1 to 10 (Wt.= 6)	**10.00**	100.0	**10.00**	100.0	
		Wetland Impacts (ac)	Total wetland impacts 4.16 acres - man-made channels (3.84 acres) and man-made ponds (0.32 acre)		Total wetland impacts 4.20 acres - man-made channels (3.88 acres) and man-made ponds (0.32 acre)		
		1 to 10 (Wt.= 6)	**4.00**	40.0	**4.00**	40.0	
		Number of Potential Residential & Business Relocations	+/-2 (Residential)		+/-2 (Residential)		
		1 to 10 (Wt.= 5)	**7.00**	70.0	**7.00**	70.0	
		Number of Potential Contamination Sites	(1) Adjacent Electrical Substation (history of discharges) (2) Adjacent Suudath Relocation Services (unremediated spill under roadway) (3) Adjacent Palm City Mobil (active fuel station with ongoing remediation) (4) Adjacent Chevron Station (active fuel station) (5) Adjacent Pt. St. Lucie Shell Station (active fuel station)		(1) Adjacent Electrical Substation (history of discharges) (2) Adjacent Suudath Relocation Services (unremediated spill under roadway) (3) Adjacent Palm City Mobil (active fuel station with ongoing remediation) (4) Adjacent Chevron Station (active fuel station) (5) Adjacent Pt. St. Lucie Shell Station (active fuel station)		
		1 to 10 (Wt.= 6)	**4.00**	40.0	**4.00**	40.0	
		Impacts to Parks & Conservation Areas (ac)	No impacts identified		No impacts identified		
		1 to 10 (Wt.= 7)	**10.00**	100.0	**10.00**	100.0	
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$45,930,000		$45,970,000		
		1 to 10 (Wt.= 15)	**7.00**	70.0	**7.00**	70.0	
		Right-of-Way Impacts (ac) / Number of Parcels Impacted	12.8 ac. / 6 Parcels At cost = $16,522,974		12.9 ac. / 8 Parcels At cost = $16,746,170		
		1 to 10 (Wt.= 10)	**8.00**	80.0	**7.00**	70.0	
		Severity and Magnitude of Impacts to FGT	Severe impacts on FGT facilities and will require relocation of 3 lines for +/-1/2 mile with no ROW availability inside FTE ROW		Impacts are minimized to an at-grade ramp crossing and minor relocation at overpass		
		1 to 10 (Wt.= 10)	**3.50**	35.0	**7.00**	70.0	
SCORE			**67.90**		**74.25**		**Max. Score = 100**
RANK			**2**		**1**		

XX	**Criteria Weighting (1 worst to 10 best)**
75-100%	**Least Impacts/Best Operation/Least Cost/Best Benefits**
60-75%	**Below than Avg. Impacts & Cost & Above Avg. Operation**
40-60%	**Avg. Impacts/Avg. Operation/Avg. Cost**
25-40%	**Above Avg. Impacts & Cost, Below than Avg. Operation**
0-25%	**Most Impacts/Worst Operation/Most Cost/Least Benefits**

FTE PD&E / SR 91 PRELIMINARY INTERCHANGE ALTERNATIVES EVALUATION MATRIX

CROSSTOWN PARKWAY (MP 144.7)

CRITERIA	CATEGORY	DESIGN PARAMETERS	ALT. 3		ALT. 4		NOTES
CRITERIA	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Access to Crosstown Pkwy is provided through SW Cameo Blvd, which may not be a direct access, but no signal addition on Crosstwon Pkwy		Access is direct to Crosstown Pkwy; however, a new signal is added on a bridge and in between two closely spaced signals which will have impacts on the Crosstown Pkwy traffic		
		1 to 10 (Wt.= 5)	**7.00**	70.0	**6.00**	60.0	
		Traffic Operations Issues (Year 2045)	Ramp traffic has very long ramps that may be used as storage under extreme traffic conditions, and will minimize any impacts to the mainline		Potentials for ramp traffic to queue back to the mainline (shorter ramp lengths) and one new signal on cross road		
		1 to 10 (Wt.= 8)	**7.50**	75.0	**4.50**	45.0	
		Driver Expectancy / Weaving Issues / Ramp Backups	Longer ramps are provided to avoid ramp backups on mainline		Ramp lengths are shorter and backup issues may be expected on mainline		
		1 to 10 (Wt.= 4)	**7.00**	70.0	**4.00**	40.0	
		MOT and Constructability Complexities	A new structure spanning over the SB mainline is added and will have its MOT implications		Constructability issues expected when tying the new ramp to the existing bridge with a 90-degree connection, and a new signal on exist. Bridge		
		1 to 10 (Wt.= 4)	**7.00**	70.0	**5.00**	50.0	
		Utilities Impacts/Magnitude	No major impacts are anticipated		No major impacts are anticipated		
		1 to 10 (Wt.= 5)	**9.00**	90.0	**9.00**	90.0	
		Local Road Impacts or Traffic Patterns	New ramps will access Crosstwon Pkwy via a side road (SW Cameo Blvd)		Will access Crosstown Pkwy directly with a new signal which will have direct traffic implications on the Crosstown Pkwy operation		
		1 to 10 (Wt.= 4)	**6.50**	65.0	**4.50**	45.0	
		Overall Interchange Performance in relation to adjacent intersections & interchanges	Will maintain existing signals and traffic operation on Crosstown Parkway; no further impacts to the adjacent interchanges are expected		Will impact traffic operation on Crosstown Pkwy and degrade the LOS of the SW Bayshore Blvd/Crosstown Pkwy intersection to an LOS of "F". However, no further impacts to the adjacent interchanges are expected		
		1 to 10 (Wt.= 5)	**7.00**	70.0	**3.50**	35.0	
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	No areas within the "A" designated flood zone		No areas within the "A" designated flood zone		
		1 to 10 (Wt.= 6)	**10.00**	100.0	**10.00**	100.0	
		Wetland Impacts (ac)	Approx. 0.1 acre of impacts to man-made drainage channels		Approx. 0.1 acre of impacts to man-made drainage channels		
		1 to 10 (Wt.= 6)	**9.00**	90.0	**9.00**	90.0	
		Number of Potential Residential & Business Relocations	None is anticipated		+/- 5 (Residential) +/- 1 (Business)		
		1 to 10 (Wt.= 5)	**10.00**	100.0	**4.00**	40.0	
		Number of Potential Contamination Sites	(1) Adjacent Port St. Lucie Service Plaza (nearby groundwater plume-active remediation)		(1) Adjacent Port St. Lucie Service Plaza (nearby groundwater plume)		Contaminants of Concern: Petroleum
		1 to 10 (Wt.= 6)	**5.00**	50.0	**6.00**	60.0	
		Impacts to Parks & Conservation Areas (ac)	Ramp in NW quadrant impacts an area identified for future recreational facilities/skate park, but access to future park will be provided		Proposed LA ROW in NW quadrant requires land acquisition along side of parcels identified as future recreational facilities/skate park		
		1 to 10 (Wt.= 7)	**6.00**	60.0	**6.00**	60.0	
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$21,360,000		$19,920,000		
		1 to 10 (Wt.= 15)	**7.00**	70.0	**8.00**	80.0	
		Right-of-Way Impacts (ac) / Number of Parcels Impacted	2.40 (ac) / 1 Parcel At cost = $1,222,789		7.23 (ac) / 30 Parcels At cost = $7,051,741		
		1 to 10 (Wt.= 10)	**6.00**	60.0	**2.50**	25.0	
		Severity and Magnitude of Impacts to FGT	Impacts are minimized; no bridge or wall work on FGT side		Impacts are minimized; no bridge or wall work on FGT side		
		1 to 10 (Wt.= 10)	**8.00**	80.0	**8.00**	80.0	
SCORE			**73.80**		**61.95**		**Max. Score = 100**
RANK			**1**		**2**		

B/C Ratio (as provided by FTE)

ALT. 3	2.00
ALT. 4	2.40

XX	Criteria Weighting (1 worst to 10 best)
75-100%	Least Impacts/Best Operation/Least Cost/Best Benefits
60-75%	Below than Avg. Impacts & Cost & Above Avg. Operation
40-60%	Avg. Impacts/Avg. Operation/Avg. Cost
25-40%	Above Avg. Impacts & Cost, Below than Avg. Operation
0-25%	Most Impacts/Worst Operation/Most Cost/Least Benefits

FTE PD&E / SR 91 PRELIMINARY INTERCHANGE ALTERNATIVES EVALUATION MATRIX

W MIDWAY ROAD (MP 150.4)

CRITERIA	CATEGORY	DESIGN PARAMETERS	ALT. 1		ALT. 4		NOTES
	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Generally, no access implications, except for the relatively short distance between the two ramp intersections which could impact timely access		Generally, no access implications		
		1 to 10 (Wt.= 5)	4.00	40.0	6.00	60.0	
		Traffic Operations Issues (Year 2045)	The short distance between the two ramp intersections has a potential for operational issues		A longer distance is provided between signals		
		1 to 10 (Wt.= 8)	6.00	60.0	7.50	75.0	
		Driver Expectancy / Weaving Issues / Ramp Backups	Ramp back ups may result in peak hours due to the close proximity of the two ramp terminal intersections		No traffic issues are anticipated		
		1 to 10 (Wt.= 4)	6.00	60.0	7.50	75.0	
		MOT and Constructability Complexities	No MOT or Constructability issues are anticipated, however, construction of NB on-ramp will eliminate existing wet ponds		No MOT or Constructability issues are anticipated		
		1 to 10 (Wt.= 4)	7.00	70.0	7.50	75.0	
		Utilities Impacts/Magnitude	Some, but not major impacts, are anticipated		Some, but not major impacts, are anticipated		
		1 to 10 (Wt.= 5)	8.50	85.0	8.50	85.0	
		Local Road Impacts or Traffic Patterns	Potential traffic impacts to Midway Rd may result from the close proximity of the two ramp terminal junctions		No local road or traffic pattern impacts are anticipated		
		1 to 10 (Wt.= 4)	7.00	70.0	8.00	80.0	
		Overall Interchange Performance in relation to adjacent intersections & interchanges	Effects on the adjacent intersections and interchanges are expected to be similar		Effects on the adjacent intersections and interchanges are expected to be similar		
		1 to 10 (Wt.= 5)	7.50	75.0	7.50	75.0	
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	No areas within the "A" designated flood zone		No areas within the "A" designated flood zone		
		1 to 10 (Wt.= 6)	10.00	100.0	10.00	100.0	
		Wetland Impacts (ac)	Approx. 6.9 acres of impacts to man-made drainage channels (6.5 acres) and man-made ponds (0.4 acre)		Approx. 1.7 acres of impacts to man-made drainage channels		
		1 to 10 (Wt.= 6)	5.00	50.0	7.00	70.0	
		Number of Potential Residential & Business Relocations	None is anticipated		None is anticipated		
		1 to 10 (Wt.= 5)	10.00	100.0	10.00	100.0	
		Number of Potential Contamination Sites	(1) Adjacent CEMEX W. Ft. Pierce Ready-Mix & Block (2) Onsite Railroad Crossing (3) Adjacent St. Lucie County Glades Road Landfill/St. Lucie Co Bailing and Recycling Facility		(1) Adjacent CEMEX W. Ft. Pierce Ready-Mix & Block (2) Onsite Railroad Crossing (3) Adjacent St. Lucie County Glades Road Landfill/St. Lucie Co Bailing and Recycling Facility		Contaminants of Concern: Petroleum, Solid Waste, Pesticides/Herbicides/Arsenic
		1 to 10 (Wt.= 6)	6.00	60.0	6.00	60.0	
		Impacts to Parks & Conservation Areas (ac)	Ramp in SW quadrant requires small amount of ROW from parcels identified as future park.		Ramp in SW quadrant requires small amount of ROW from parcels identified as future park.		
		1 to 10 (Wt.= 7)	7.00	70.0	7.00	70.0	
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$25,890,000		$28,070,000		
		1 to 10 (Wt.= 15)	7.50	75.0	6.00	60.0	
		Right-of-Way Impacts (ac) / Number of Parcels Impacted	11.6 ac. / 16 Parcels At cost = $5,147,557		15.1 ac. / 18 Parcels At cost = $6,517,211		
		1 to 10 (Wt.= 10)	7.00	70.0	6.50	65.0	
		Severity and Magnitude of Impacts to FGT	Two new at-grade crossings for the ramps (over FGT) and one new overpass to replace existing bridge; minor impacts but similar in both options		Two new at-grade crossings for the ramps (over FGT) and one new overpass to replace existing bridge; minor impacts but similar in both options		
		1 to 10 (Wt.= 10)	7.50	75.0	7.50	75.0	
		SCORE	**71.05**		**72.90**		**Max. Score = 100**
		RANK	**2**		**1**		

B/C Ratio (as provided by FTE)	
ALT. 1	0.20
ALT. 4	0.20

XX	Criteria Weighting (1 worst to 10 best)
75-100%	Least Impacts/Best Operation/Least Cost/Best Benefits
60-75%	Below than Avg. Impacts & Cost & Above Avg. Operation
40-60%	Avg. Impacts/Avg. Operation/Avg. Cost
25-40%	Above Avg. Impacts & Cost, Below than Avg. Operation
0-25%	Most Impacts/Worst Operation/Most Cost/Least Benefits

FTE PD&E / SR 91 PRELIMINARY INTERCHANGE ALTERNATIVES EVALUATION MATRIX

OKEECHOBEE ROAD / SR 70 (MP 153.2)

CRITERIA	CATEGORY	DESIGN PARAMETERS	ALT. 1		ALT. 4		NOTES
CRITERIA	ENGINEERING CONSIDERATIONS (35 Points)	Quality of Access Provided (Circuitous to Direct)	Access is concentrated at one junction placing it under extreme congestions, and degrading the ease of access ability		Access is separated into two junctions to ease congestions and enhance access abilities		
		1 to 10 (Wt.= 5)	4.00	40.0	7.50	75.0	
		Traffic Operations Issues (Year 2045)	Severe weaving between SB off and NB off Ramps once joined		The S. Kings Hwy junction is at LOS D. All other junctions are operating at D or better		
		1 to 10 (Wt.= 8)	4.00	40.0	7.00	70.0	
		Driver Expectancy / Weaving Issues / Ramp Backups	Ramp back ups are expected at the south side of SR 70		Back ups are minimized, as they have been separated into two junctions		
		1 to 10 (Wt.= 4)	3.00	30.0	7.50	75.0	
		MOT and Constructability Complexities	There is a large structure spanning over the Turnpike, which will have MOT and constructability implications		Typical construction with no large structures spanning over the Turnpike		
		1 to 10 (Wt.= 4)	4.00	40.0	8.00	80.0	
		Utilities Impacts/Magnitude	Less impacts along SR 70. Potential impacts the FGT lines under the new structure and may require FGT relocation		Longer distance impacted along SR 70. FGT impacts are minimized;		
		1 to 10 (Wt.= 5)	6.00	60.0	7.50	75.0	
		Local Road Impacts or Traffic Patterns	The major congestion at the SR 70/S. Kings Hwy will impact the operation of SR 70		Impacts to SR 70 or traffic patterns are minimized		
		1 to 10 (Wt.= 4)	4.00	40.0	7.50	75.0	
		Overall Interchange Performance in relation to adjacent intersections & interchanges	Effects on adjacent interchanges are similar; however, large impacts to the S. Kings Hwy intersection		Effects on adjacent interchanges are similar. Impacts to the S. Kings Hwy intersection are minimized		
		1 to 10 (Wt.= 5)	6.00	60.0	7.50	75.0	
	ENVIRONMENTAL & COMMUNITY CONSIDERATIONS (30 Points)	Floodplain Impacts (ac)	Approx. 0.1 acre within the "AE" designated flood zone		Less than 0.1 acre within the "AE" designated flood zone		
		1 to 10 (Wt.= 6)	7.00	70.0	8.00	80.0	
		Wetland Impacts (ac)	Approx. 1.0 acre of impacts to man-made drainage channels (0.6 acre) and man-made ponds (0.4 acre)		Approx. 1.2 acres of impacts to man-made drainage channels (1.2 acres)		
		1 to 10 (Wt.= 6)	7.00	70.0	7.00	70.0	
		Number of Potential Residential & Business Relocations	None is anticipated		+/- 1 (Residential)		
		1 to 10 (Wt.= 5)	10.00	100.0	7.00	70.0	
		Number of Potential Contamination Sites	(1) Adjacent Agricultural Row Crops (2) Adjacent Pilot Travel Center (active remediation)		(1) Adjacent Agricultural Row Crops (2) Adjacent Pilot Travel Center (active remediation)		Contaminants of Concern: Petroleum, Herbicides/Pesticides
		1 to 10 (Wt.= 6)	3.00	30.0	3.00	30.0	
		Impacts to Parks & Conservation Areas (ac)	No impacts identified		No impacts identified		
		1 to 10 (Wt.= 7)	10.00	100.0	10.00	100.0	
	COST CONSIDERATIONS (35 Points)	Construction Cost Estimates	$28,250,000		$28,240,000		
		1 to 10 (Wt.= 15)	7.00	70.0	7.00	70.0	
		Right-of-Way Impacts (ac) / Number of Parcels Impacted	0.36 (ac) / 2 Parcels At cost = $277,698		15.11 (ac) / 8 Parcels At cost = $6,658,207		
		1 to 10 (Wt.= 10)	7.50	75.0	3.50	35.0	
		Severity and Magnitude of Impacts to FGT	Two existing at-grade ramps will remain over FGT; one new overpass (to replace existing bridge) may cause minor FGT relocation		FGT Conflicts minimized; two existing at-grade ramps will remain over FGT but no new overpass structure		
		1 to 10 (Wt.= 10)	6.00	60.0	8.00	80.0	
SCORE			**61.80**		**69.35**		**Max. Score = 100**
RANK			**2**		**1**		

XX	Criteria Weighting (1 worst to 10 best)
75-100%	Least Impacts/Best Operation/Least Cost/Best Benefits
60-75%	Below than Avg. Impacts & Cost & Above Avg. Operation
40-60%	Avg. Impacts/Avg. Operation/Avg. Cost
25-40%	Above Avg. Impacts & Cost, Below than Avg. Operation
0-25%	Most Impacts/Worst Operation/Most Cost/Least Benefits

Appendix C
Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation

Traffic and Revenue Consultant
Florida's Turnpike Enterprise

Florida Department
of Transportation

MEMORANDUM

Date: January 10, 2020

To: Brian Ribaric, Senior Project Manager

From: Kim Samson, Traffic Engineering Project Manager

Copies: Andrew Velasquez, Emam B. Emam, Enock Mtoi

Subject: Central Turnpike PD&E: Tier 2 Interchange Alternative Evaluation

FPN(s): 423374-1

Counties: Palm Beach, Martin, St. Lucie

Overview

The Turnpike is in the process of preparing a Project Development & Environment (PD&E) study [FPN 423374-1] for widening Florida's Turnpike to address future demand resulting from growth occurring in the region. The PD&E study is evaluating widening from four to eight lanes from north of Palm Beach County to the St. Lucie County line (north of Ft. Pierce/SR 70 interchange). In addition to the mainline widening evaluation, there are interchange improvements being explored at Martin's Downs Boulevard in Stuart, Becker Road, Port St. Lucie Boulevard, SR 70 in Fort Pierce and potential new interchanges at I-95/Bridge Road (Direct Connect Ramps), Crosstown Parkway and Midway Road. Several alternatives were evaluated in Tier 1, this memo provides information for the preferred alternatives advancing into Tier 2. For all analysis to date, the most conservative future forecast scenarios (with evaluation of new interchanges) were used to compare the alternatives at each location. The final detailed analysis will be documented in a Project Traffic Analysis Report (PTAR) and/or System Interchange Justification Report(SIJR). The alternatives at these interchanges are described below:

I-95 Direct Connect (Mile Post 124)

The purpose of this proposed interchange is to provide a partial system to system direct access between the Turnpike and Interstate 95 (I-95). Two direct connect ramps are evaluated: Turnpike northbound to I-95 northbound and I-95 southbound to Turnpike southbound. The access is planned to be provided within the I-95/Bridge Road Interchange footprint at milepost 124. The following two alternatives are evaluated for this potential system to system access:

- **Alternative 1**: In this alternative traffic from south of Turnpike connects directly to the existing Bridge Road northbound on ramp before merging into mainline I-95. The I-95 southbound off ramp to is split to provide direct access to southbound Turnpike and an exit to Bridge Road.
- **Alternative 3**: This alternative is similar to Alternative 1, except the I-95 direct access to southbound Turnpike forms a curve looping west before merging into the mainline Turnpike.

The lane geometry and directional design traffic volumes (DDHVs) for these alternatives are included in **Attachment A**. **Tables 1** and **2** show Highway Capacity Software (HCS) analysis summary for 2045 No-Build and Build Alternatives.

AECOM
P.O. Box 613069
Florida's Turnpike Milepost 263, Building 5315
Ocoee, Florida 34761-3069
Tel: 407-532-3999
www.aecom.com

Table 1
2045 No-Build HCS Freeway Analysis Results

Segment	Segment Type	Lanes	Volume (vph)		LOS	
			AM	PM	AM	PM
Turnpike - Southbound						
North/South of Bridge Road Overpass	Basic	4	5,070	3,490	C	B
Turnpike - Northbound						
North/South of Bridge Road Overpass	Basic	4	3,490	5,070	B	C
I-95 - Southbound						
Upstream of I-95 off-ramp to Bridge Road	Basic	3	6,180	5,500	F	D
I-95 off-ramp to Bridge Road Diverge Influence Area	Diverge	3	6,180	5,500	D	D
Between I-95 off-ramp and on-ramp from Bridge Road	Basic	3	5,450	5,130	F*	D
I-95 on-ramp from Bridge Road Merge Influence Area	Merge	3	6,300	5,550	F	D
Downstream of I-95 on-ramp from Bridge Road Merge Influence Area	Basic	3	6,300	5,550	E	D
I-95 - Northbound						
Upstream of I-95 off-ramp to Bridge Road	Basic	3	4,670	7,040	D	F
I-95 off-ramp to Bridge Road Diverge Influence Area	Diverge	3	4,670	7,040	C	F
Between I-95 off-ramp and on-ramp from Bridge Road	Basic	3	4,260	6,220	C	F*
I-95 on-ramp from Bridge Road Merge Influence Area	Merge	3	4,600	6,920	C	F
Downstream of I-95 on-ramp from Bridge Road Merge Influence Area	Basic	3	4,600	6,920	C	F

Notes: 00 indicates constrained operations and 00 indicates failing operation

*Failing due to downstream bottleneck/congestion

AECOM
P.O. Box 613069
Florida's Turnpike Milepost 263, Building 5315
Ocoee, Florida 34761-3069
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Table 2
Turnpike/I-95 Direct Connect 2045 HCS Freeway Analysis Results

Segment	Segment Type	Lanes	Volume (vph)		LOS	
			AM	PM	AM	PM
Turnpike - Southbound						
Upstream of I-95 SB Direct Connect	Basic	4	4,560	3,490	B	B
I-95 SB Direct Connect Merge Influence Area	Merge	5	6,000	4,300	C	B
Downstream of I-95 SB Direct Connect Merge Influence Area	Basic	4	6,000	4,300	C	B
Turnpike - Northbound						
Upstream of I-95 NB Direct Connect	Basic	4	4,000	6,000	B	C
I-95 NB Direct Connect Diverge Influence Area	Diverge	5	4,000	6,000	C	C
Downstream of I-95 NB Direct Connect Diverge Influence Area	Basic	4	3,190	4,560	B	C
I-95 - Southbound						
Upstream of I-95 off-ramp to Bridge Road	Basic	3	6,180	5,500	F	D
I-95 off-ramp to Bridge Road Diverge Influence Area	Diverge	4	6,180	5,500	D	C
Between I-95 off-ramp and on-ramp from Bridge Road	Basic	3	4,010	4,320	C	C
I-95 on-ramp from Bridge Road Merge Influence Area	Merge	3	4,860	5,170	D	C
Downstream of I-95 on-ramp from Bridge Road Merge Influence Area	Basic	3	4,860	5,170	D	C
I-95 - Northbound						
Upstream of I-95 off-ramp to Bridge Road	Basic	3	3,860	5,600	C	D
I-95 off-ramp to Bridge Road Diverge Influence Area	Diverge	3	3,860	5,600	C	D
Between I-95 off-ramp and on-ramp from Bridge Road	Basic	3	3,450	4,780	B	C
I-95 on-ramp from Bridge Road Merge Influence Area	Merge	4	4,600	6,920	B	F
Downstream of I-95 on-ramp from Bridge Road Merge Influence Area	Basic	3	4,600	6,920	C	F

Notes: 00 indicates constrained operations and 00 indicates failing operations

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To the north of Bridge Road, the LOS are the same for both No-Build and Build scenarios. South of Bridge Road, LOS improvement of LOS F to LOS D or better on I-95 are anticipated. With additional capacity on Turnpike, the LOS is D or better.

Stuart/Martin Highway

S.R. 714 is a four-lane divided minor arterial with a posted speed limit of 45 mph. The Turnpike interchange has a trumpet configuration with ramps that connect to S.R. 714 at a single intersection. The projected traffic growth shows that the existing interchange configuration is unsuitable to process future demand efficiently and will cause unsafe operations for the mainline Turnpike and arterial streets. To accommodate future traffic growth, the following alternatives were proposed and evaluated:

- **Modified Alternative 7**: This alternative includes a displaced southbound left turn on Martin Downs Boulevard and a new ramp terminal at SW Armellini Avenue for the Turnpike southbound and northbound exiting traffic heading westbound on Martin's Highway.
- **Modified Alternative 7a**: Similar to Alternative 7, without the displaced southbound left turn on Martin Downs Boulevard.
- **Modified Alternative 7b**: In this alternative, a new ramp terminal is introduced at SW Leighton Farm Avenue for the Turnpike southbound off traffic heading westbound on Martin's Highway while the left turns from northbound off ramp are served at the existing intersection.
- **Modified Alternative 7c**: In this alternative, a new ramp terminal is introduced at SW Leighton Farm Avenue for the Turnpike southbound off traffic heading westbound on Martin's Highway, while the left turns from northbound off ramp are directed to make a U-turn at SW High Meadows Avenue intersection. The southbound left turns from Martin Downs Boulevard are directed to make a U-turn at SW Leighton Farm Avenue intersection.
- **Alternative 7s**: This is a hybrid of **Modified Alternative 7b** and an additional new ramp terminal introduced at SW High Meadow Avenue for the to/from south of Turnpike traffic.

The lane geometry and DDHVs are included in **Attachment B** and analysis results are summarized in **Tables 3**.

The results in **Table 3** show that the displaced left on Martin Downs Boulevard benefits in terms of reduction in delay will be marginal compared to the ROW and business access impacts. With the removal of the displaced left turn, comparable performance results still will be achieved. **Alternatives 7b** and **7c** evaluated replacing the braided ramp that serving low volume with allowing U-turn at the downstream intersections. Again, marginal benefits are obtained compared to the construction cost. Therefore, it is recommended that **Modified Alternatives 7b** and **7s** advance for further consideration.

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Table 3
2045 Martin Highway Synchro Intersection Analysis Results

Intersection	No-Build		Modified Alternative 7		Modified Alternative 7a		Modified Alternative 7b		Modified Alternative 7c		Alternative 7s	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
SW Martin Hwy & SW 42nd Ave	E/76	E/56	E/76	E/56	E/76	E/56	E/76	E/56	E/76	E/56	E/76	E/56
SW Martin Hwy & Leighton Farm Ave	D/42	E/59	C/27	E/65	C/27	E/65	D/54	D/46	E/70	D/43	D/54	D/46
SW Martin Hwy & Off Ramp to WB SW Martin Hwy/SW Amellini Ave	--	--	A/7	B/13	B/12	C/33	--	--	--	--	--	--
SW Martin Hwy & Off Ramp to WB SW Martin Hwy/NB On Ramp	--	--	--	--	--	--	--	--	--	--	--	--
SW Martin Downs Blvd at DLT	--	--	A/5	A/8	--	--	--	--	--	--	--	--
SW Martin Hwy & TPK Ramps/SW Martin Downs Blvd	**F/139**	**F/246**	C/29	D/55	D/50	E/61	D/51	E/78	D/37	D/41	D/50	E/64
SW Martin Hwy & SW High Meadows Ave*	**F/248**	**F/193**	**F/168**	**F/184**	**F/168**	**F/184**	**F/168**	**F/184**	**F/226**	**F/199**	E/73	E/57
SW High Meadows Ave & to/from South Ramps	--	--	--	--	--	--	--	--	--	--	C/26	C/29

* North-south approaches at SW Martin Highway/SW High Meadows Avenue intersection matches existing geometry

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Becker Road

Becker Road is a four-lane divided minor arterial that forms a partial cloverleaf interchange with the Turnpike. Although this interchange is currently operating acceptably, two alternatives are explored to keep up with future traffic growth and maintain safe operations. The following alternatives were proposed and evaluated:

- **Alternative 1**: This alternative maintains the existing interchange configuration while implementing Transportation Systems Management and Operations (TSM&O) solutions by adding left turn lane for both the southbound and northbound off ramps, and adding an eastbound left turn lane at the northbound ramp terminal. In this alternative, the westbound left turn lane to southbound on ramp is extended to the northbound ramp terminal to provide continuity.
- **Alternative 3**: In this alternative, the lane geometry at the northbound ramp terminal is maintained as in Alternative 1 with a new westbound right turn into southbound loop ramp connecting to the existing eastbound to southbound on ramp before merging into the mainline. In this alternative, the westbound right turn lane to southbound on ramp is extended to the northbound ramp terminal to provide continuity.

Attachment C shows the lane geometry and DDHVs and **Table 4** provides summarized analysis results.

Table 4
2045 Becker Road Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 1		Alternative 3	
	AM	PM	AM	PM	AM	PM
Becker Road & TPK SB Ramps	D/41	C/25	D/46	C/30	C/31	C/24
Becker Road & TPK NB Ramps	E/71	E/65	C/26	C/34	C/26	D/36

The results in **Table 4** show that **Alternative 1**, the TSM&O solution would be sufficient to keep the interchange ramp terminals at acceptable operational conditions.

Port St. Lucie Boulevard

Currently, the Turnpike interchange at Port St. Lucie Boulevard has a trumpet configuration with ramps that connect to Port St. Lucie Boulevard at a single intersection. In addition, there is an unsignalized intersection of SE Bayshore Boulevard and Turnpike ramp access road located approximately 500 feet south of the Port St. Lucie Boulevard intersection. The interchange is currently experiencing operational failure where traffic congestion has been observed on the westbound left-turn lanes during the AM peak period and on the northbound approach during PM peak period. The exit ramps traffic queues extended past the toll plazas causing periodic queue backups on the Turnpike Mainline. To alleviate the existing deviancies and accommodate future traffic growth, the following alternatives were proposed and evaluated:

- **Alternative 1**: The alternative proposes two new ramp terminal intersections at Port St. Lucie Boulevard for the Turnpike northbound off ramp and the another one at SW Bayshore Boulevard for Turnpike ramps to and from the north. A loop ramp serves the westbound Port St. Lucie Boulevard to southbound Turnpike movement. The northbound approach at the existing Port St. Lucie Boulevard intersection serves SE Bayshore Boulevard traffic only.

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- **Alternative 2**: Similar to Alternative 1, Two new ramp terminal intersections are created: one at Port St. Lucie Boulevard for the northbound off-ramp right turn movement and southbound on ramp to the Turnpike, and the other at SW Bayshore Boulevard for Turnpike ramps to and from the north and northbound off-ramp traffic to SW Bayshore Boulevard. A loop ramp serves the northbound off-ramp to westbound Port St. Lucie Boulevard movement. The northbound approach at the existing Port St. Lucie Boulevard intersection serves SE Bayshore Boulevard traffic only.

Attachment D shows the lane geometry and DDHVs for these alternatives. Summary analysis results are provided in **Table 5**.

Table 5
2045 Port St. Lucie Boulevard Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 1		Alternative 2	
	AM	PM	AM	PM	AM	PM
Port St. Lucie Boulevard & SW Cameo Boulevard	F/105	F/103	E/62	E/64	E/73	E/57
Port St. Lucie Boulevard & Turnpike Ramps (To/From South)	--	--	B/15	C/29	--	--
Port St. Lucie Boulevard & SE/SW Bayshore Boulevard	F/158	F/156	D/48	E/73	D/42	E/74
SW Bayshore Boulevard & Turnpike Ramps (To/From North)	--	--	D/39	C/22	D/40	C/22

Crosstown Parkway

Crosstown Parkway is a six-lane divided arterial running east-west parallel to Port St. Lucie Boulevard. The facility is about a mile north of Port St. Lucie Boulevard. The Crosstown Parkway Extension Project was just completed and opened, providing a new bridge crossing over the North Fork of the St. Lucie River in the City of Port St. Lucie, connecting Crosstown Parkway from Manth Lane to US 1 Highway at Village Green Drive. Currently, there is no Turnpike interchange at this location. The ongoing PD&E is evaluating two interchange alternatives at Crosstown Parkway:

- **Alternative 3**: The alternative proposes a partial interchange providing access to/from south Turnpike. The ramp lanes are implemented from northbound and southbound inside lanes, passing under the Crosstown Parkway overpass bridge and connects to the northern leg of SE Cameo Boulevard.

- **Alternative 4**: This alternative also proposes a partial interchange providing access to/from south Turnpike. Similar to Alternative 3, the ramp lanes are implemented from northbound and southbound inside lanes and creates a T-intersection with the Crosstown Parkway overpass bridge.

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The lane geometry and DDHVs for these alternatives are included in **Attachment E** and summary analysis results are shown in **Table 6**.

Table 6
2045 Crosstown Parkway Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 3		Alternative 4	
	AM	PM	AM	PM	AM	PM
SW Cameo Blvd & Crosstown Pkwy	D/42	D/43	E/59	D/47	D/42	D/42
SW Cameo Blvd & Turnpike Ramps	--	--	D/46	E/65	--	--
Crosstown Pkwy & Turnpike Ramps (To/From South)	--	--	--	--	D/40	D/47
SW Bayshore Blvd & Crosstown Pkwy	E/68	E/73	E/77	E/75	E/77	**F/82**

Midway Road

The need for additional Turnpike access at Midway Road was evaluated in two previous Florida Department of Transportation (FDOT) efforts: the Turnpike in 2005 and District 4 in 2016. The Turnpike's Midway Road Interchange Concept Study – December 2005 planning level study addressed growth of traffic on the Turnpike in St. Lucie County and a future planned network scenario, which now exists. It determined no fatal flaws existed to providing the interchange in the future; however, no demonstrated need was determined and priority was low to medium. FDOT District 4 also included a feasibility study, re-evaluating an interchange at Midway Road in the 2016 PD&E study completed for widening Midway Road from Glades Cut-Off Road to Selvitz Road. Two alternatives (Full Diamond and Partial Cloverleaf) being carried forward and evaluated. The evaluation also considered with and without an extension of Jenkins Road between Midway Road and SR 70. The District's evaluation study concluded that the interchange is not anticipated to have a significant impact on the adjacent interchanges to the south and north to justify need.

In this ongoing PD&E, multiple single-line alternatives were developed for the proposed interchange. Two alternatives are being short listed based on screening/high level analysis and are evaluated for the proposed interchange at Midway Road:

- **Alternative 1**: A tight diamond interchange (TUDI) with northbound ramps on the east side and southbound ramps on the west of Turnpike.

- **Alternative 4**: A tight diamond on the west of Turnpike as in Alternative 1, and a partial cloverleaf on the east of Turnpike.

The lane geometry and DDHVs for these alternatives are included in **Attachment F** and Synchro analysis results are provided in **Table 7**.

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Table 7
2045 Midway Road Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 1		Alternative 4	
	AM	PM	AM	PM	AM	PM
Midway Rd & Glades Cut Off Rd	D/54	D/38	D/47	D/40	D/47	D/40
Midway Rd & NW E Torino Pkwy	F/140	F/99	F/89	E/76	F/89	E/76
Midway Rd & SB Ramps	--	--	C/21	C/24	D/38	C/25
Midway Rd & NB Ramps	--	--	D/50	D/46	C/27	D/52

Fort Pierce/SR 70

SR 70 is a divided principal arterial with six lanes to the east of the Turnpike ramps/South Kings Highway intersection and four lanes to the west. The existing Turnpike interchange has a trumpet configuration with ramps that connect to SR 70 at a single intersection. The Turnpike and I-95 offer parallel and often competing services through St. Lucie County. Both have interchanges on SR 70 about 1 mile apart, creating a convenient place to switch from one facility to the other. The next I-95 interchange south of SR 70 is at SR 712 (Midway Road), approximately 1.6 miles to the west of where that road crosses the Turnpike.

Currently the interchange ramp terminal is operating at acceptable level of service but accommodate projected traffic growth, the following alternatives were proposed and evaluated:

- **Alternative 1**: This alternative maintains the existing interchange configuration while implementing TSM&O solutions by adding right turn lane for both the southbound and northbound approaches the ramp terminal, adding an eastbound left turn lane and an extra westbound through lane through the overpass bridge. In this alternative, two more southbound lanes and one extra northbound lane are added.
- **Alternative 4**: In this alternative, northbound movements are maintained as a partial cloverleaf at the existing ramp terminal and a new ramp terminal with partial cloverleaf configuration as well is introduced on the west of Turnpike to serve southbound movements.

Attachment G shows the alternatives lane geometry and DDHVs and Synchro intersection results are summarized in **Table 8**.

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Table 8
2045 SR 70/Okeechobee Road Synchro Intersection Analysis Results

Intersection	No-Build		Alternative 1		Alternative 4	
	AM	PM	AM	PM	AM	PM
SR 70 & TPK Ramps/S Kings Hwy	F/218	F/220	D/53	D/51	D/48	D/49
SR 70 & TPK Ramps (New SB Ramps)	--	--	--	--	D/40	C/32
SR 70 & Crossroads Pkwy	D/39	D/45	D/37	D/40	D/37	D/40

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Attachments

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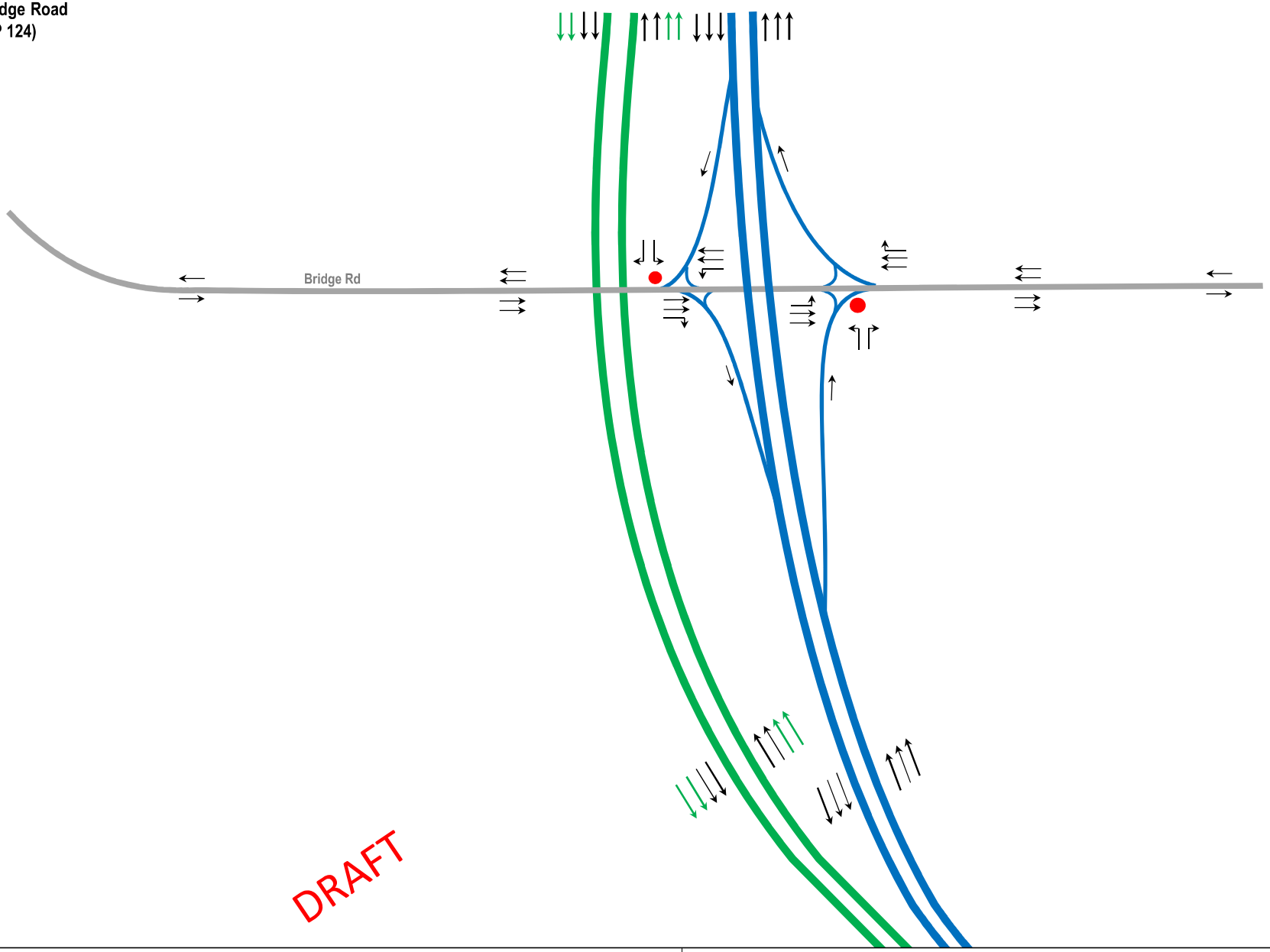
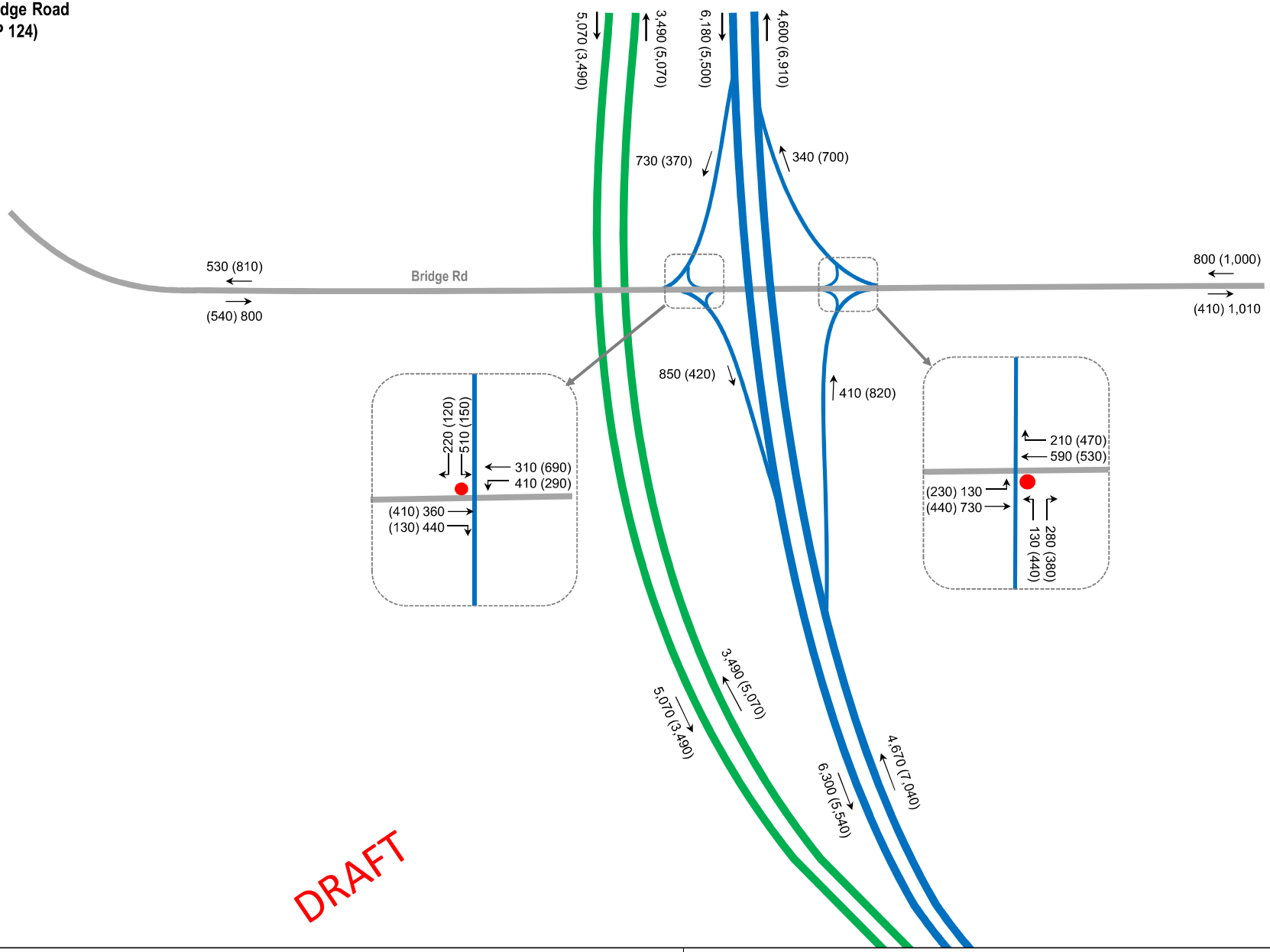
Attachment A

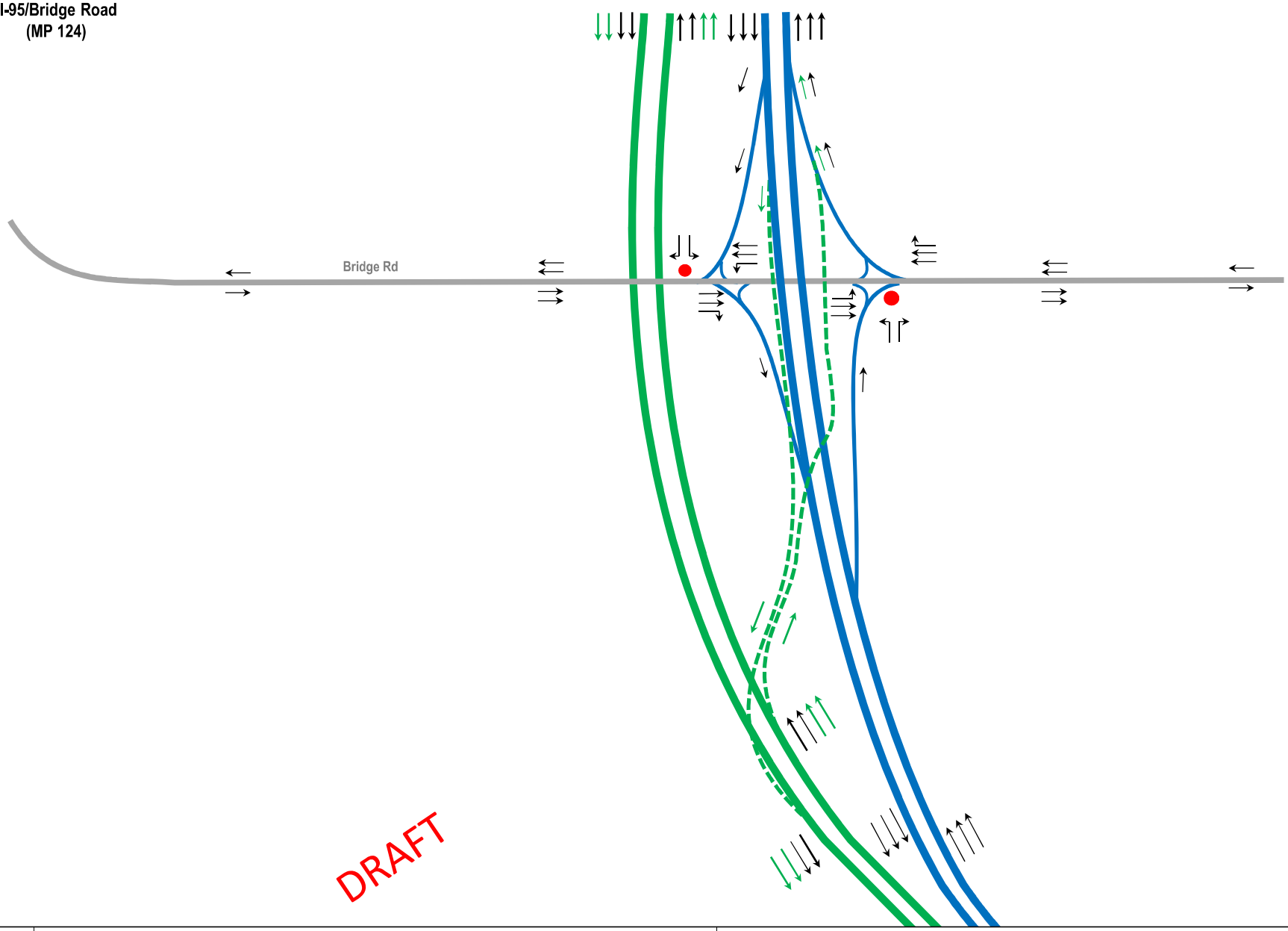
I-95/Bridge Road
(MP 124)



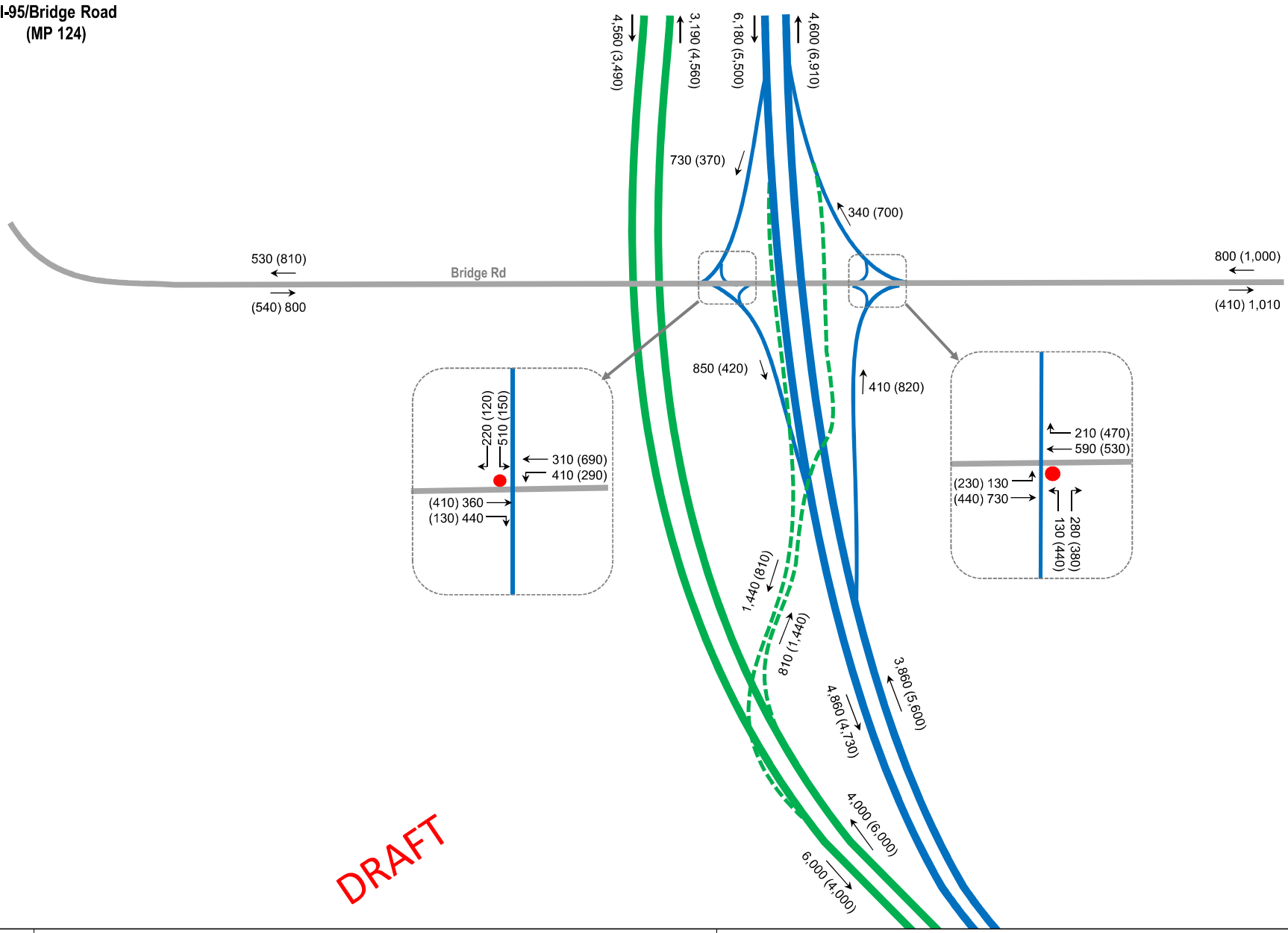
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure A.1



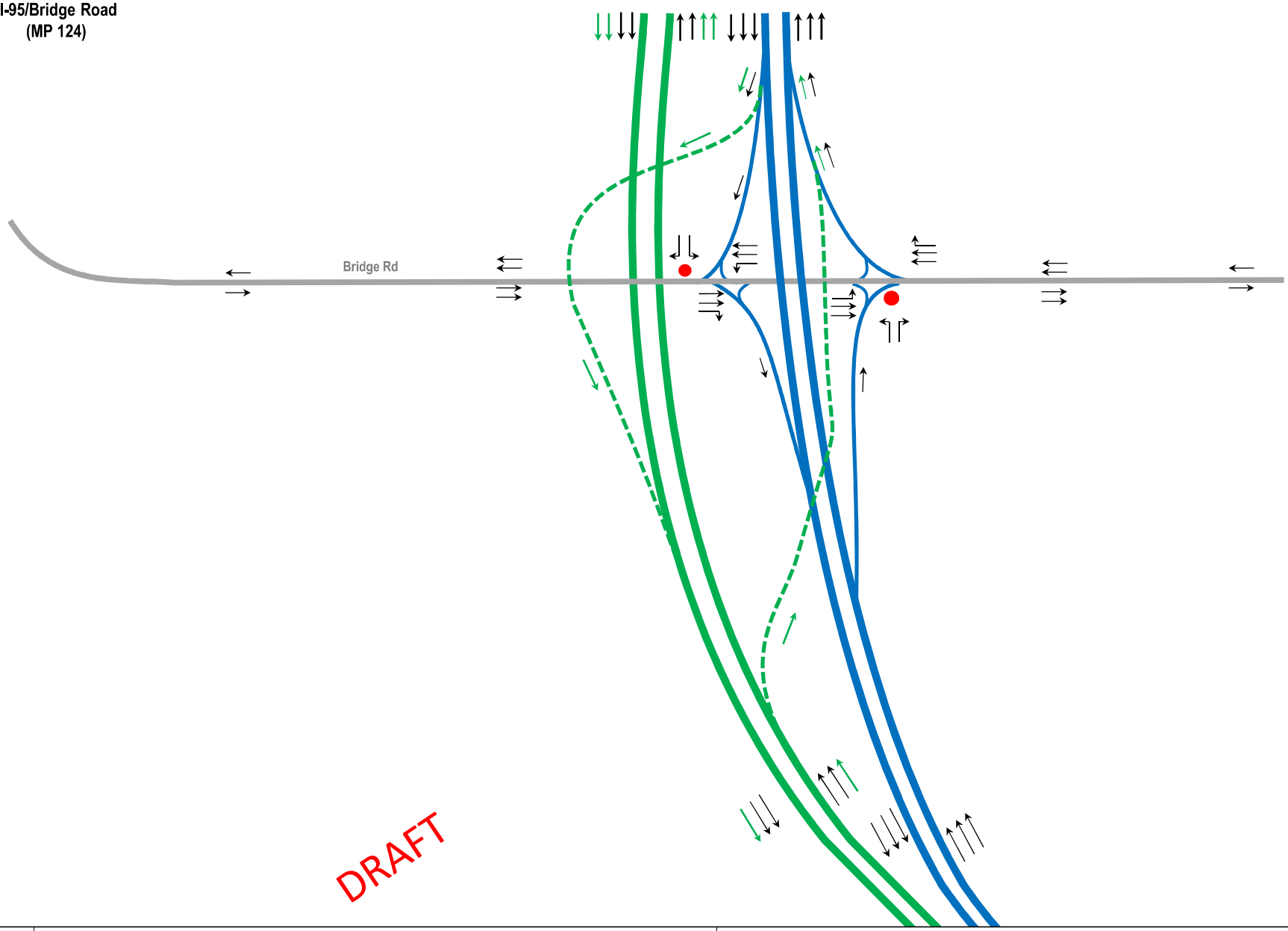
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure A.2



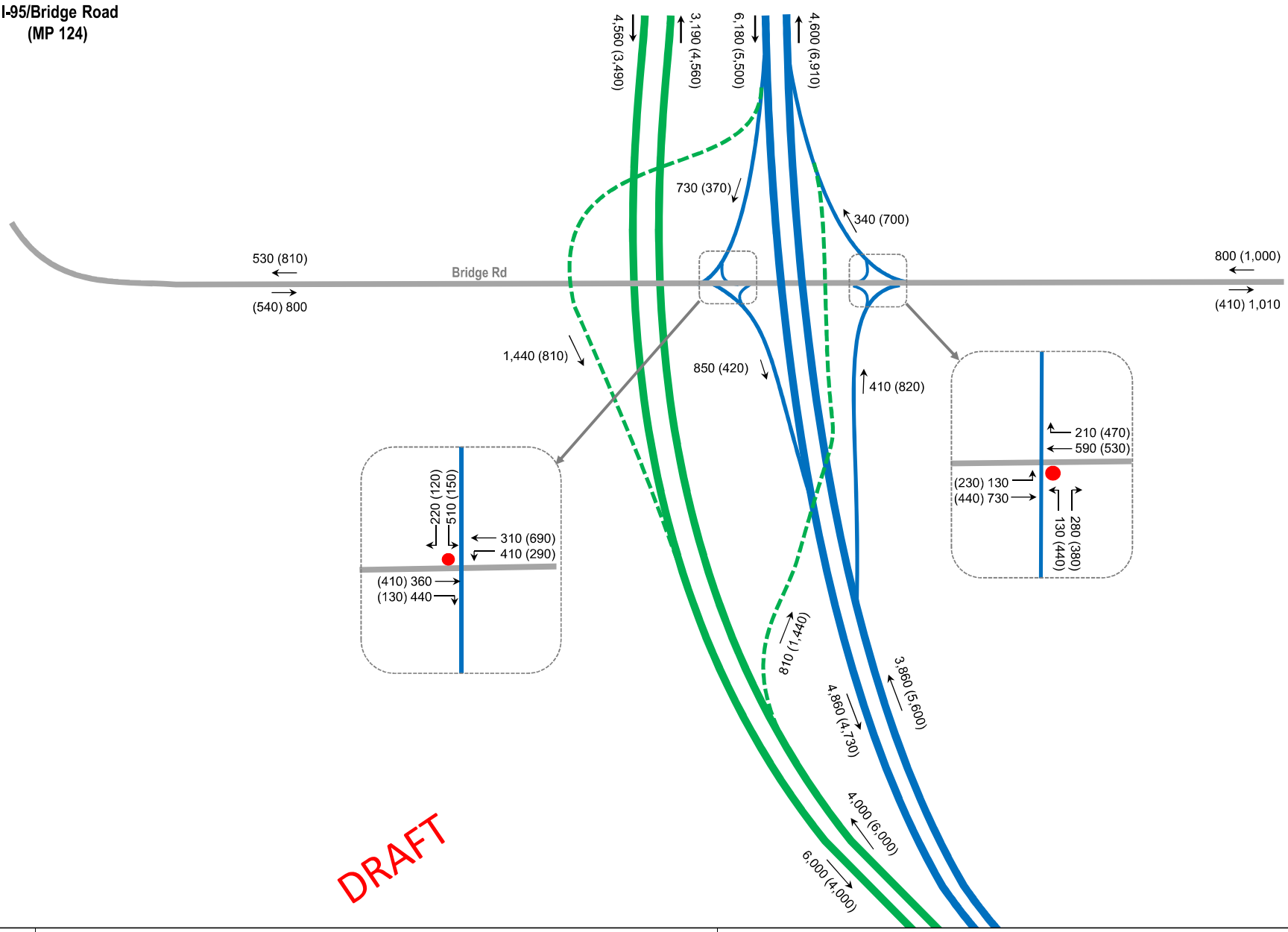
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 Lane Geometry	Figure A.3



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 2045 DDHVs	Figure A.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 Lane Geometry	Figure A.5

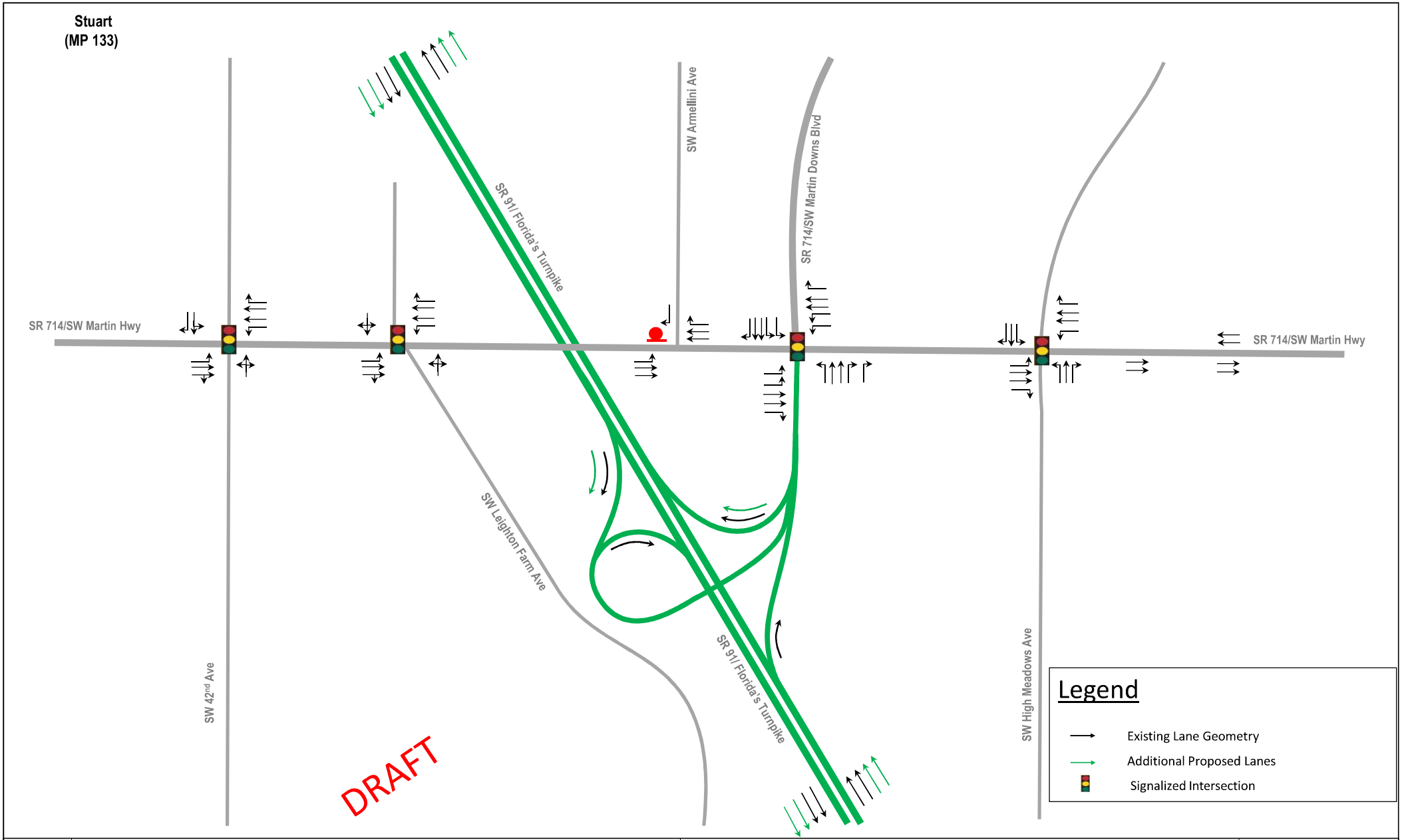


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 2045 DDHVs	Figure A.6

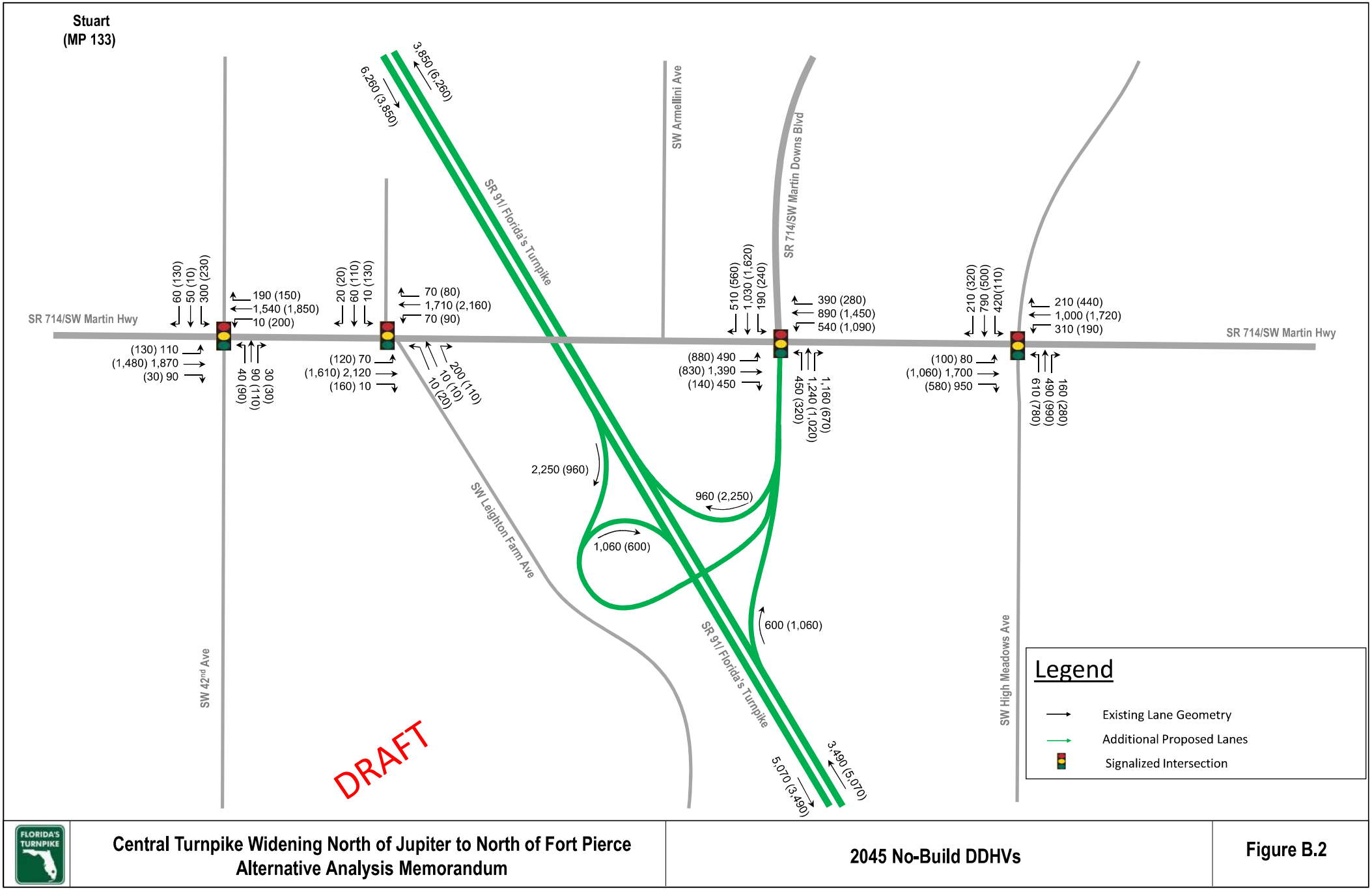
Attachment B

Stuart/Martin Highway

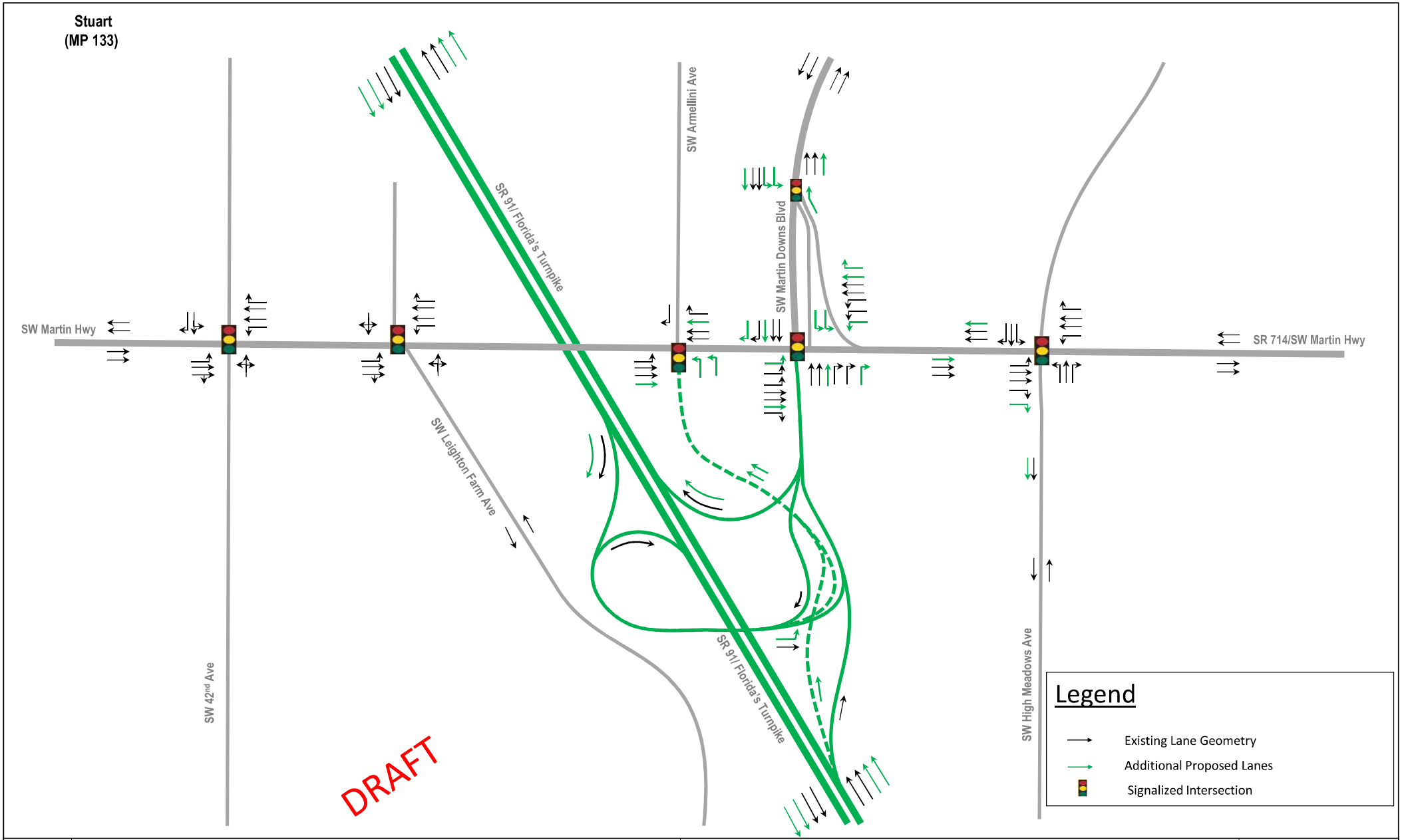
(MP 133)



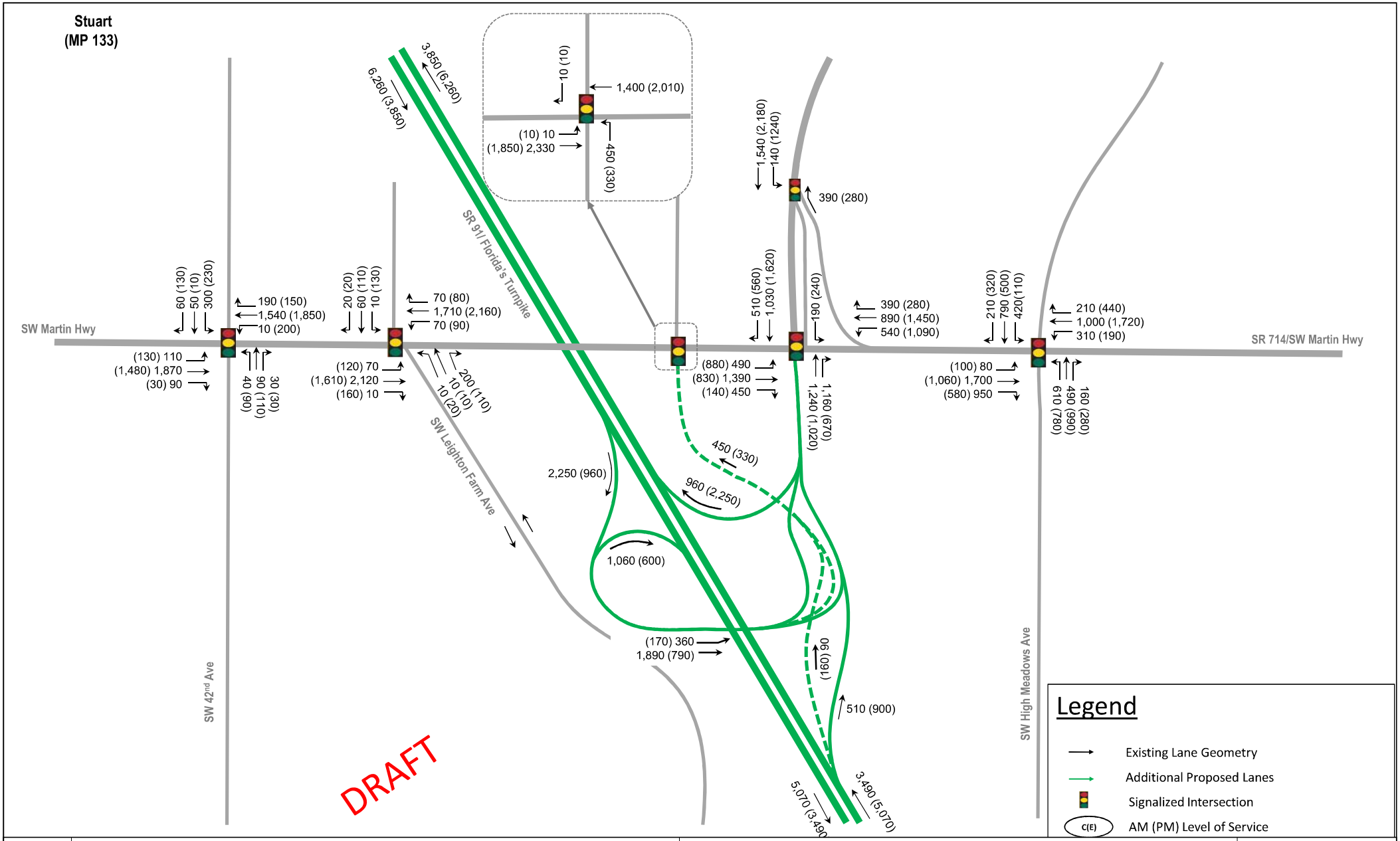
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure B.1



FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum**	**2045 No-Build DDHVs**
		Figure B.2



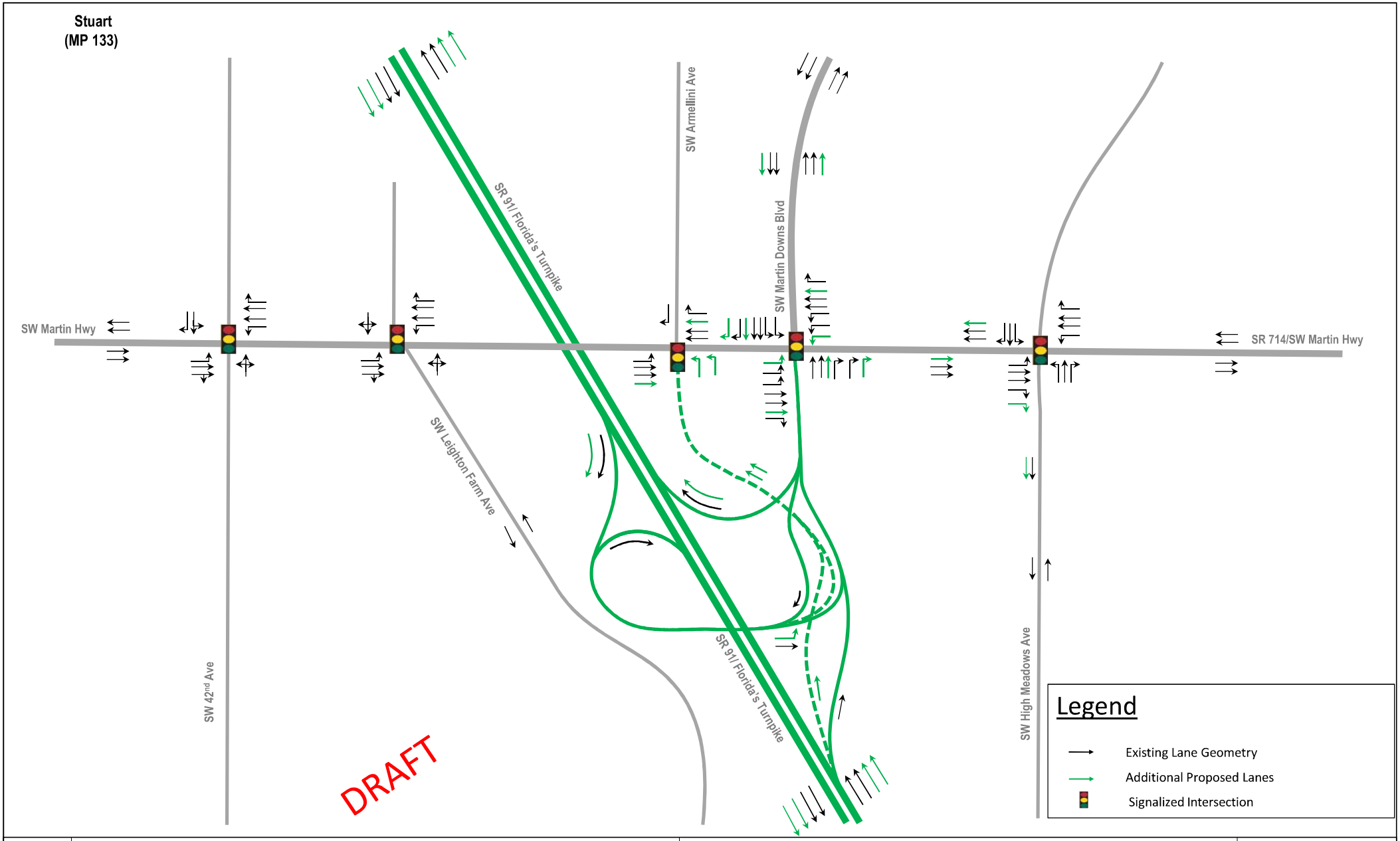
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7 Lane Geometry	Figure B.3



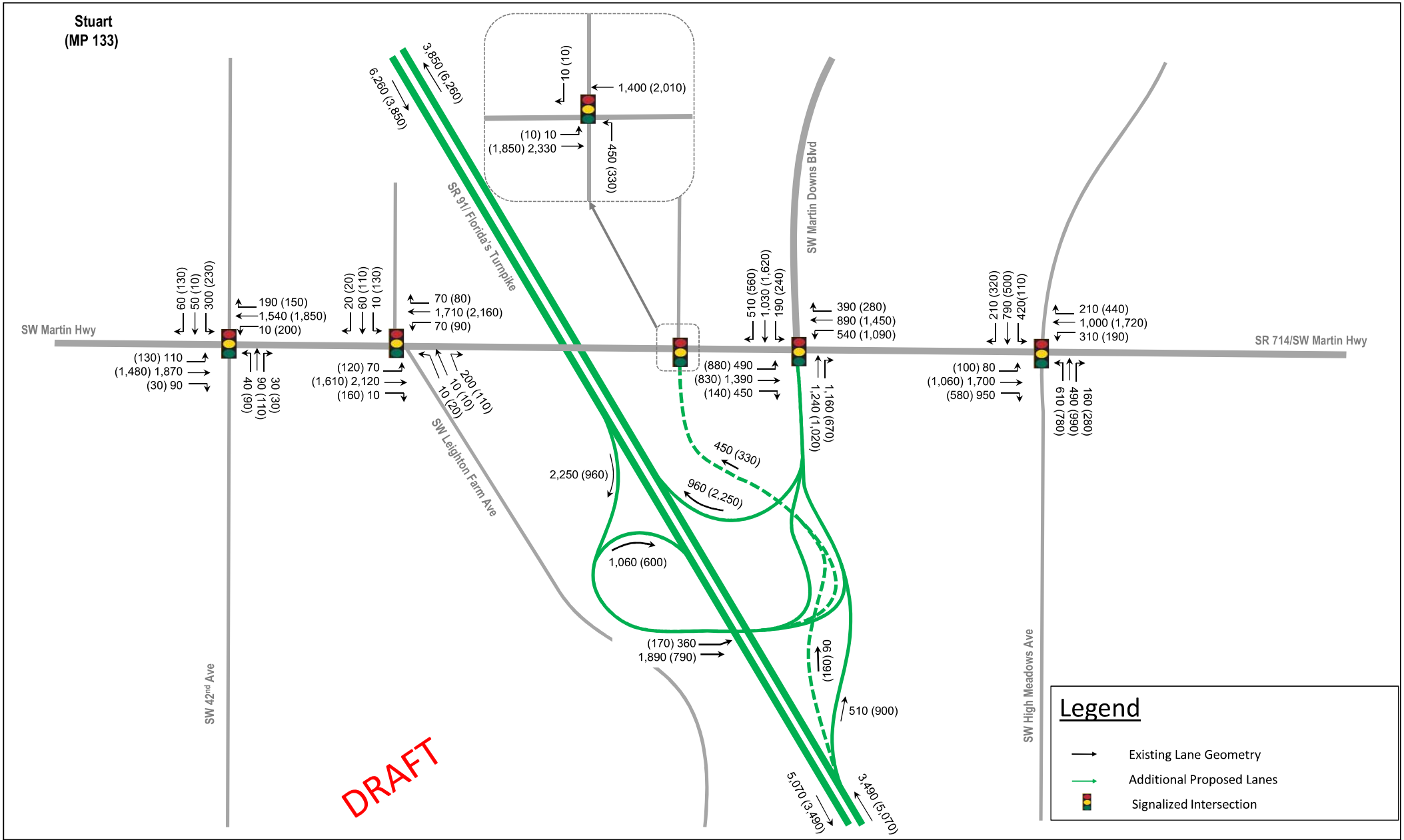
Central Turnpike Widening North of Jupiter to North of Fort Pierce
Alternative Analysis Memorandum

Modified Alternative 7
2045 DDHVs

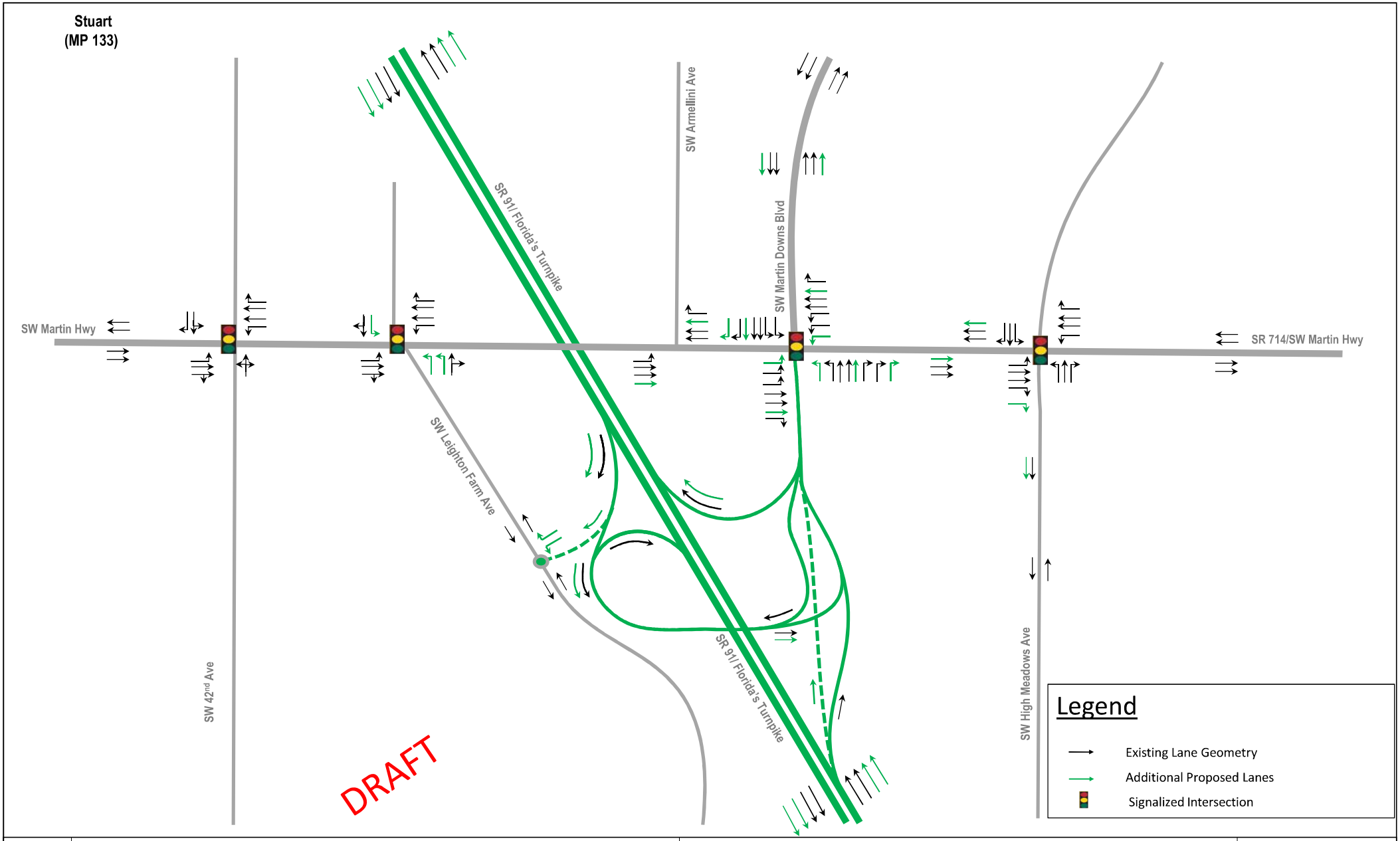
Figure B.4



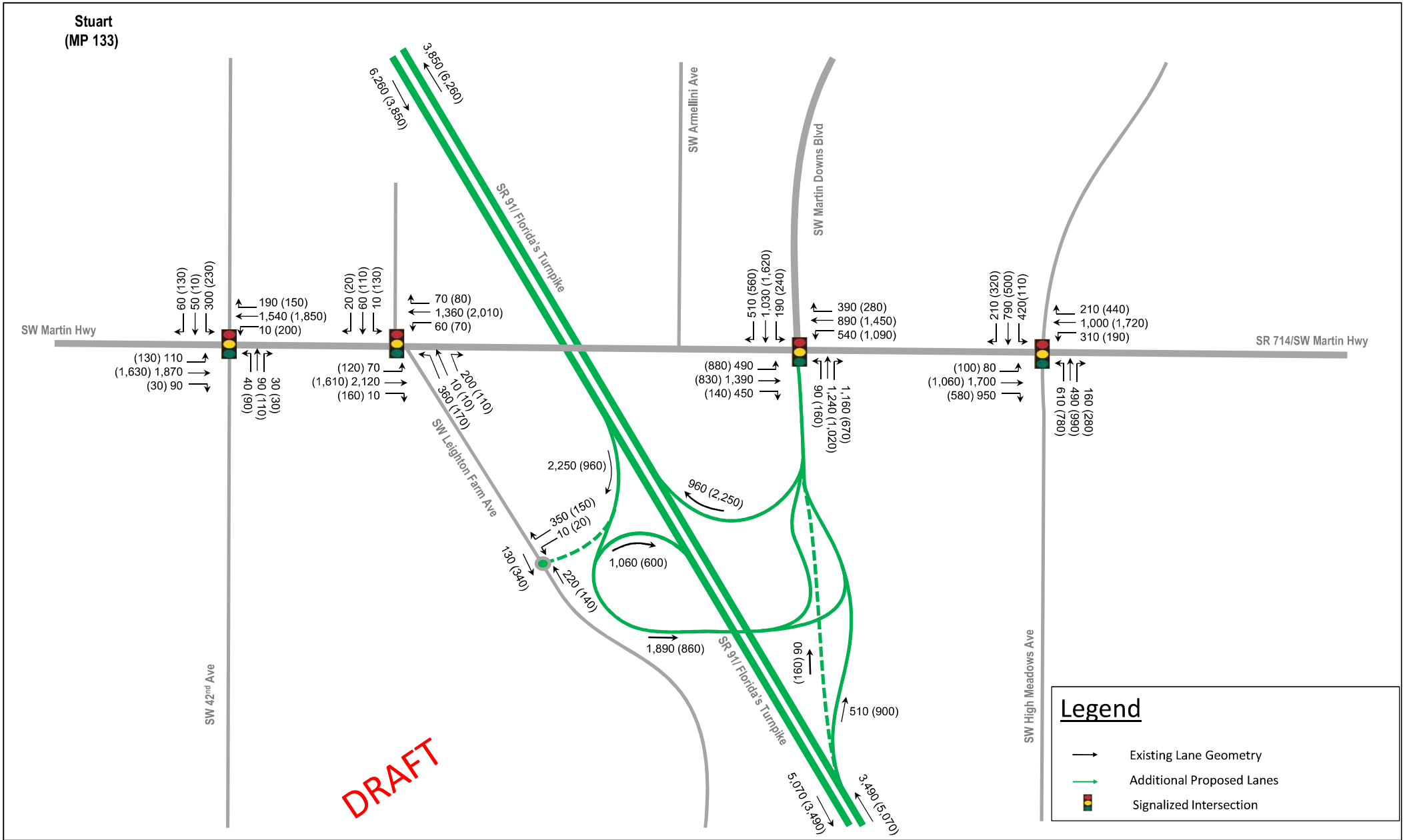
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7a Lane Geometry	Figure B.5



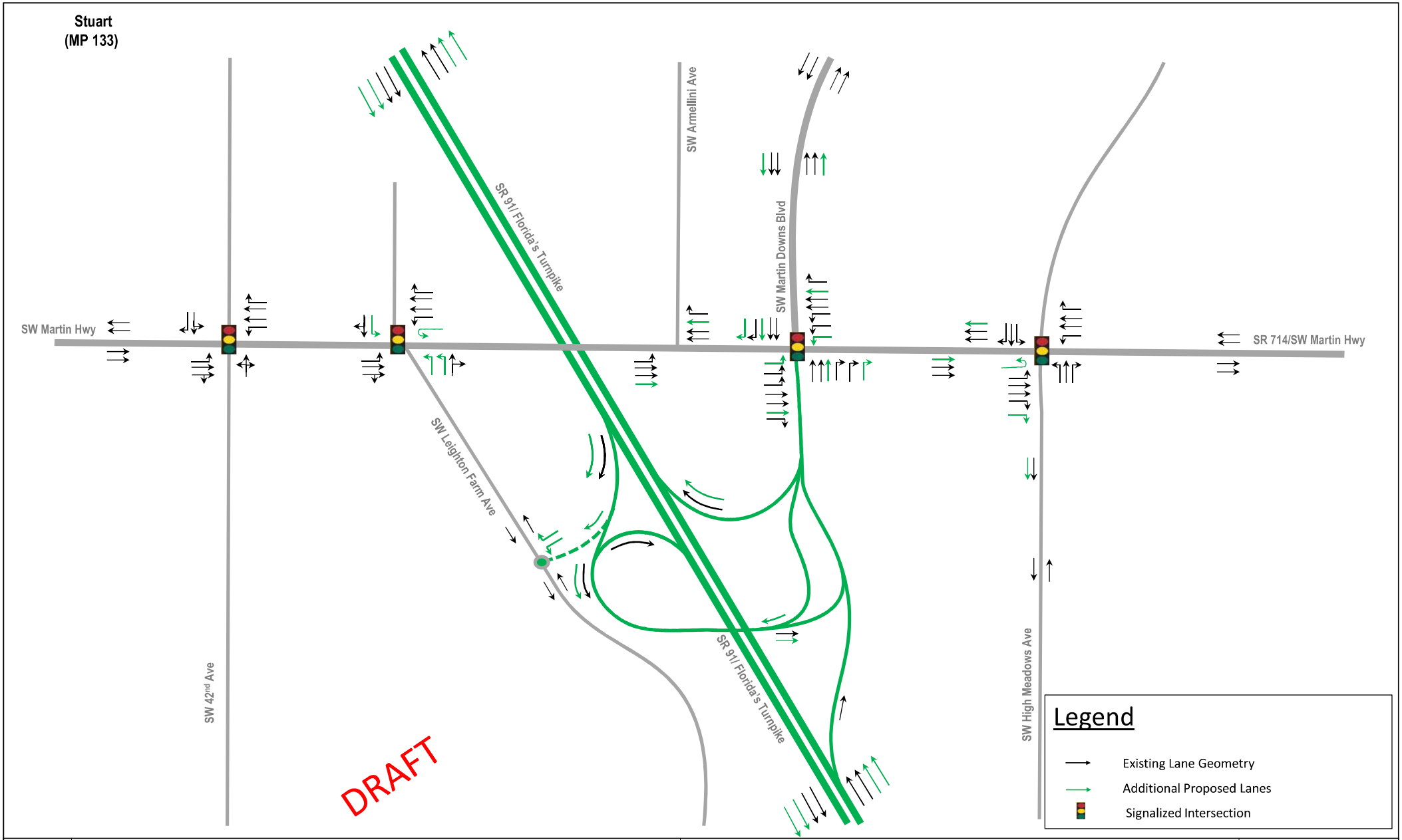
FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**Modified Alternative 7a** **2045 DDHVs**
		Figure B.6



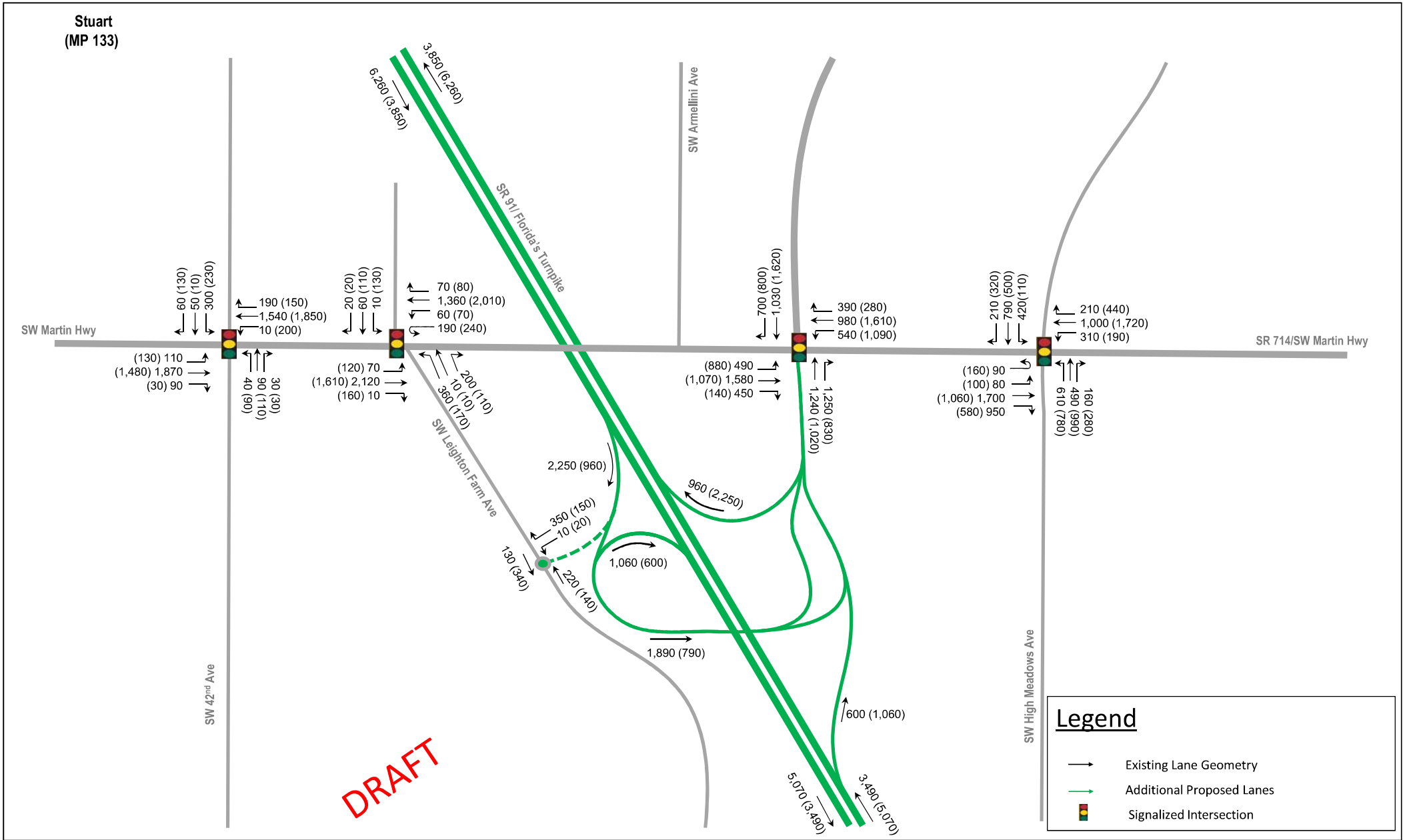
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7b Lane Geometry	Figure B.7



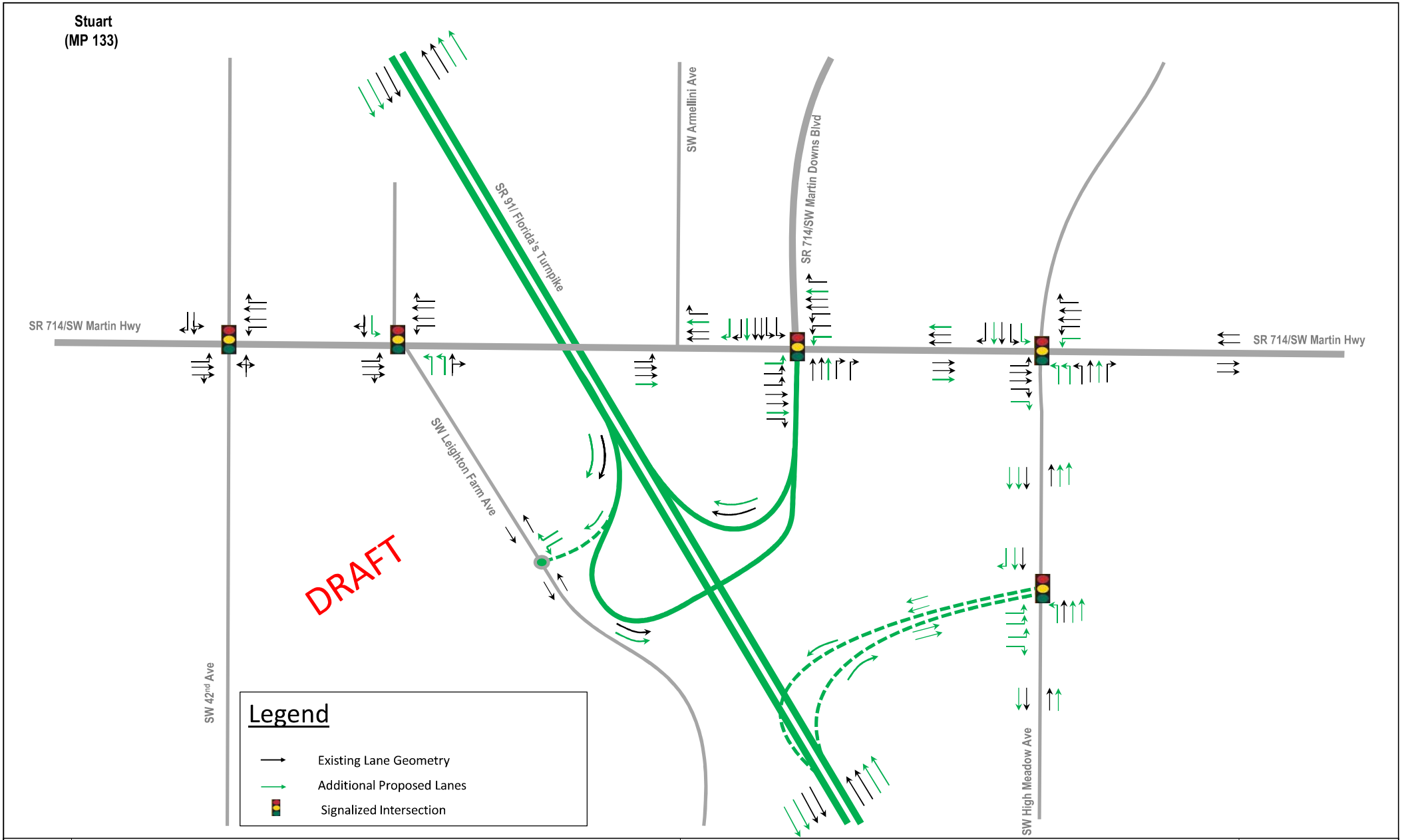
FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**Modified Alternative 7b** **2045 DDHVs**
		Figure B.8



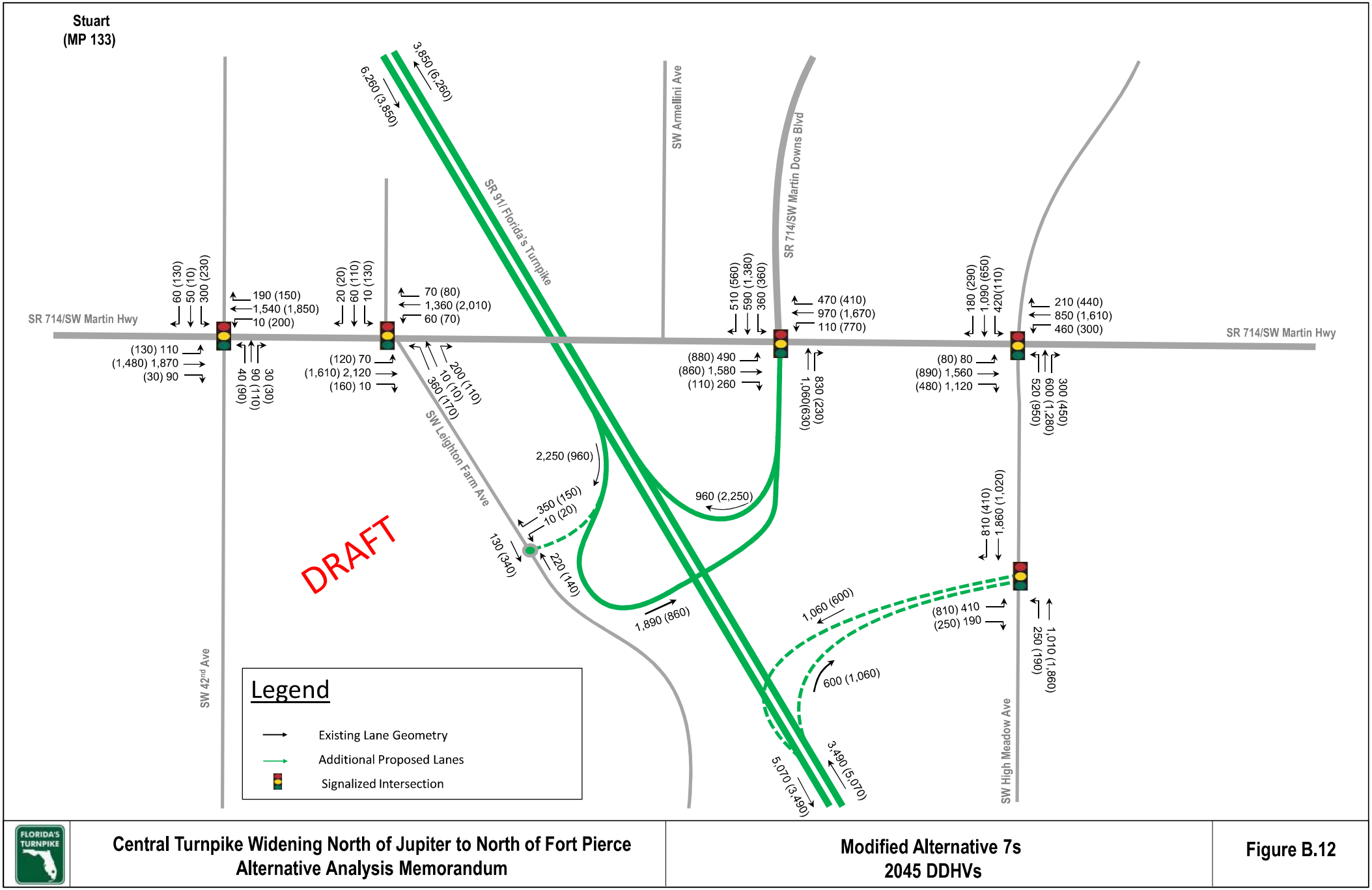
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7c Lane Geometry	Figure B.9



FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**Modified Alternative 7c** **2045 DDHVs**
		Figure B.10



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Modified Alternative 7s Lane Geometry	Figure B.11

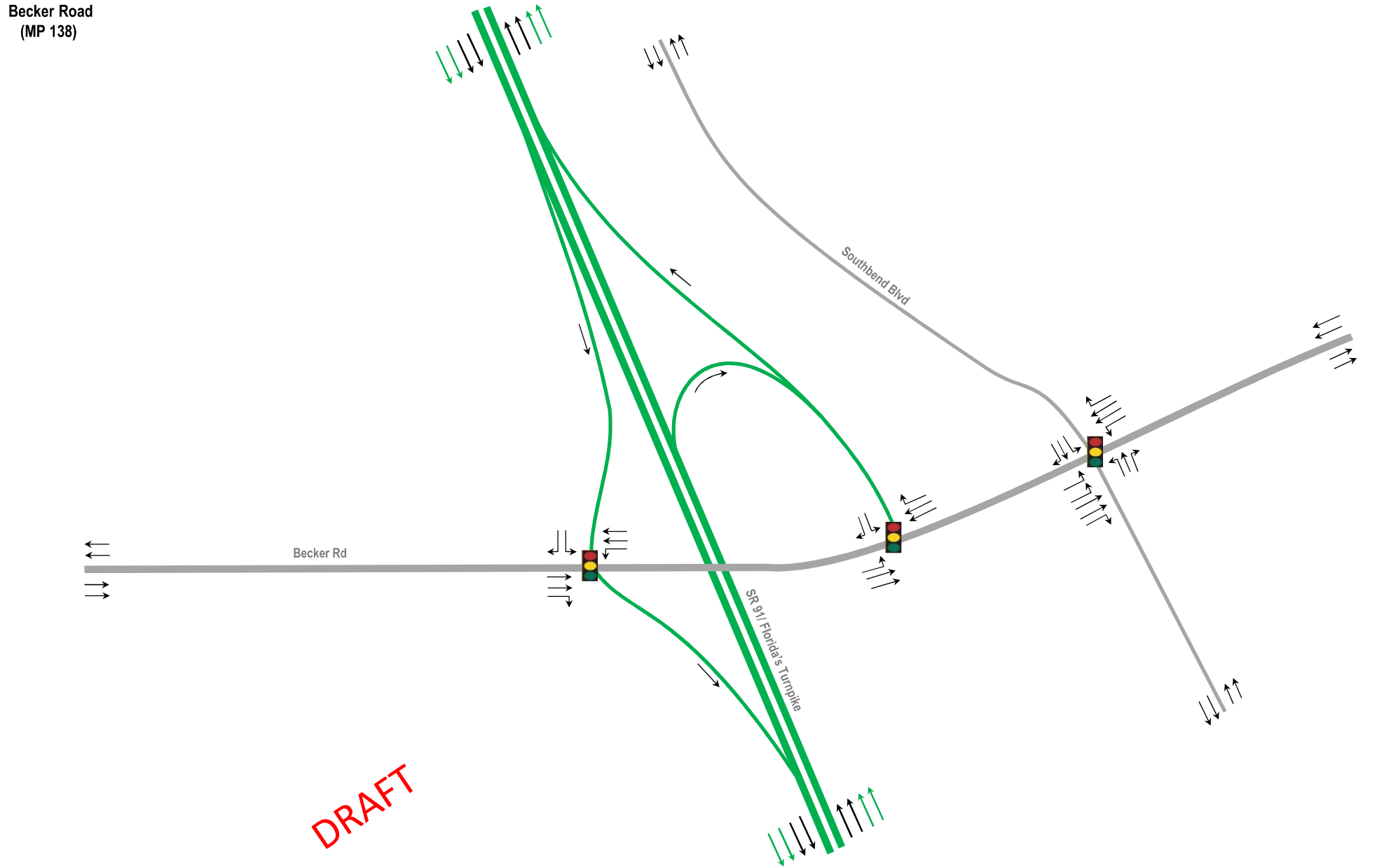


FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**Modified Alternative 7s** **2045 DDHVs**
		Figure B.12

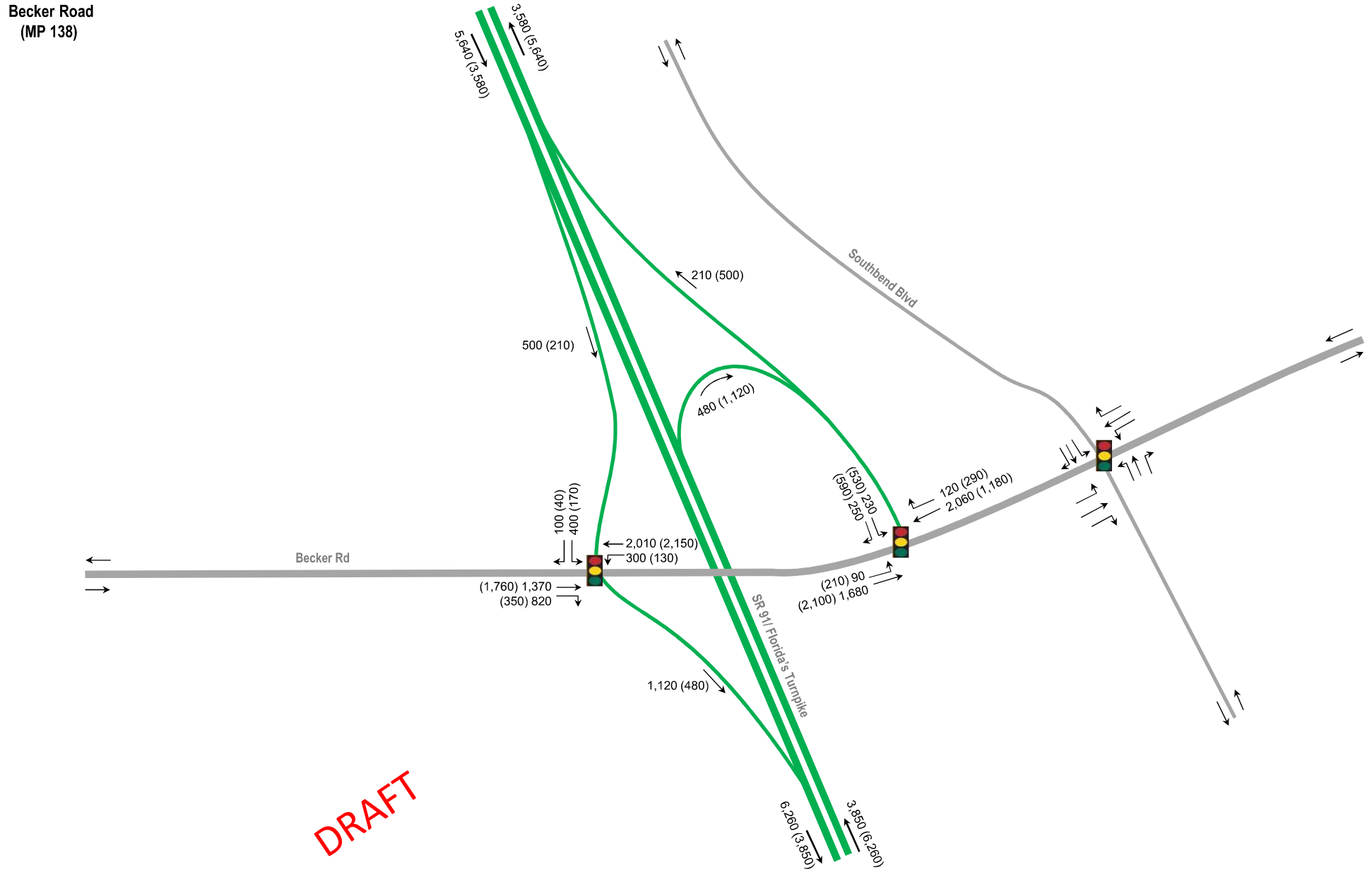
Attachment C

Becker

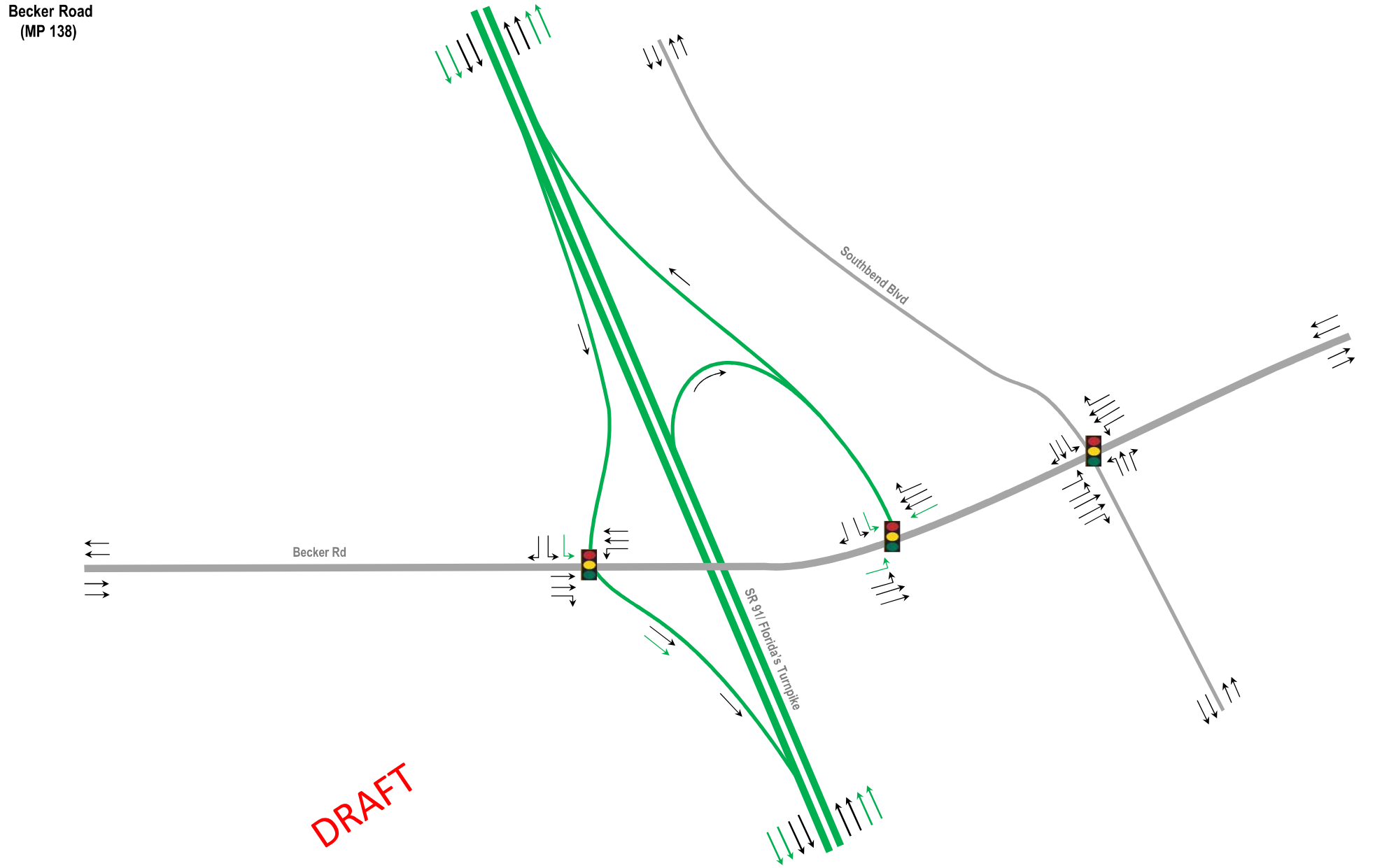
(MP 138)



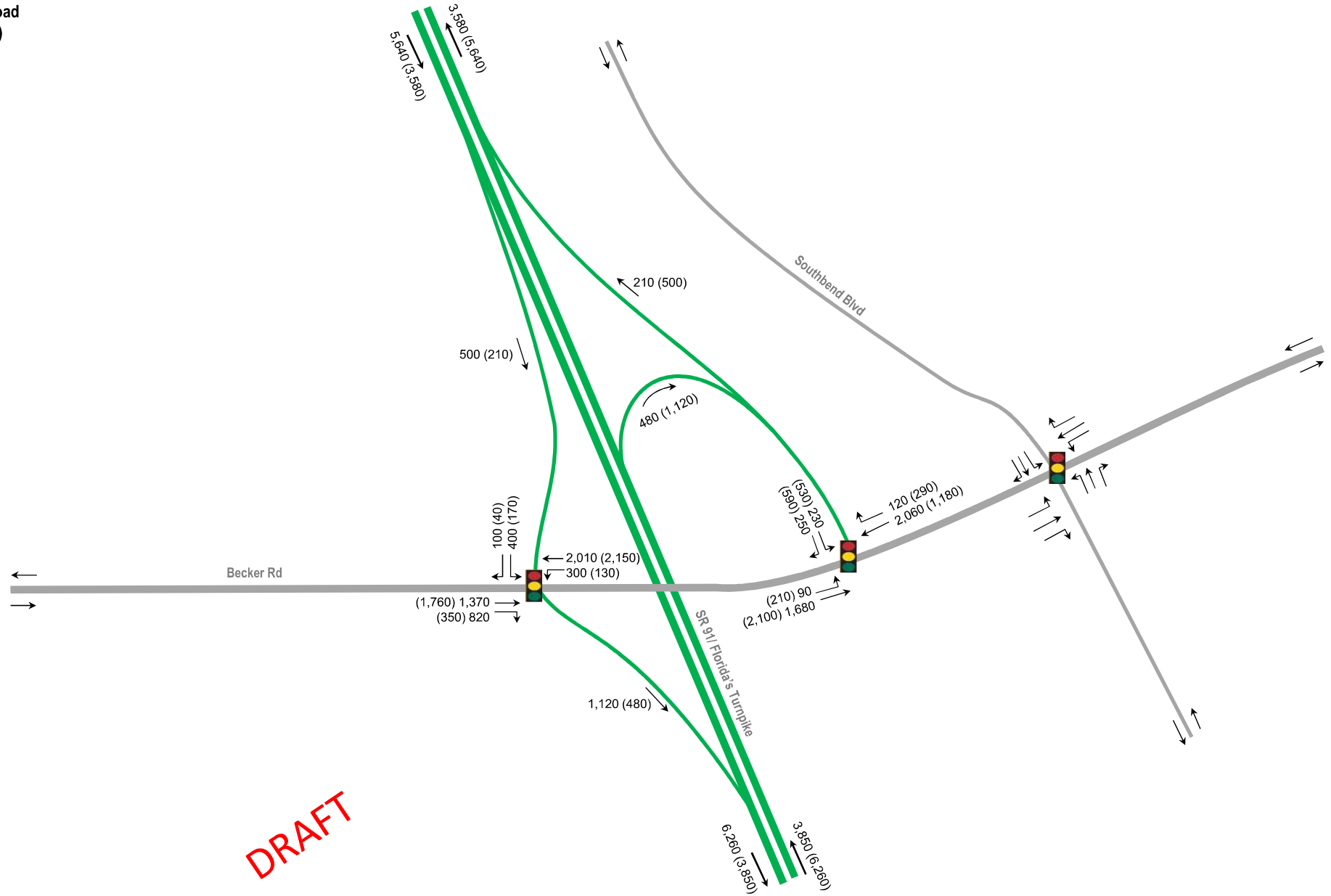
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure C.1



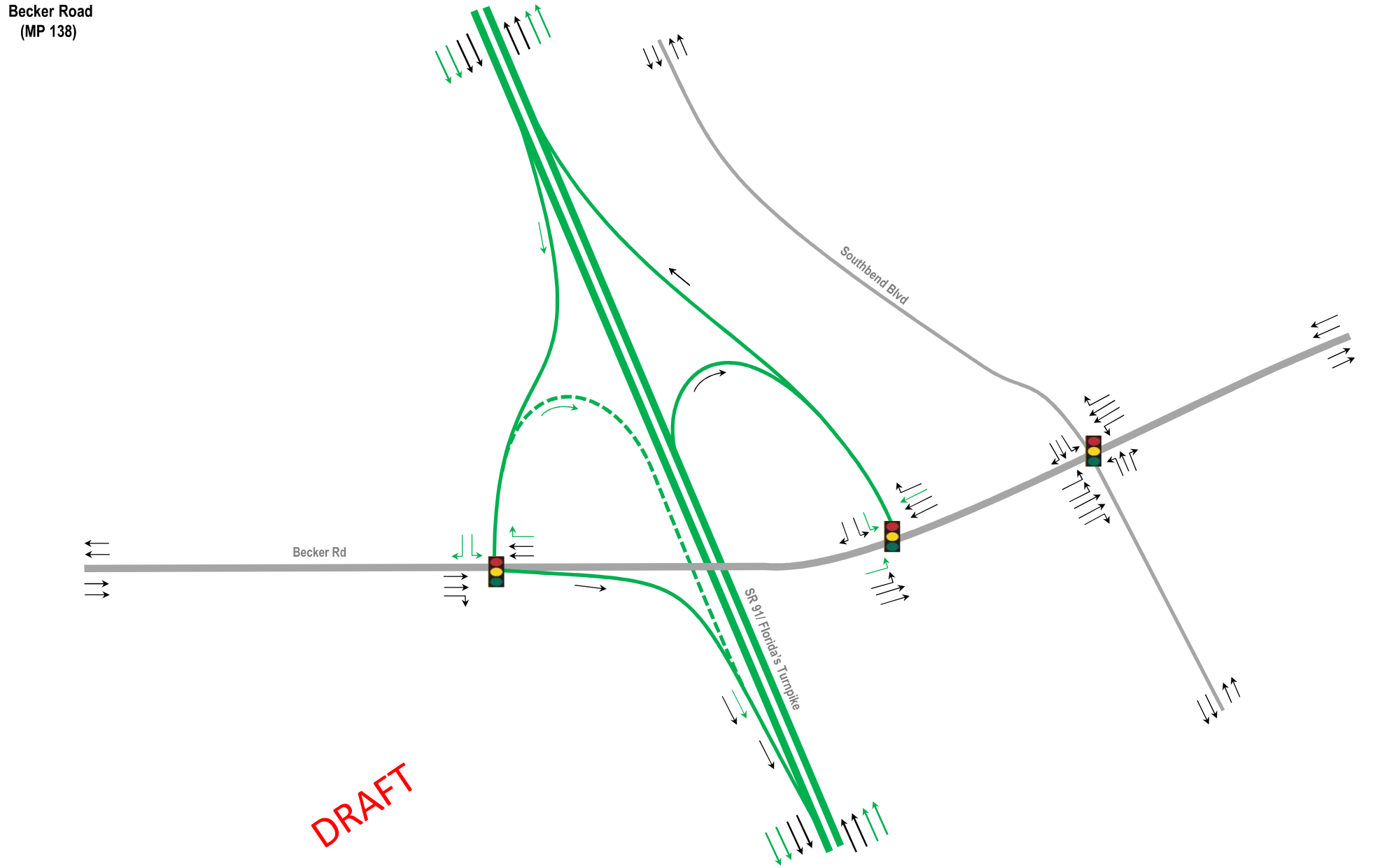
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure C.2



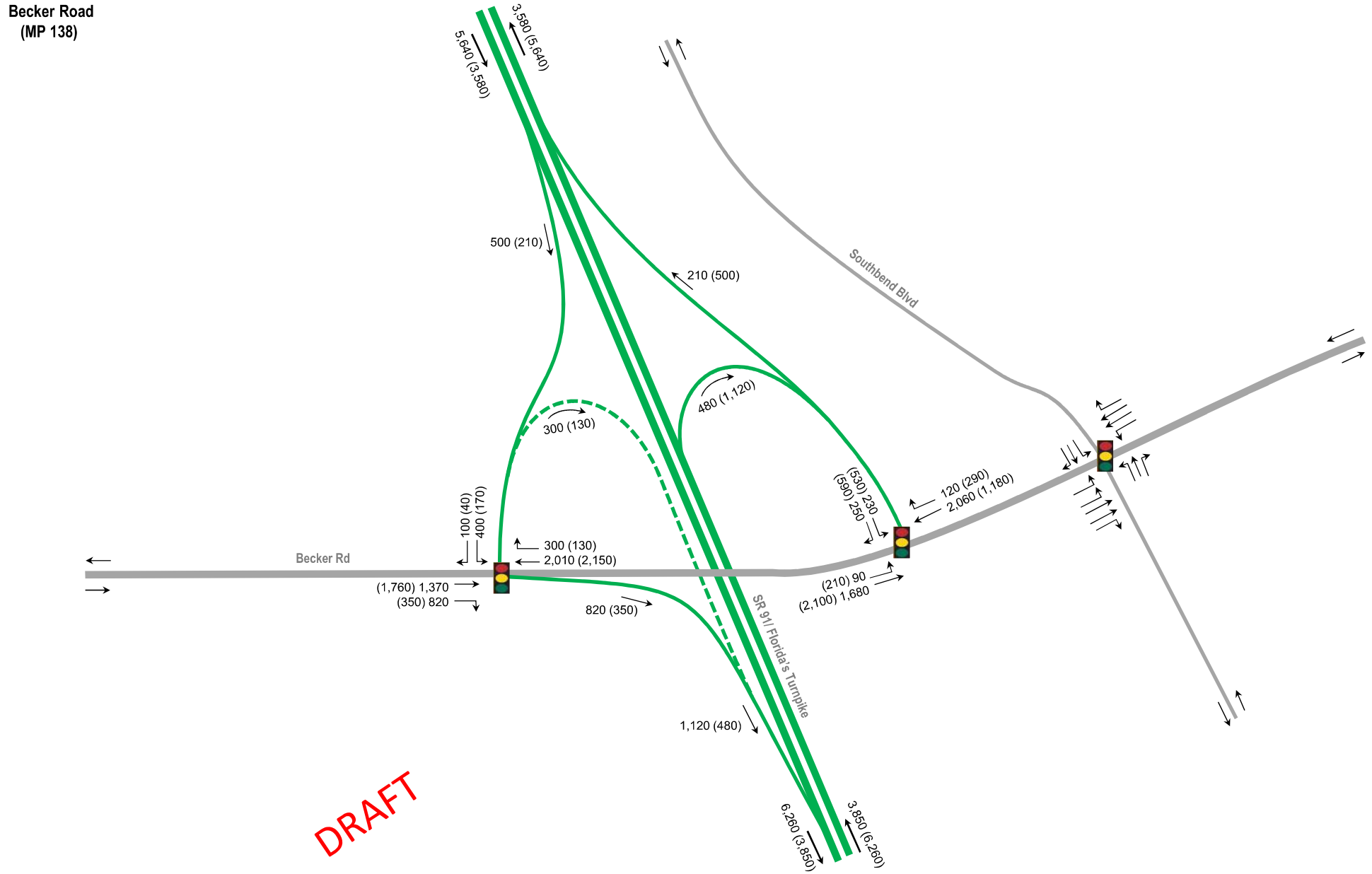
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 Lane Geometry	Figure C.3



FLORIDA'S TURNPIKE	Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 2045 DDHVs	Figure C.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 Lane Geometry	Figure C.5

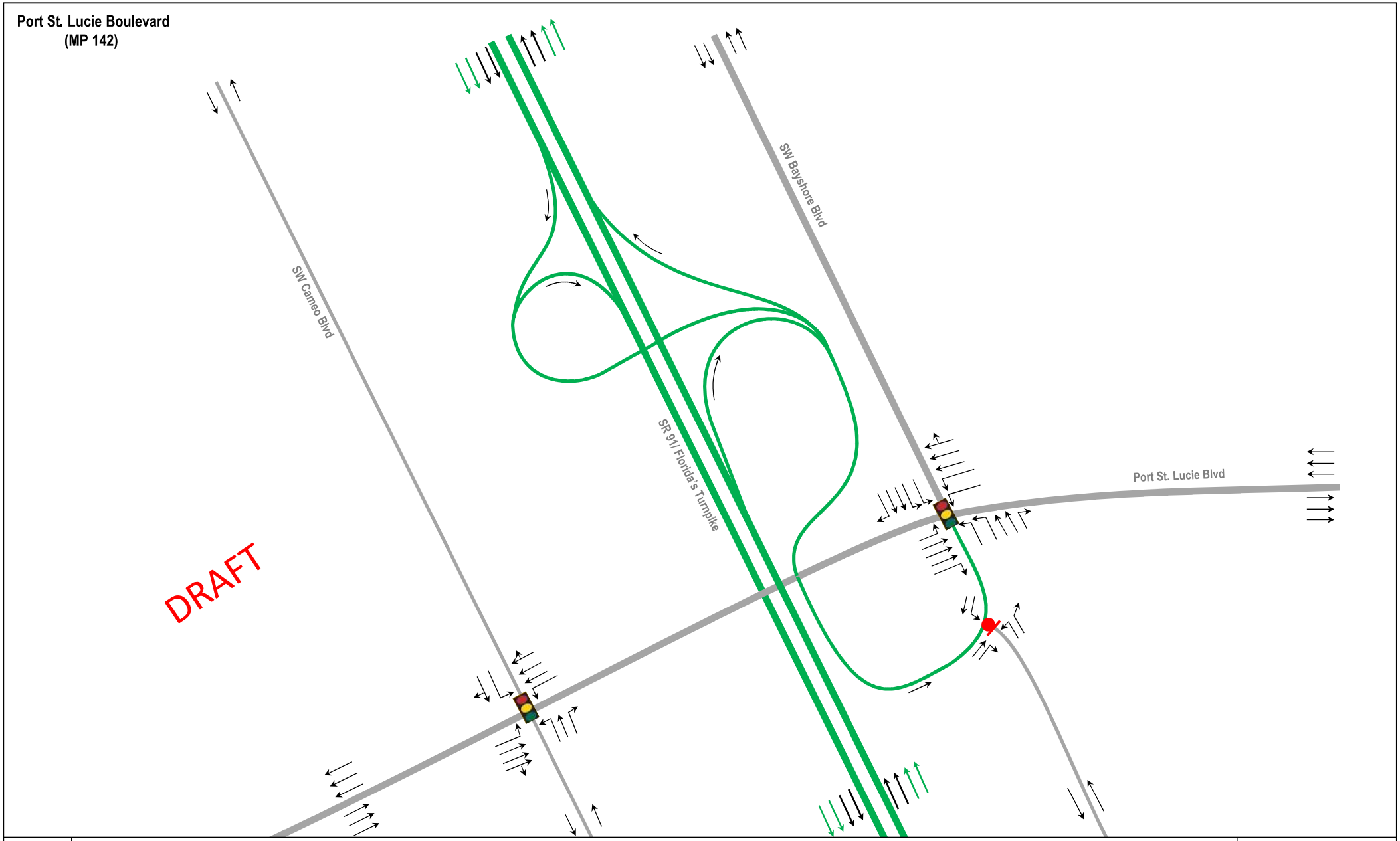


FLORIDA'S TURNPIKE	Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 2045 DDHVs	Figure C.6

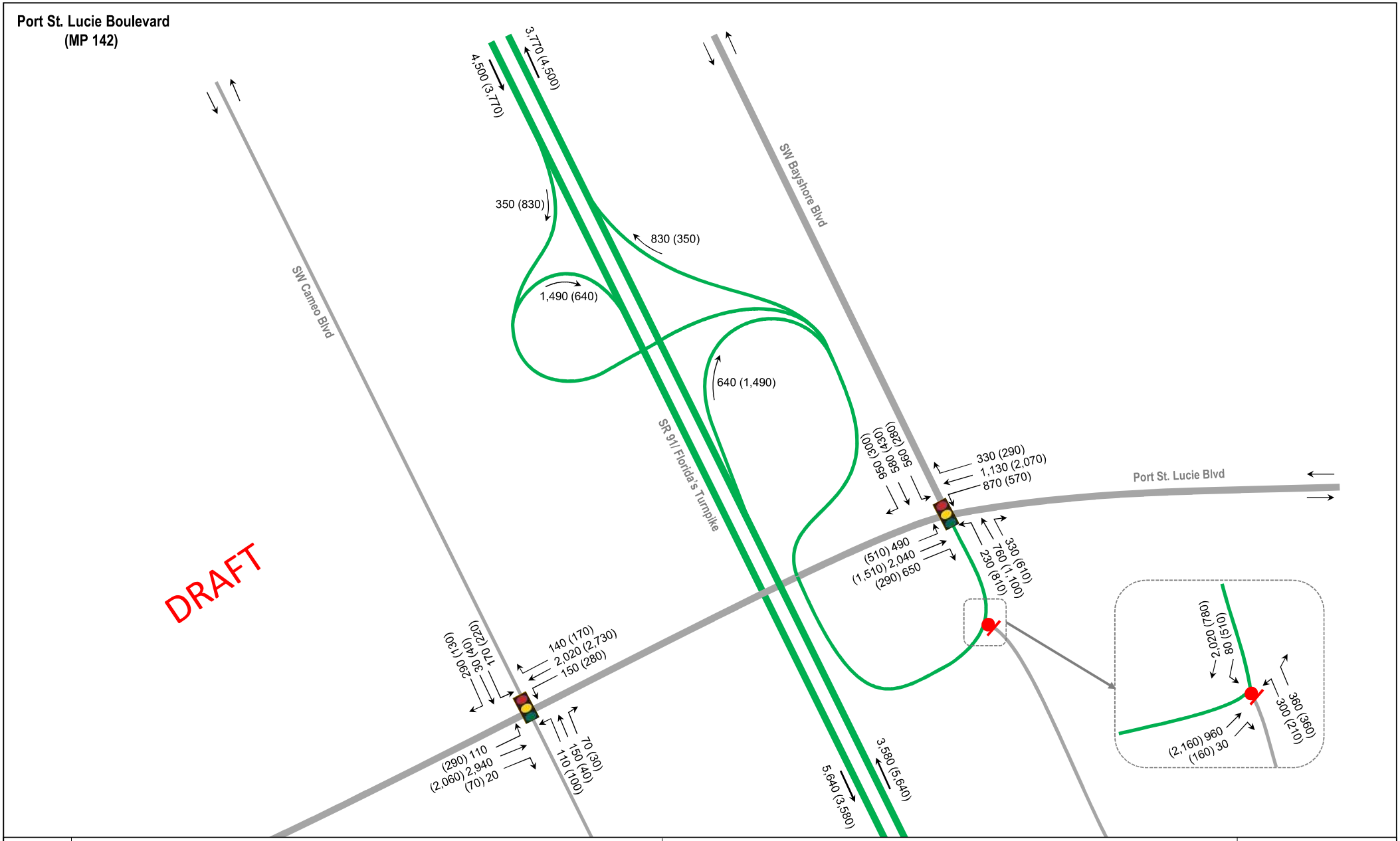
Attachment D

Port St. Lucie

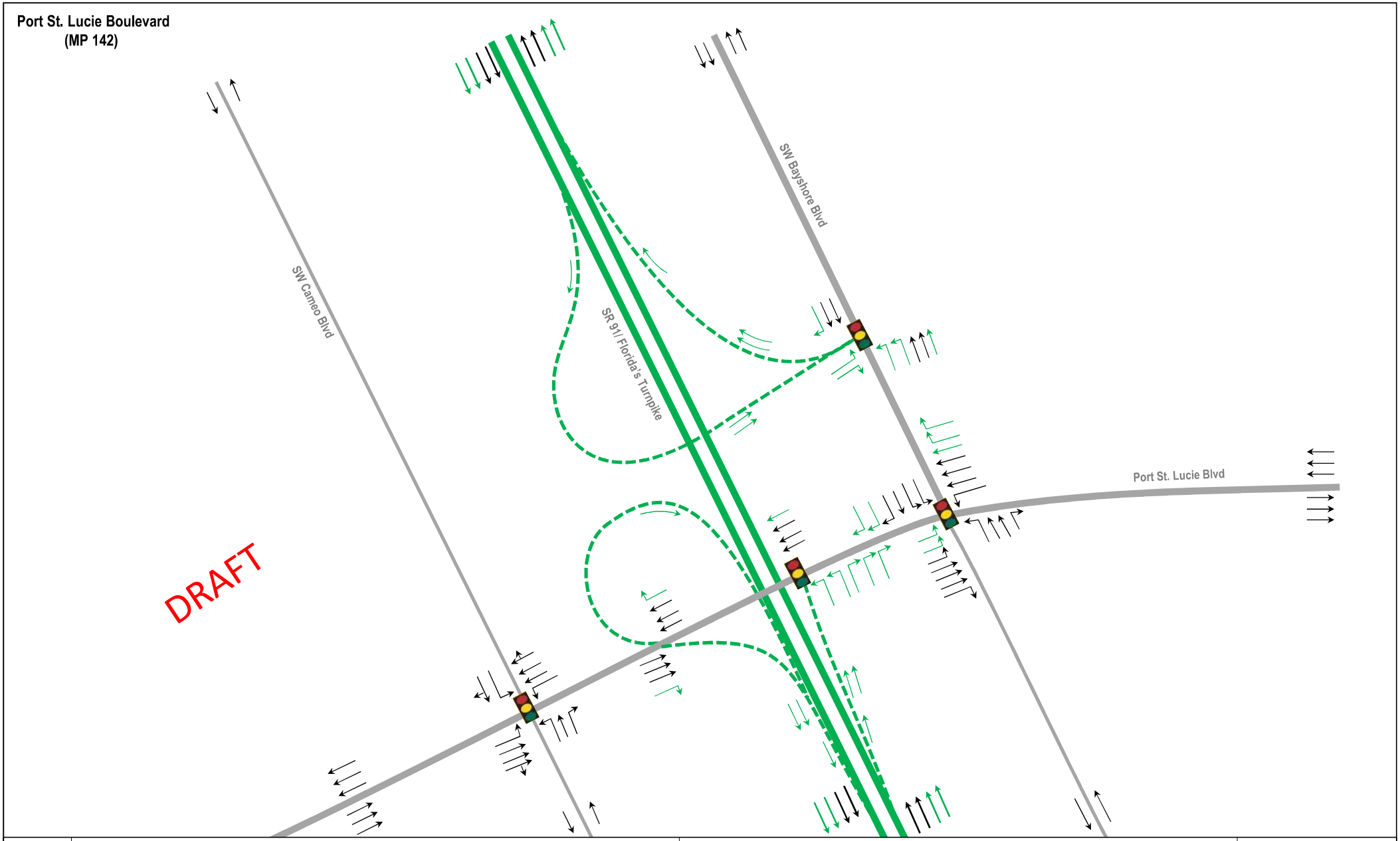
(MP 142)



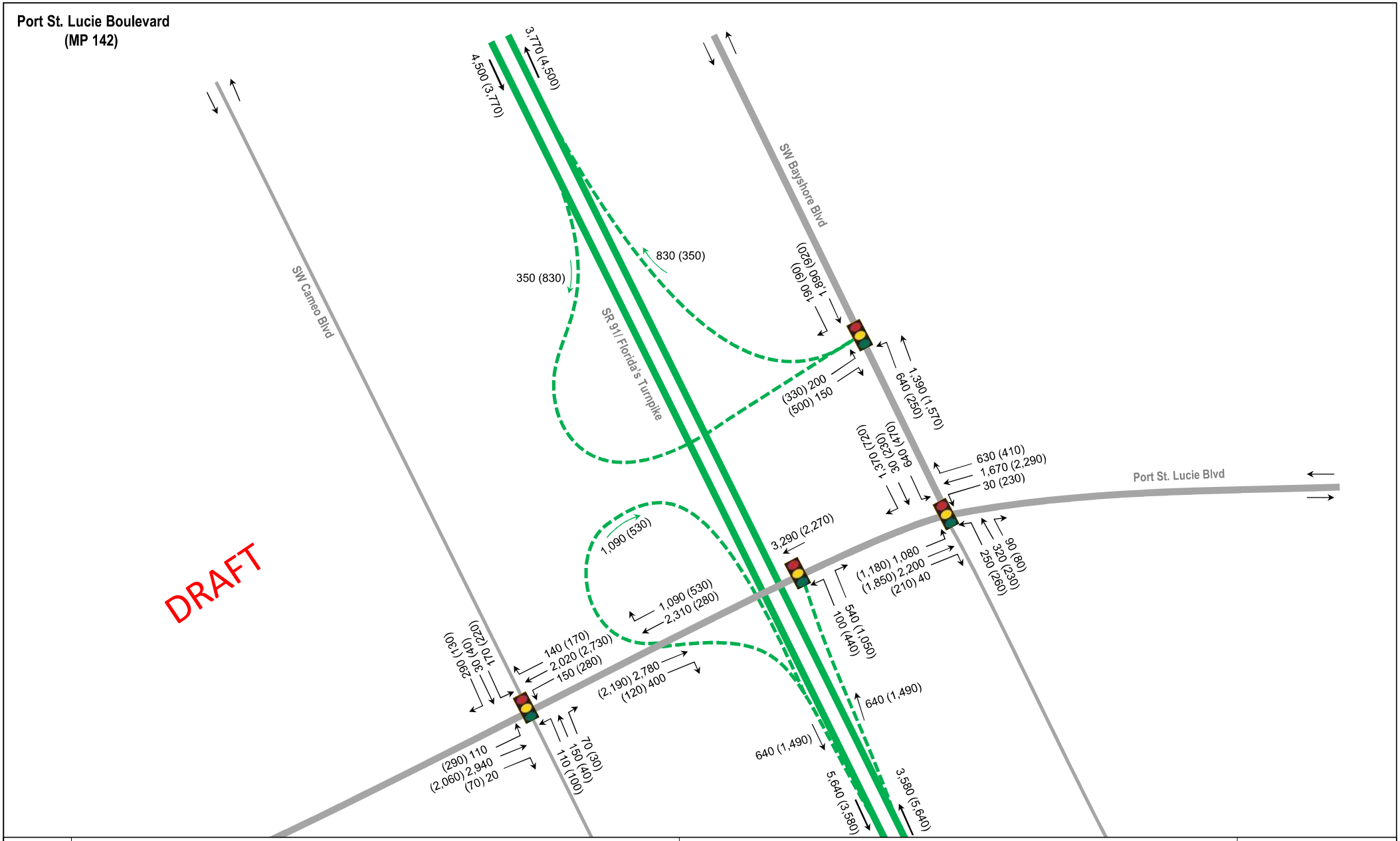
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure D.1



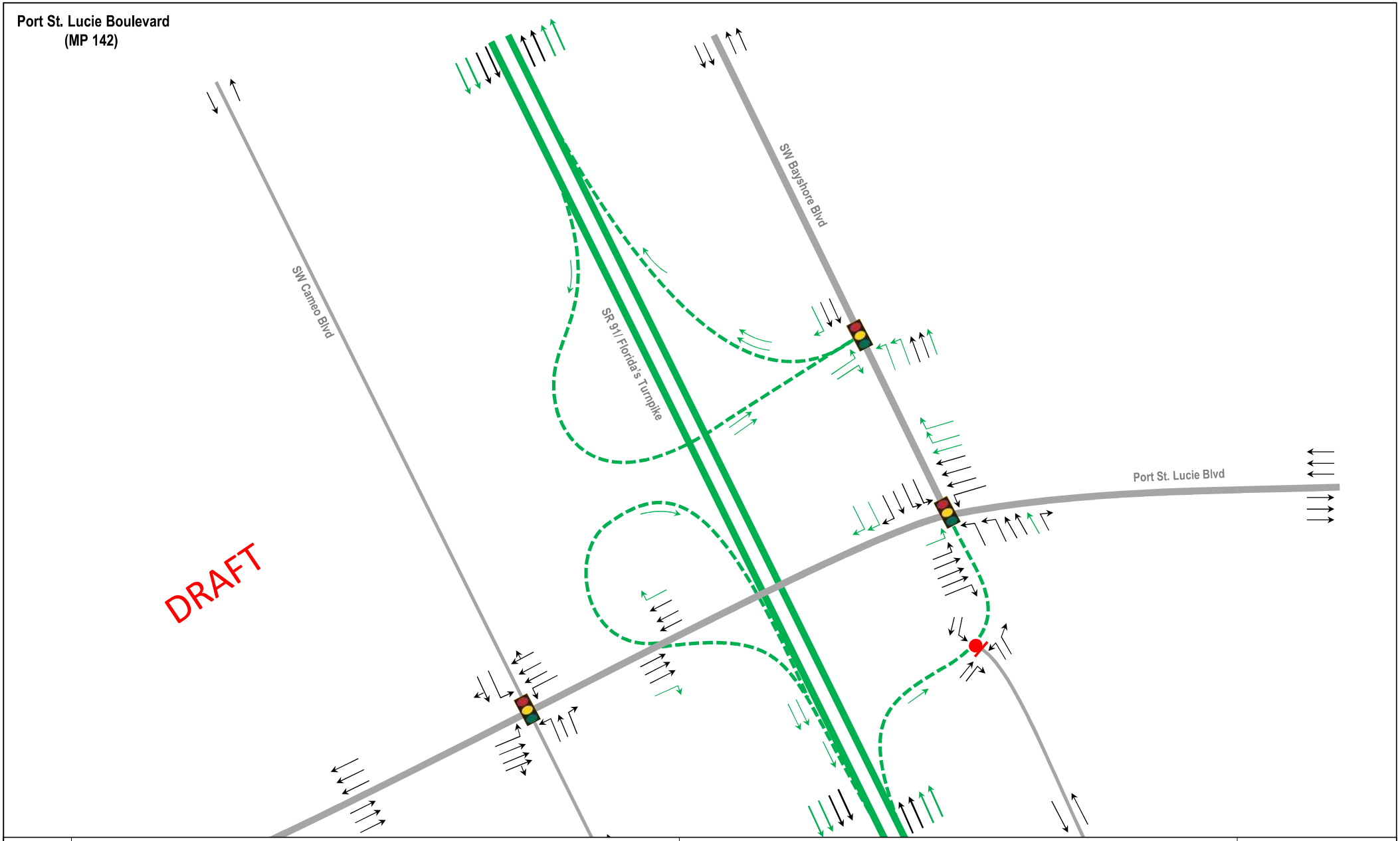
FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**2045 No-Build DDHVs**
		Figure D.2



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 Lane Geometry	Figure D.3



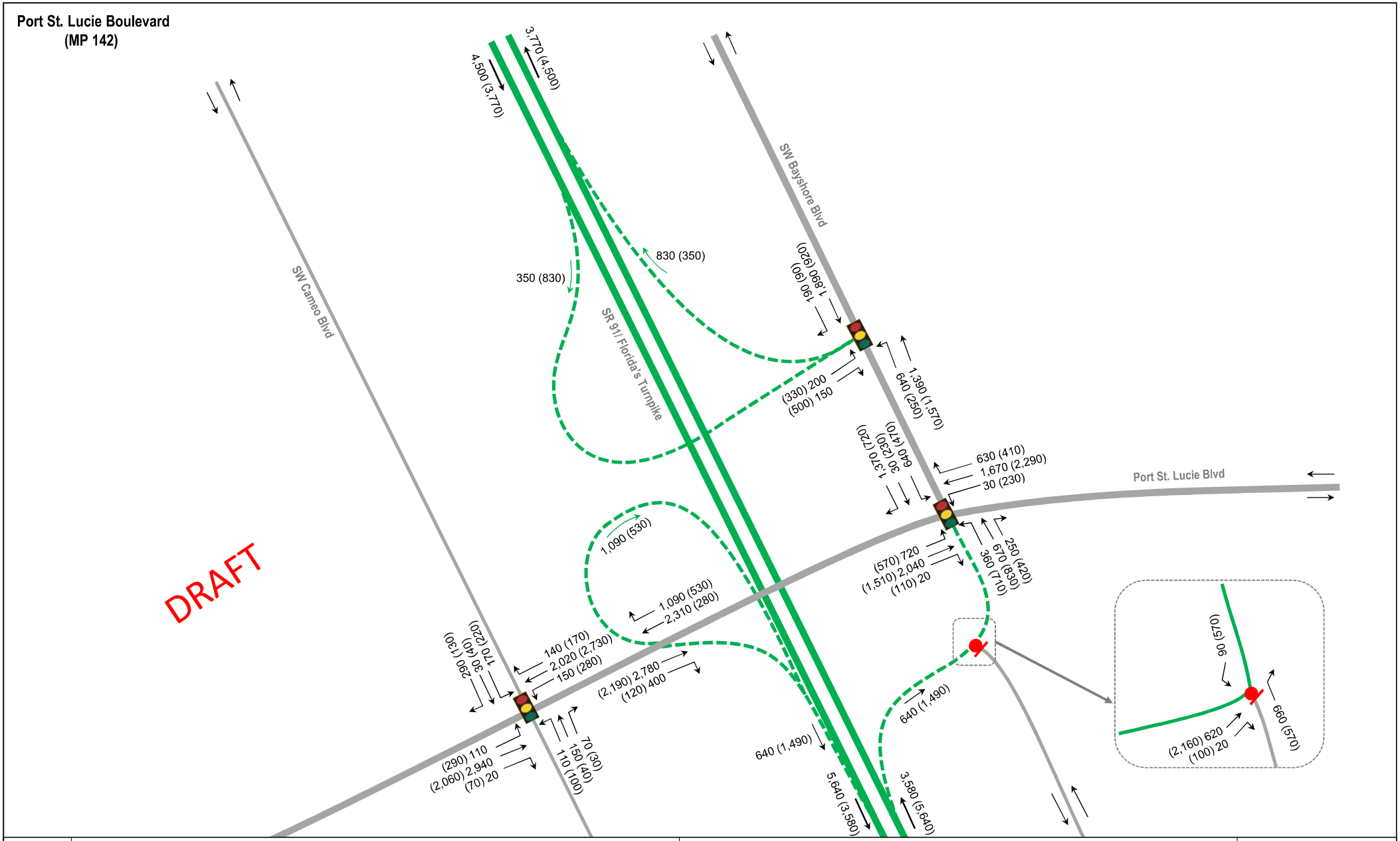
FLORIDA'S TURNPIKE	Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 2045 DDHVs	Figure D.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce
Alternative Analysis Memorandum

Alternative 2 Lane Geometry

Figure D.5

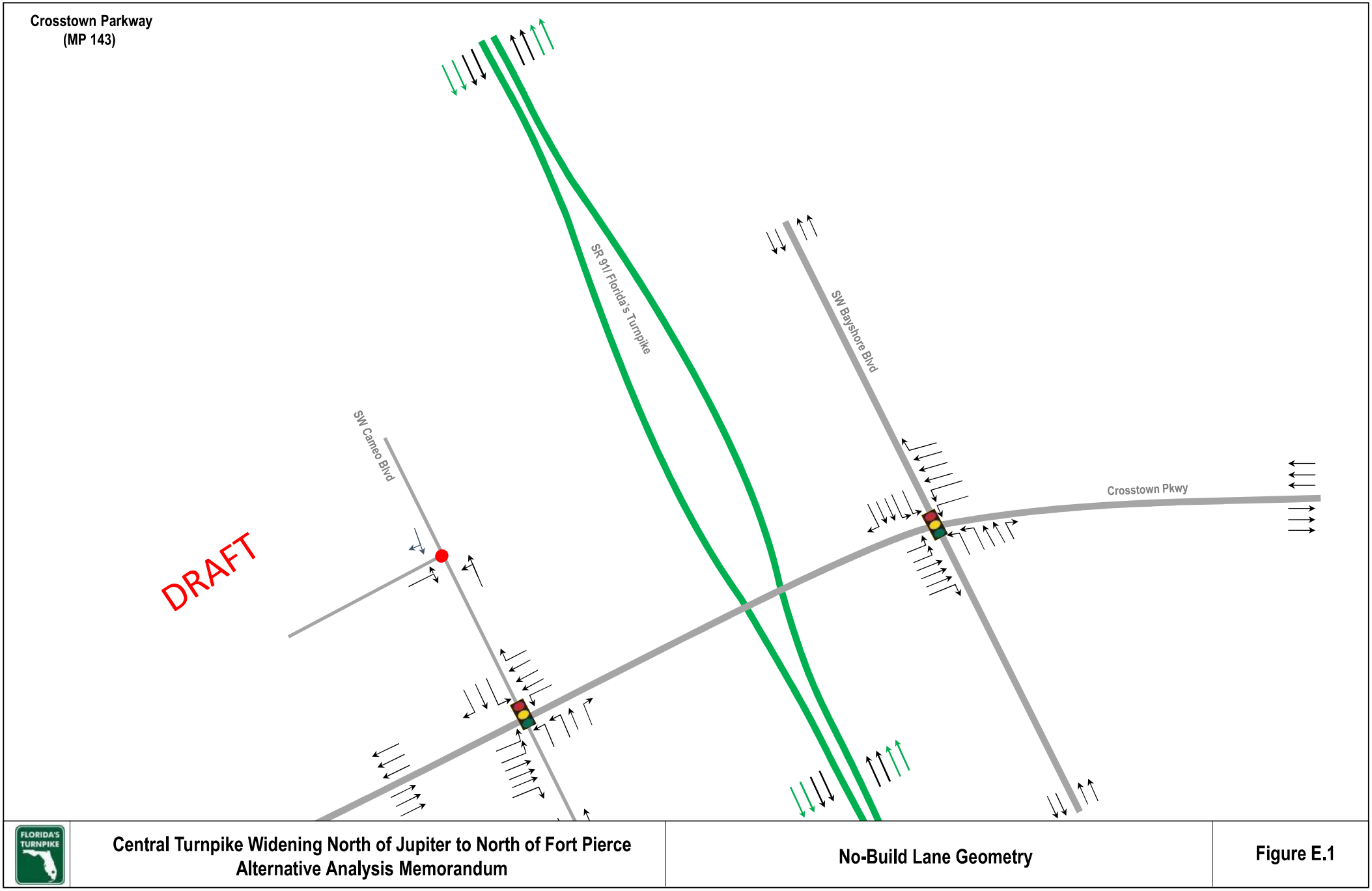


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 2 Lane Geometry	Figure D.6

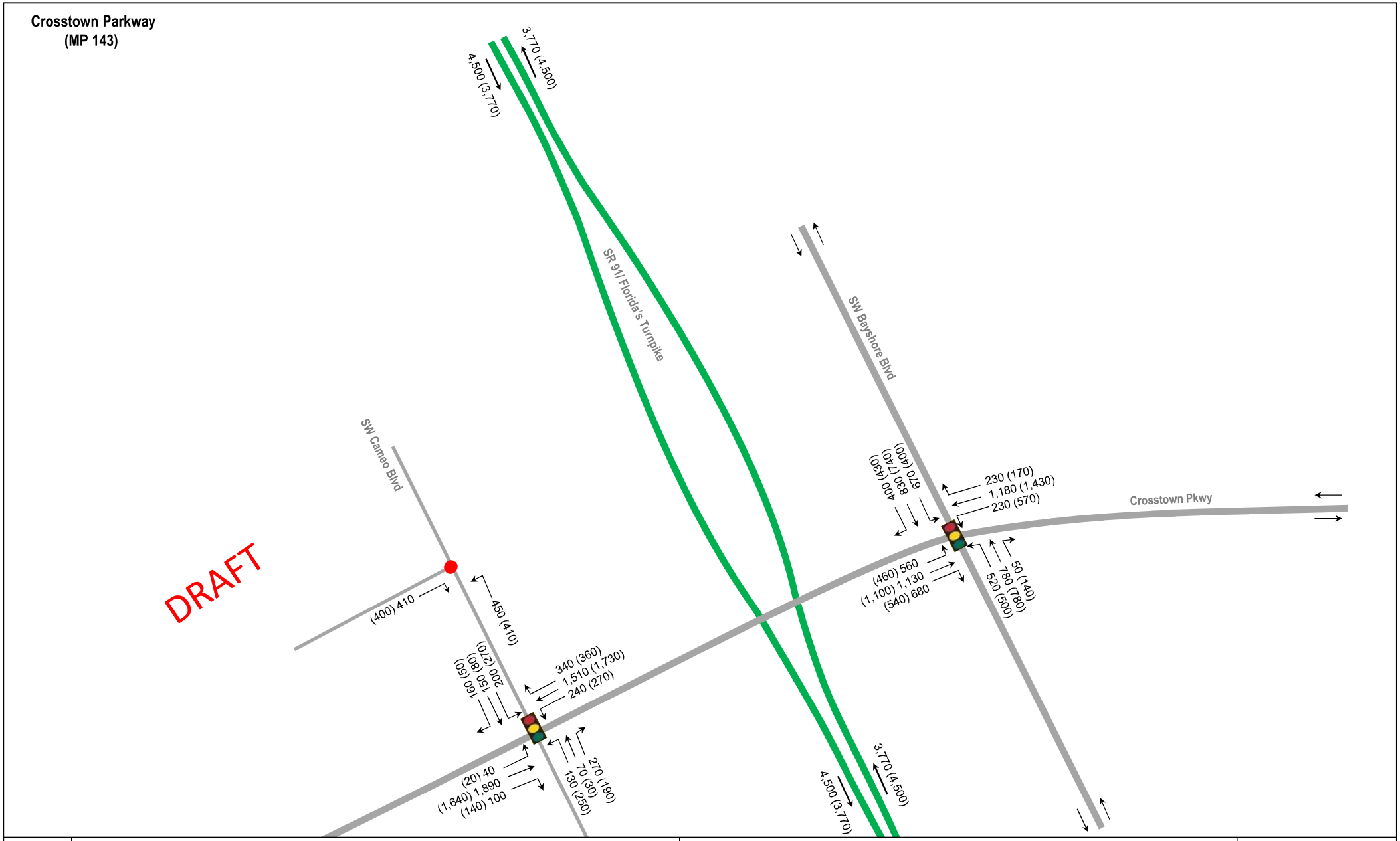
Attachment E

Crosstown Parkway

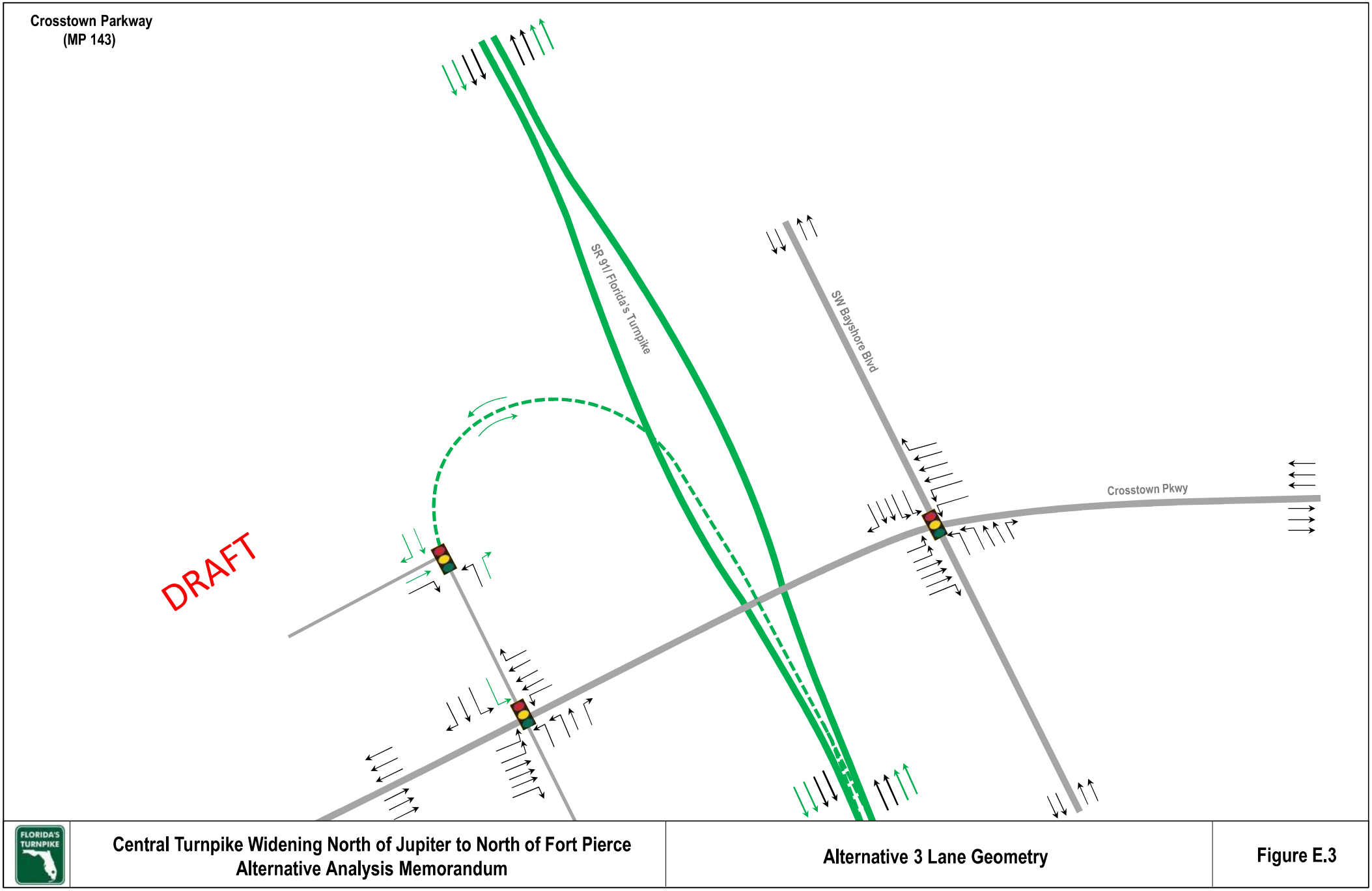
(MP 143)



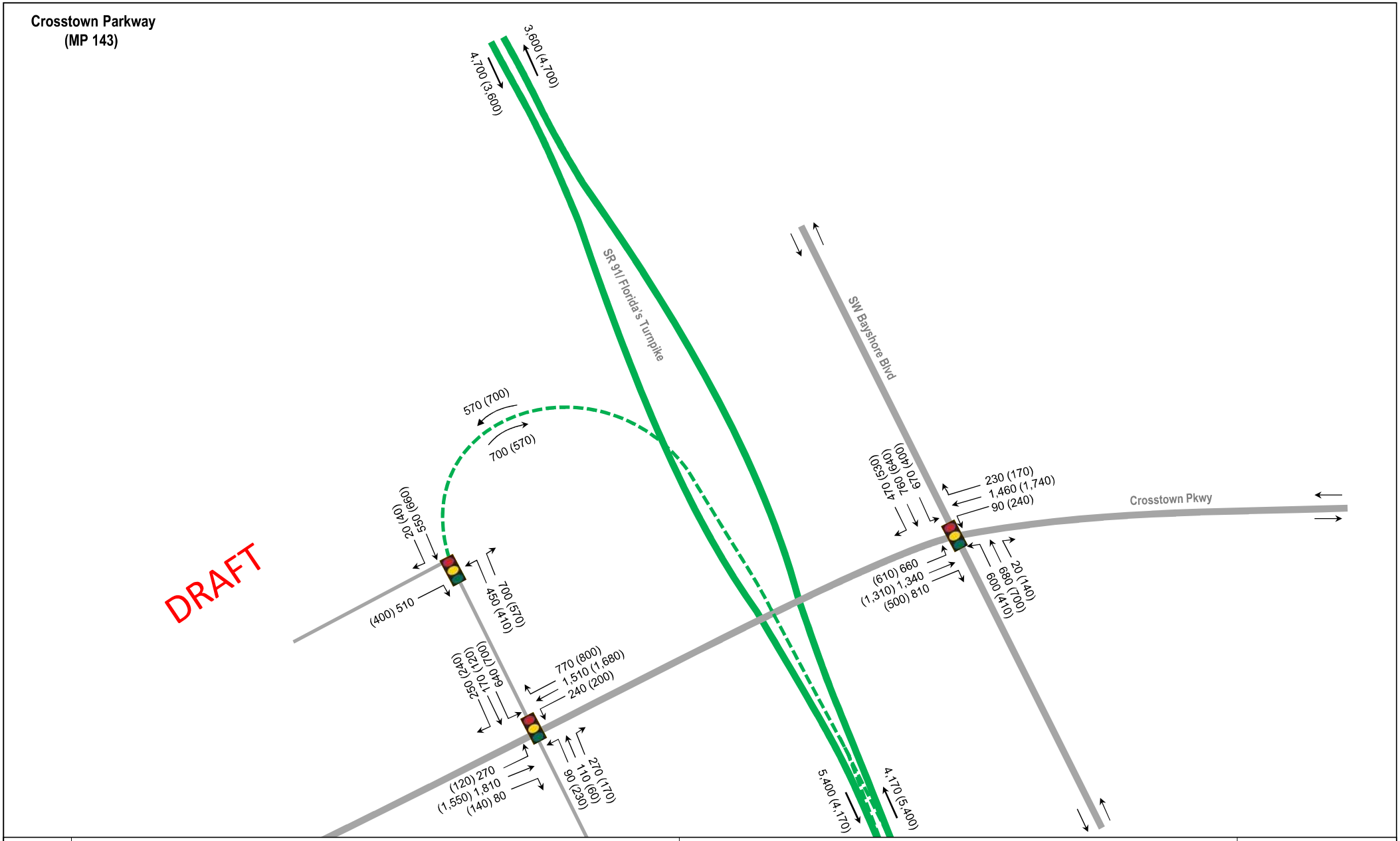
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure E.1



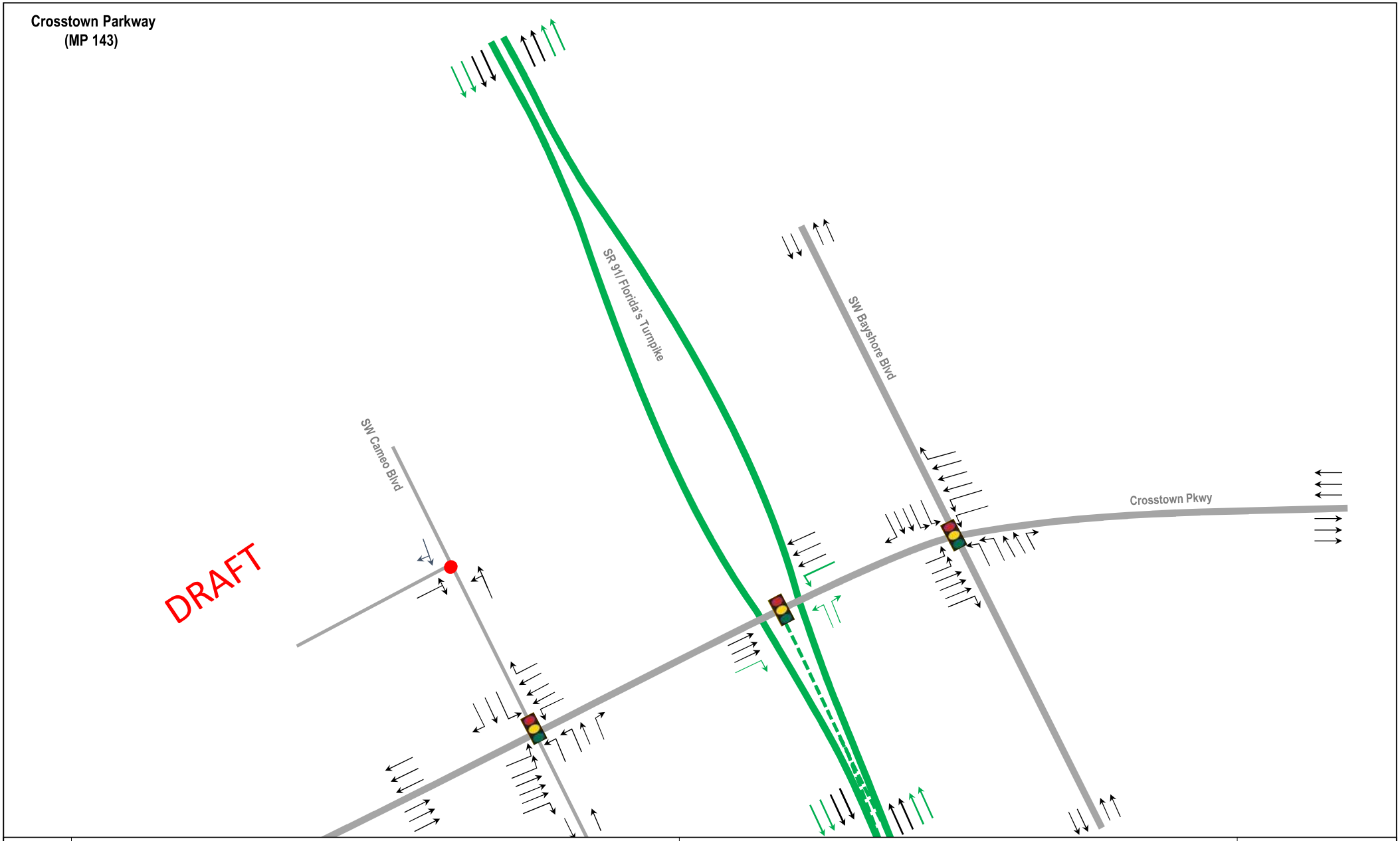
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure E.2



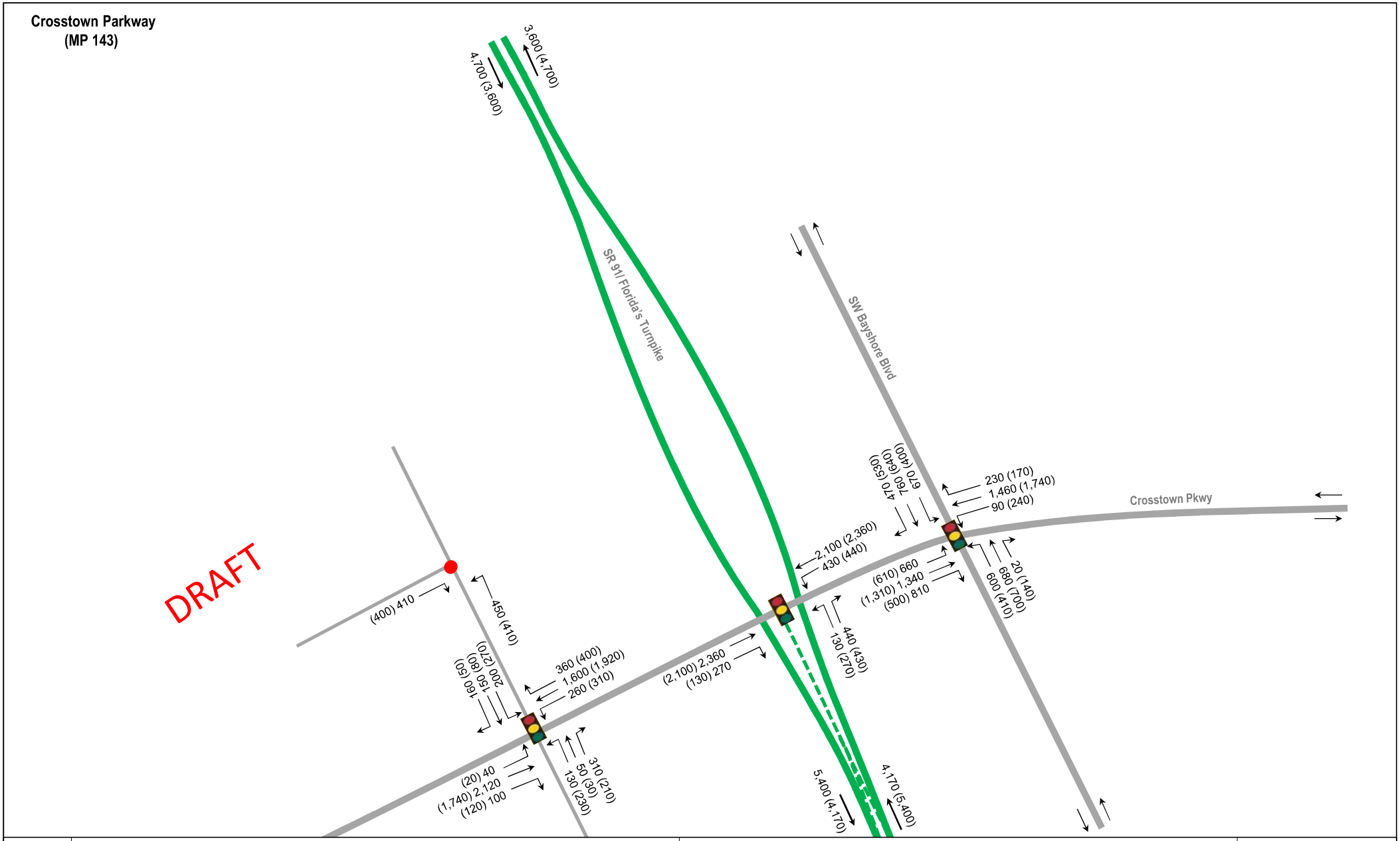
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 Lane Geometry	Figure E.3



FLORIDA'S TURNPIKE	Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 3 2045 DDHVs	Figure E.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 Lane Geometry	Figure E.5

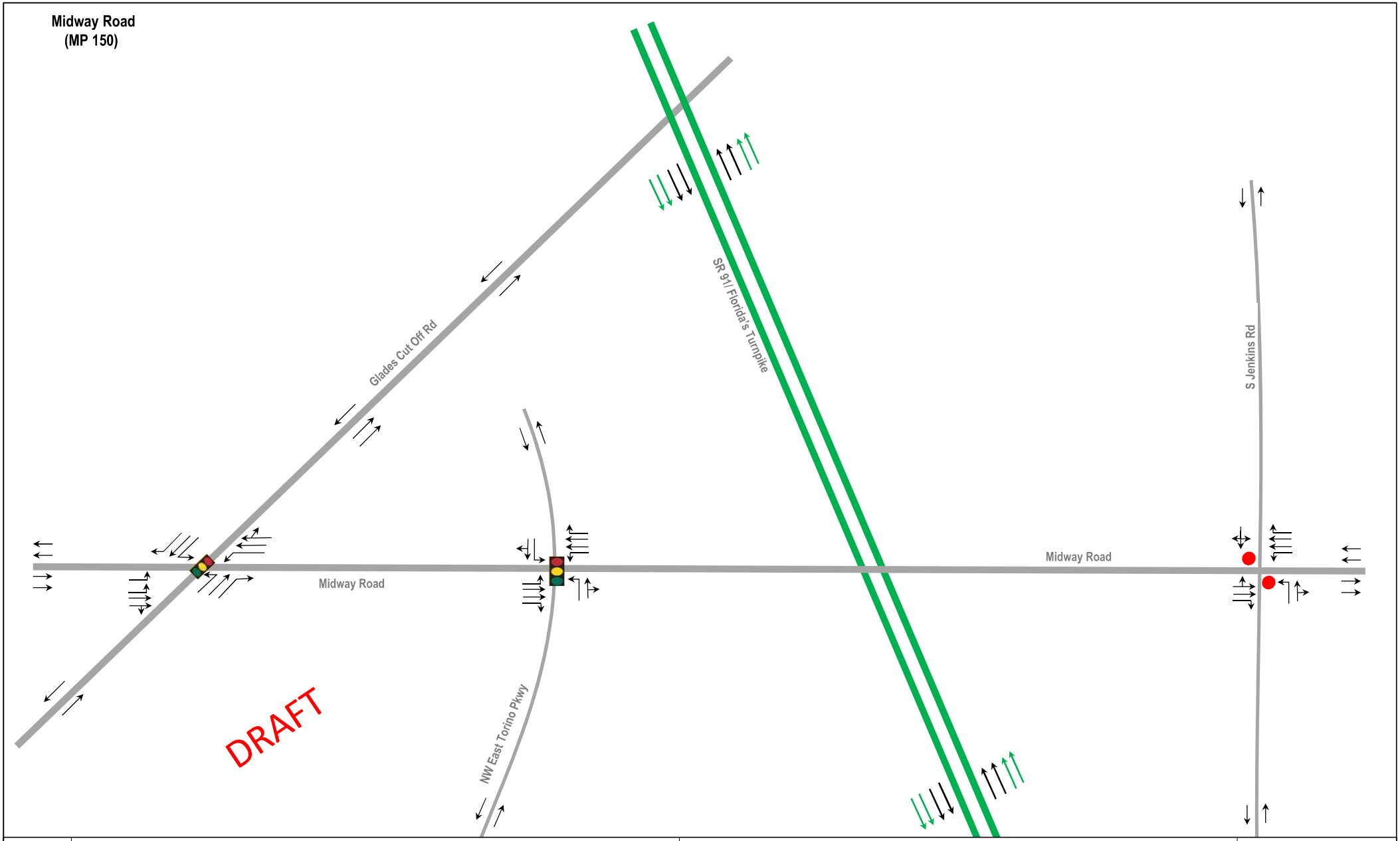


FLORIDA'S TURNPIKE	Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 2045 DDHVs	Figure E.6

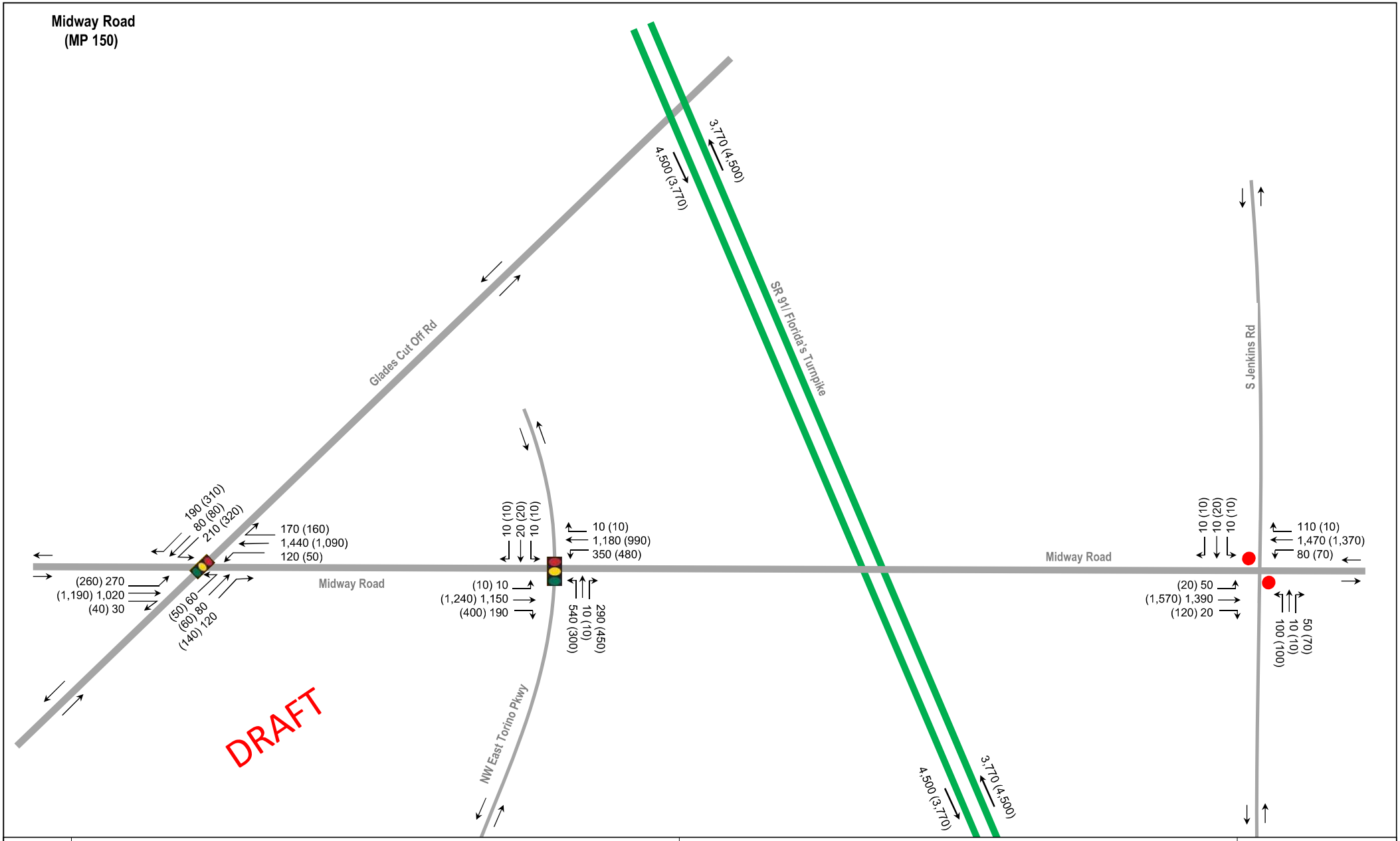
Attachment F

Midway Road

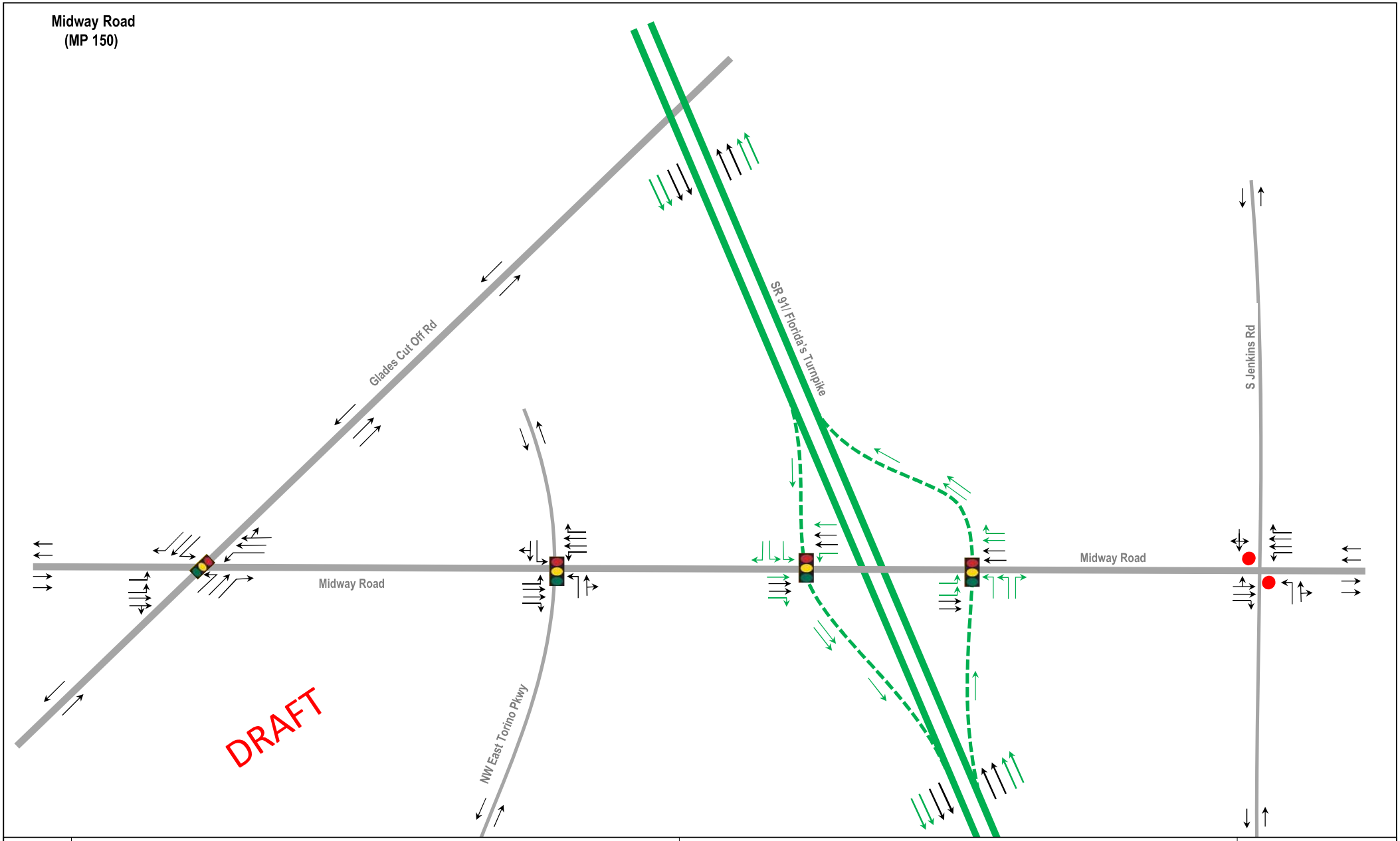
(MP 150)



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure F.1



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure F.2



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 Lane Geometry	Figure F.3

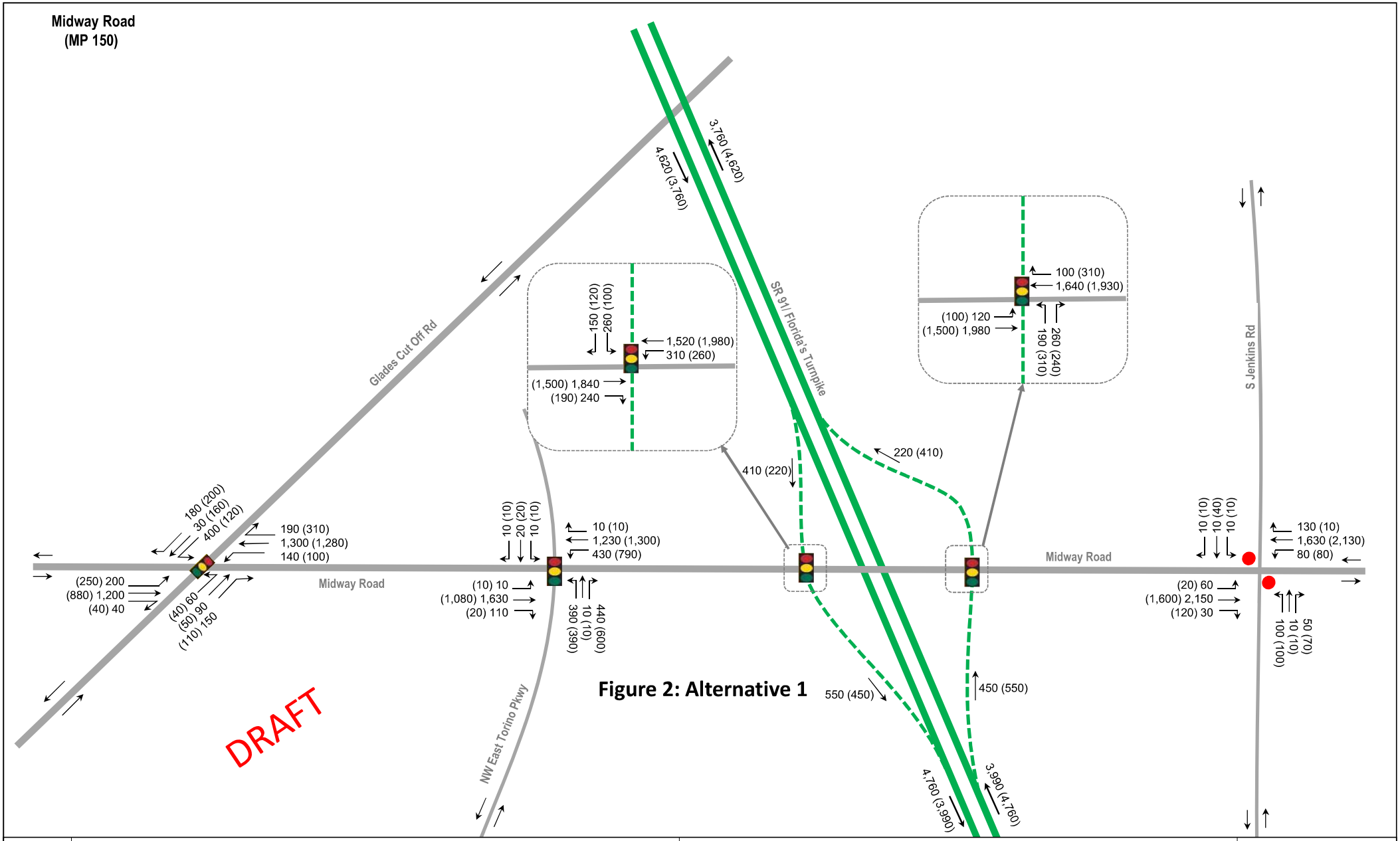
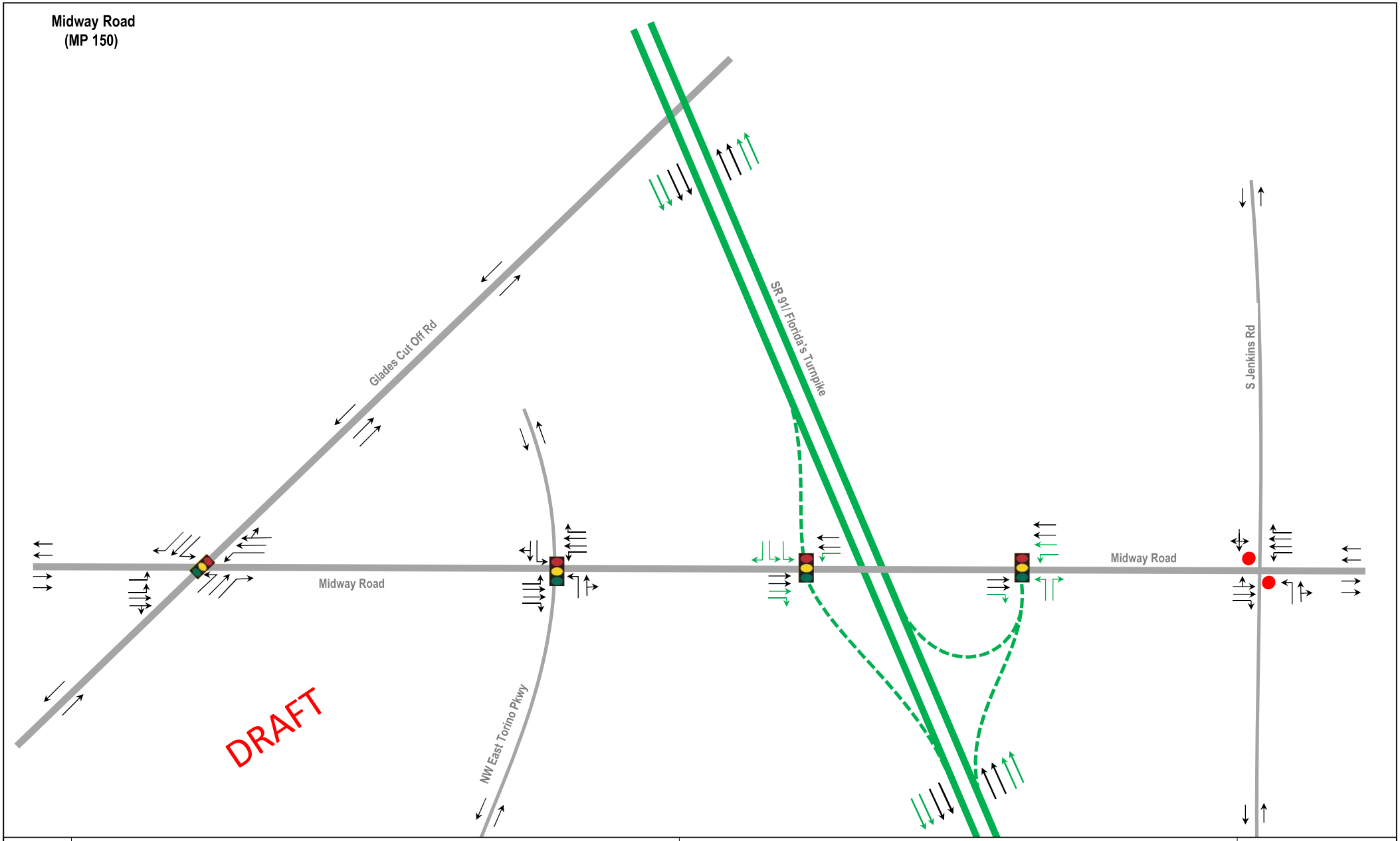
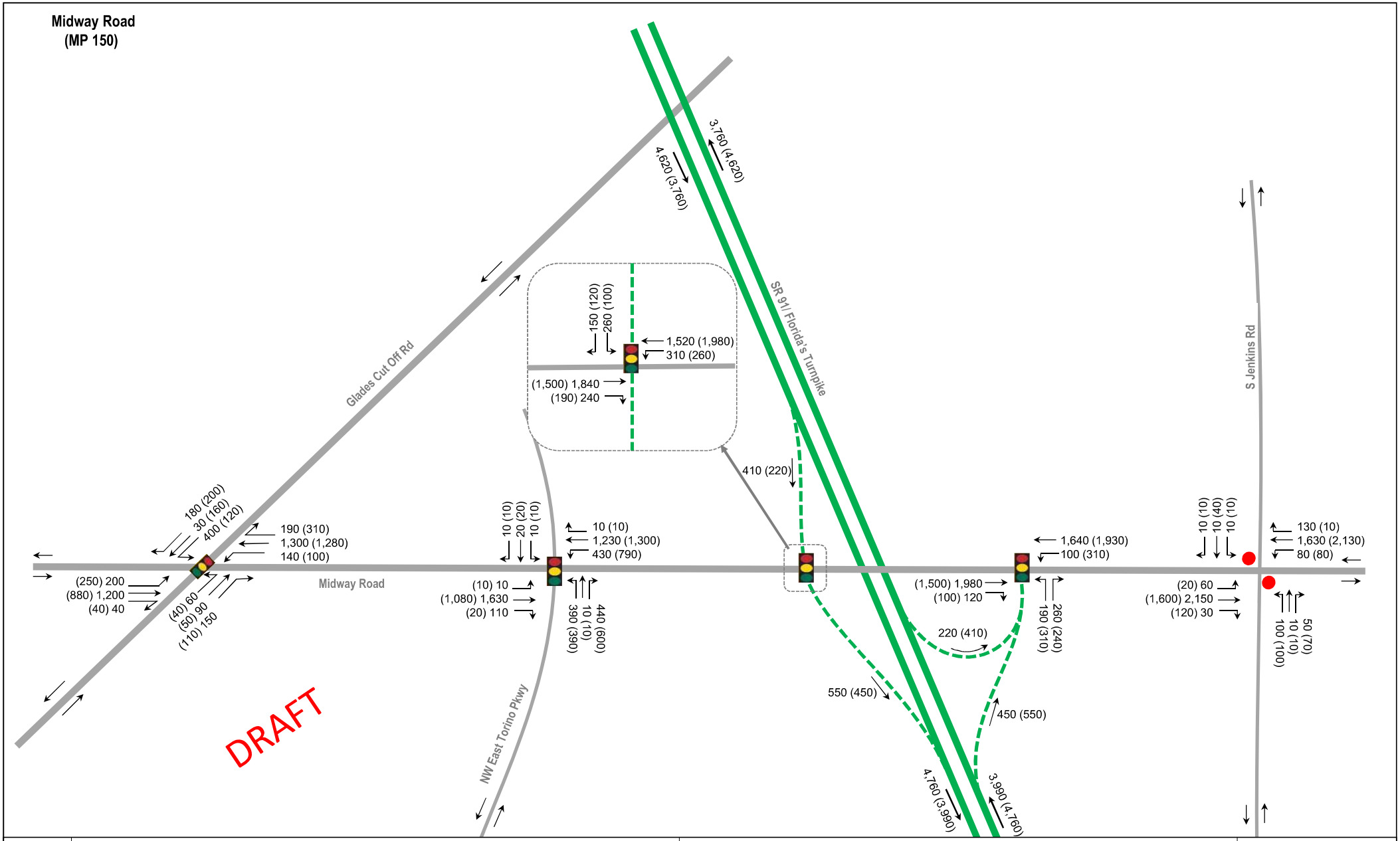


Figure 2: Alternative 1

Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 2045 DDHVs	Figure F.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 Lane Geometry	Figure F.5

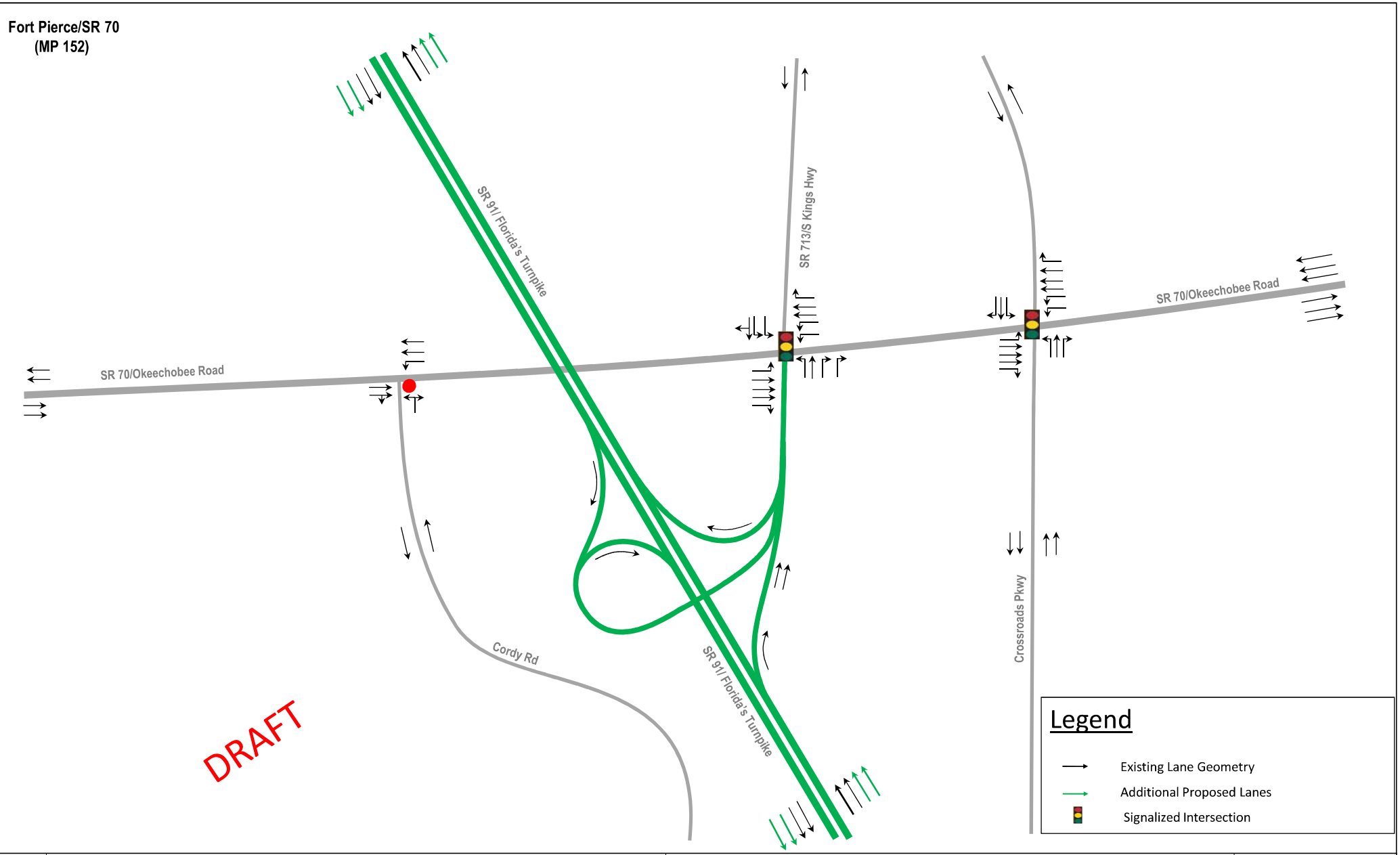


FLORIDA'S TURNPIKE	**Central Turnpike Widening North of Jupiter to North of Fort Pierce** **Alternative Analysis Memorandum**	**Alternative 4** **2045 DDHVs**
		Figure F.6

Attachement G

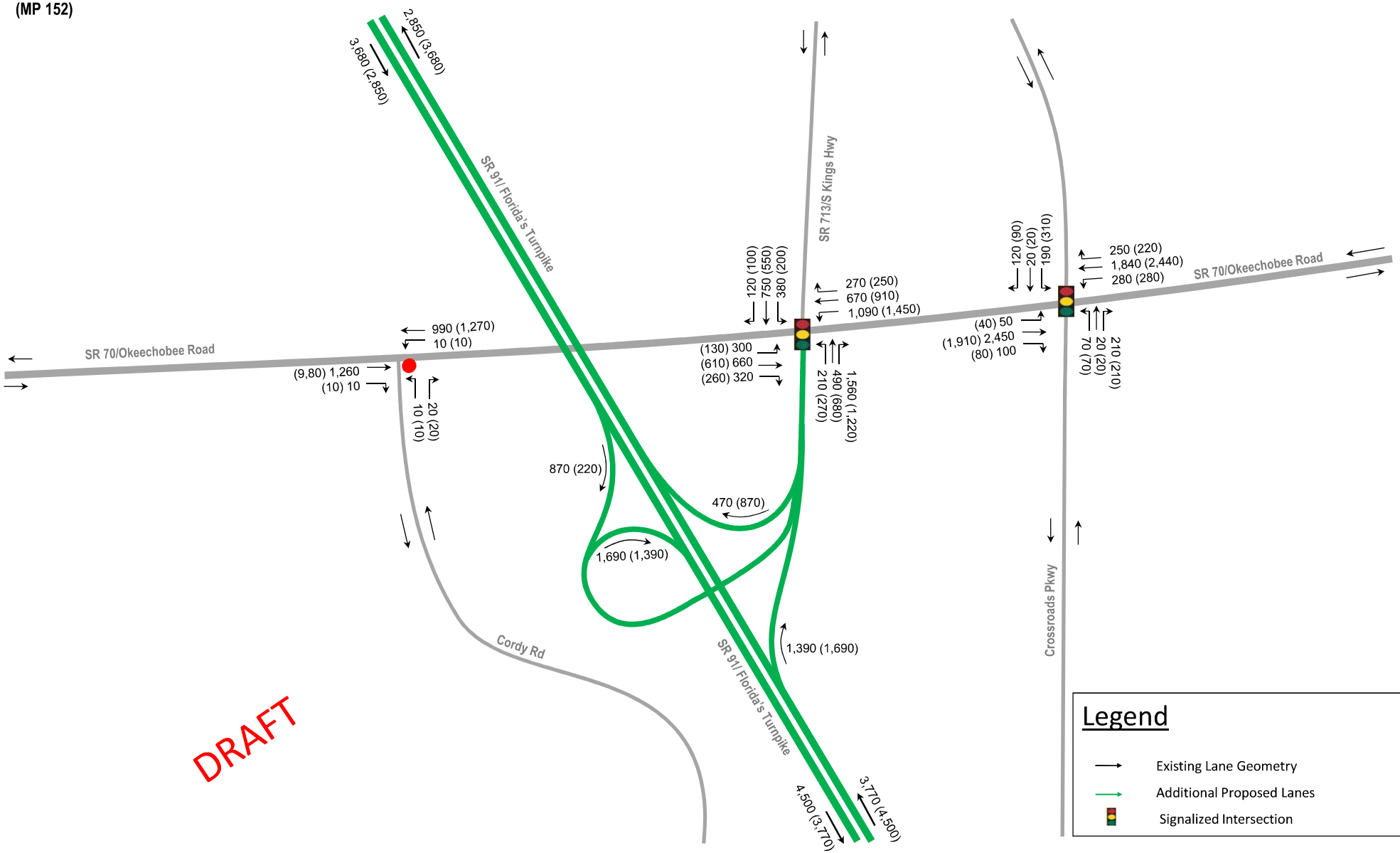
Fort Pierce (S.R. 70)

(MP 152)

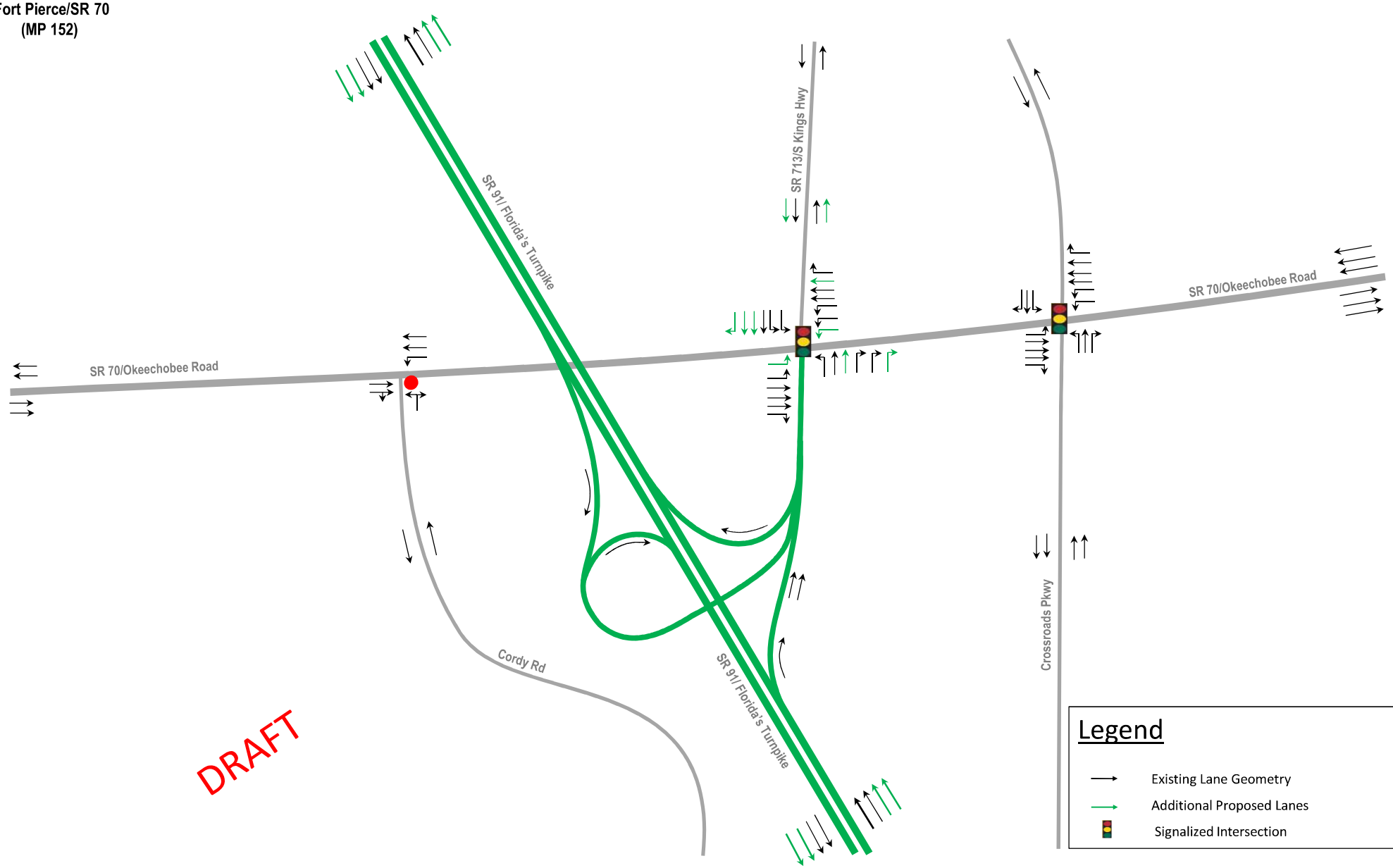


Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	No-Build Lane Geometry	Figure G.1

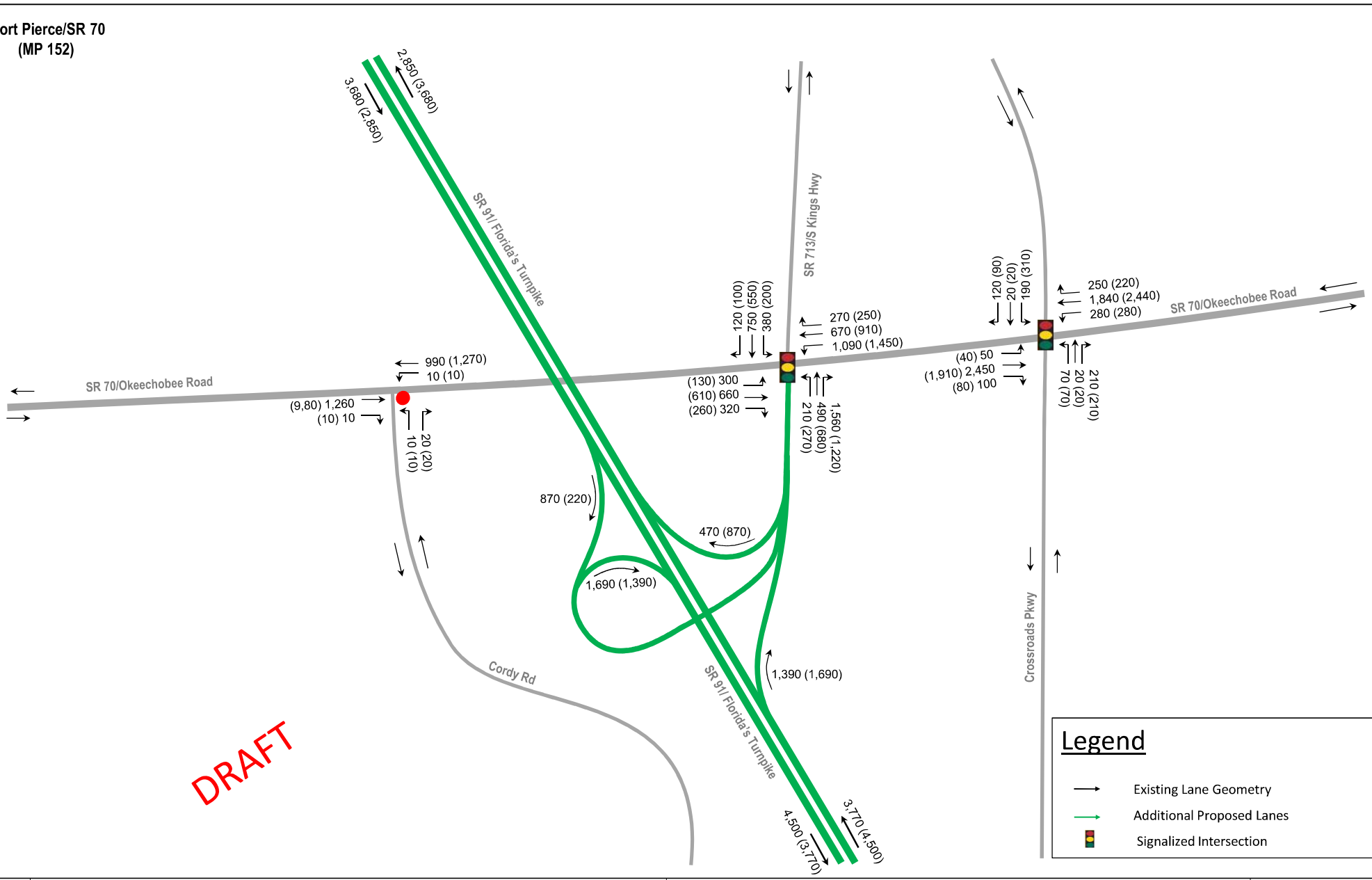
Fort Pierce/SR 70
(MP 152)



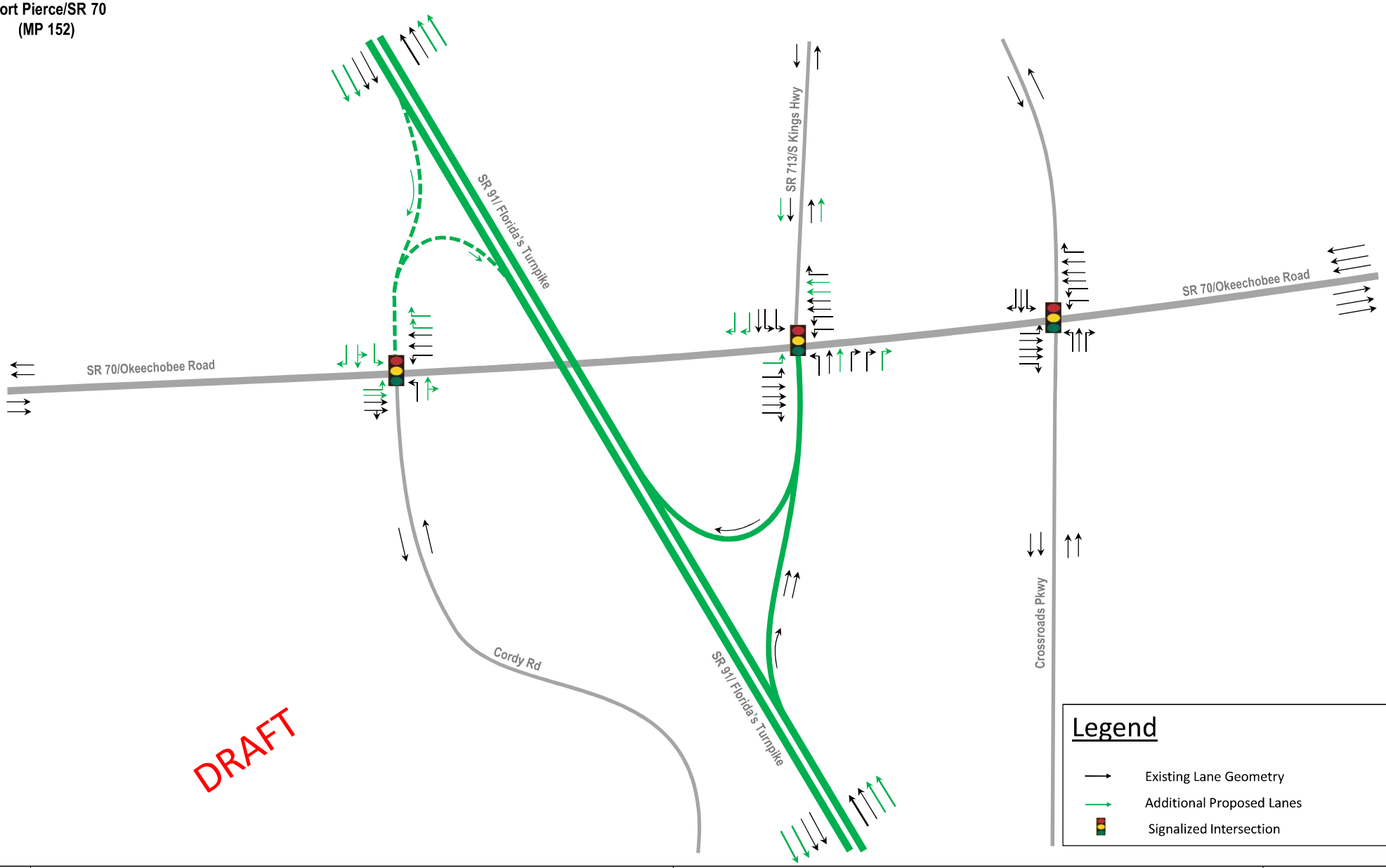
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	2045 No-Build DDHVs	Figure G.2



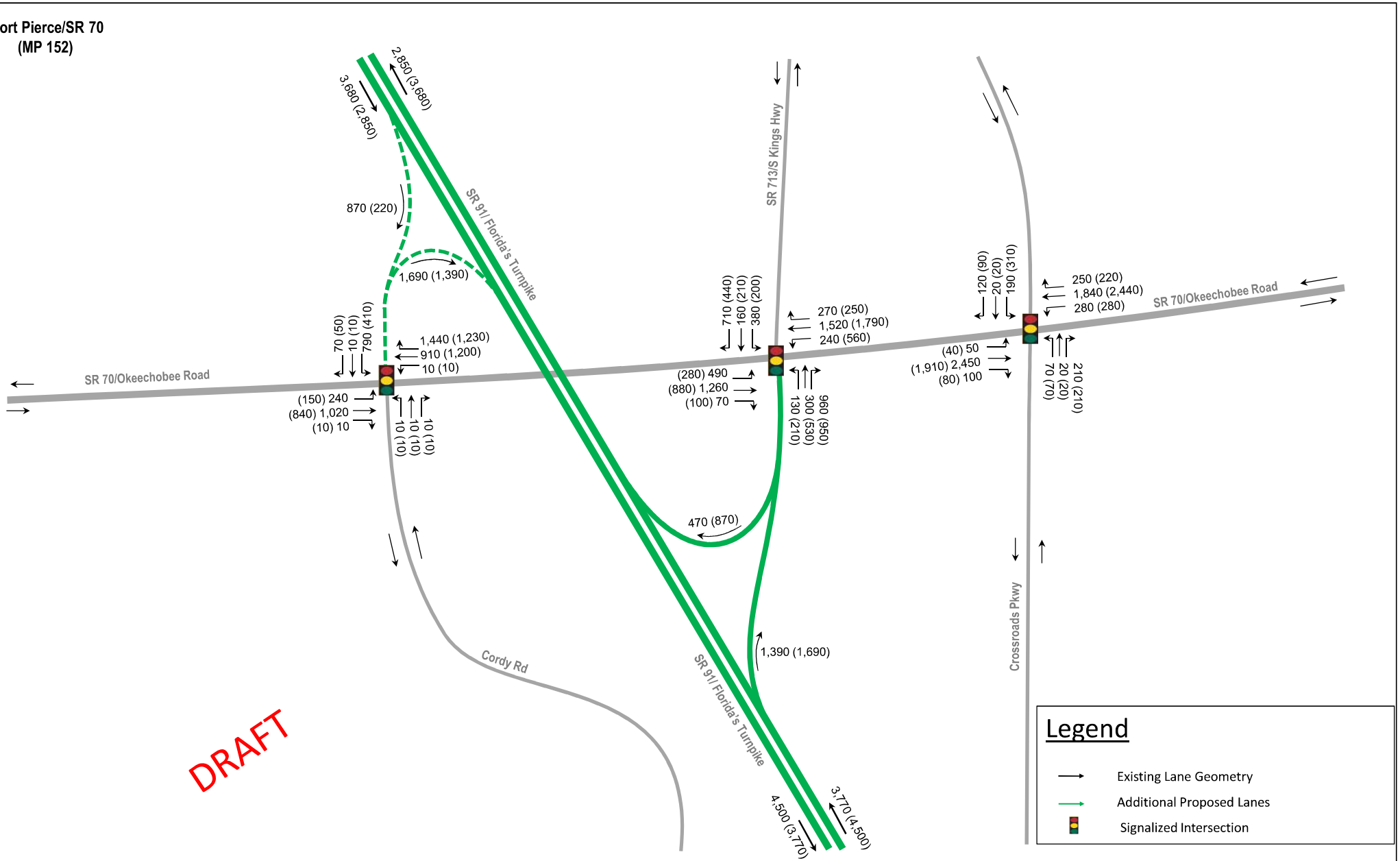
Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 Lane Geometry	Figure G.3



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 1 2045 DDHVs	Figure G.4



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 Lane Geometry	Figure G.5



Central Turnpike Widening North of Jupiter to North of Fort Pierce Alternative Analysis Memorandum	Alternative 4 2045 DDHVs	Figure G.6

Appendix D
St. Lucie County Resolution 20-267 & Letters of Support for Midway Road Interchange Alternative 1

RESOLUTION 20-267

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF ST. LUCIE COUNTY, FLORIDA, SUPPORTING THE RECOMMENDATIONS OF INWOOD CONSULTING ENGINEERS REGARDING THE DEVELOPMENT OF A NEW TURNPIKE INTERCHANGE AT MIDWAY ROAD IN ST. LUCIE COUNTY, FLORIDA

WHEREAS, the Board of County Commissioners has made the following determinations:

1. The Florida Turnpike Enterprise (FTE) is currently performing a PD&E (Project Development & Environment) study for turnpike facilities from Jupiter to Fort Pierce.

2. The Turnpike is planning to widen from a four-lane facility to a ten lane facility.

3. The FTE is evaluating several locations for new interchanges within the study limits.

4. The County supports the development of a new turnpike interchange at Midway Road.

5. The County is requesting that Florida's Turnpike Enterprise change their recommended interchange configuration to Alternative B (TUDI) as shown in the Midway Road Interchange Alternatives public document.

NOW, THEREFORE, BE IT RESOLVED by the St. Lucie County Board of County Commissioners:

1. This Board does hereby proclaim its support for a change to the interchange configuration to Alternative B (TUDI) for the new turnpike exchange at Midway Road.

2. This Resolution shall become effective immediately upon adoption.

3. The County Administrator is directed to send a copy of this resolution to the County's state legislative delegation and to the Florida Turnpike Enterprise.

PASSED AND DULY ADOPTED this 1st day of December 2020.

ATTEST:

DEPUTY CLERK

BOARD OF COUNTY COMMISSIONERS
ST. LUCIE COUNTY, FLORIDA

BY: _____
CHAIR

APPROVED AS TO LEGAL FORM

_____
Asst **COUNTY ATTORNEY**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, Florida 34953
772-462-1593 www.stlucietpo.org

December 17, 2020 **VIA EMAIL**

Mr. Henry Pinzon, P.E.
Environmental Management Engineer
Florida's Turnpike Enterprise
P.O. Box 613069
Ocoee, Florida 34761-3069

RE: Support of St. Lucie County Resolution 20-267 and Alternative B, Tight Urban Diamond Interchange (TUDI), as the Preferred Alternative for the New Midway Road Turnpike Interchange Configuration

Dear Mr. Pinzon:

The governments, agencies, and entities that comprise the St. Lucie Transportation Planning Organization (St. Lucie TPO) work in collaboration to implement projects that reduce congestion and increase mobility and safety while fostering economic development. The Midway Road Turnpike Interchange Project, which adds a new connection to Florida's Turnpike from Midway Road, is such a project.

The Midway Road Turnpike Interchange Project is a priority project of the St. Lucie TPO and also is ranked as one of the most important regional projects for the Treasure Coast. This transformative project is included in the Project Development & Environment (PD&E) Study that is being conducted by Florida's Turnpike Enterprise (FTE).

Currently, the draft PD&E Study identifies two configuration alternatives for the interchange, a Partial Cloverleaf Interchange (Alternative A) and a TUDI (Alternative B), with Alternative A identified as the Preferred Alternative. However, the St. Lucie TPO believes that Alternative B will have less of a negative impact on the local roadway network, especially on the planned intersection at Midway Road and the future Jenkins Road Extension, than the currently-identified Preferred Alternative of Alternative A.

Therefore, the St. Lucie TPO strongly supports the attached Resolution 20-67 that was recently adopted by St. Lucie County and the change in the draft PD&E Study of the Preferred Alternative interchange configuration for the new Turnpike Interchange at Midway Road to Alternative B, TUDI.

Please contact Peter Buchwald, the St. Lucie TPO Executive Director, should you require any additional information or clarification regarding the TPO's support of St. Lucie County Resolution 20-267 and Alternative B, TUDI, as the Preferred Alternative in the PD&E Study.

Sincerely,

Jeremiah Johnson
Chairman

Attachment

cc: Rax Jung, FTE
Brian Ribaric, FTE
St. Lucie TPO Board

CITY OF PORT ST. LUCIE

Office of the City Manager

"A City for All Ages"

RUSS BLACKBURN
City Manager

Rec'd 12/30/20 DR

December 17, 2020

Henry Pinzon, P.E.
Environmental Management Engineer
Florida's Turnpike Enterprise
MP 263, Building 5315
PO Box 6123069
Ocoee, FL 34761-3069

Subject: Support for Tight Urban Diamond Interchange at Turnpike and Midway Road
Turnpike Project Development and Environment (PD&E) Study – Jupiter to Fort Pierce

Dear Mr. Pinzon:

The purpose of this letter is to express the City's support of the attached St. Lucie County Resolution 20-267. The City of Port St. Lucie agrees that a new Tight Urban Diamond Interchange (TUDI) at the Turnpike and Midway Road would best serve the needs of the region.

The new interchange will provide an important connection that will help boost economic activity and development in the region. The currently identified preferred alternative in the Florida Turnpike Enterprise's ongoing PD&E Study is a partial cloverleaf interchange configuration.

The City supports the use of a TUDI configuration because it will have less impact to the local roadway network, especially on the planned intersection at Midway Road and the future Jenkins Road Extension than the partial clover leaf configuration.

Your review and consideration of this very important issue is greatly appreciated.

Sincerely,

Russ Blackburn
City Manager

Enclosure

C: Jesus Merejo, Chief Assistant City Manager
Robert Sweeney, P.E., Public Works Director
Peter Buchwald, Executive Director St. Lucie TPO

THE SUNRISE CITY
FORT PIERCE
OFFICE OF THE MAYOR
AND CITY COMMISSION
Florida

Received
JAN 0 5 2021
City of Fort Pierce
City Manager's Office

January 5, 2021

Henry Pinzon, P.E.
Environmental Management Engineer
Florida's Turnpike Enterprise
MP 263, Building 5315
P.O. Box 613069
Ocoee, FL 34761-3069

Re: Letter of Support for Tight Urban Diamond Interchange (TUDI) at Turnpike and Midway Road – St. Lucie County Resolution 20-267

Dear Mr. Pinzon:

The Fort Pierce City Commission, at their meeting of January 4, 2021, agreed to show their support of St. Lucie County Resolution 20-267, in which St. Lucie County has requested the Florida's Turnpike Enterprise to change their recommended configuration for the proposed interchange at Midway Road. St. Lucie County has requested that "Alternative B", the Tight Urban Diamond Interchange (TUDI) be the recommended interchange configuration shown by the final PD&E (Project Development & Environment) study for turnpike facilities from Jupiter to Fort Pierce.

The Fort Pierce City Commission fully supports the efforts of St. Lucie County to secure the future construction of an interchange at the Midway Road crossing.

Sincerely,

Linda Hudson

Mayor Linda Hudson

APPENDIX F

Typical Section Package

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION PACKAGE

FINANCIAL PROJECT ID 423374-1-22-01

PALM BEACH COUNTY (93470)

MARTIN COUNTY (89470)

ST. LUCIE COUNTY (94470)

STATE ROAD NO. 91 (FLORIDA'S TURNPIKE)

RECONSTRUCTION OF SR 91 FROM 4 TO 8 LANES

PROJECT LOCATION URL: https://owpbstandardmap.fdot.gov/?query=WorkProgram_Tbl15_Dissolved_2004,itemseg,4233741

PROJECT DESCRIPTION: RECONSTRUCTION

PROJECT LIMITS: BEGIN MP 117.00 - END MP 153.7

EXCEPTIONS: NONE

BRIDGE LIMITS: (930241) MP 117.5
(890079) MP 119.1 (890119) MP 125.5
(890082) MP 126.5 (890126) MP 130.0
(891000) MP 131.0 (890066) MP 131.0
(890068) MP 134.3 (890159) MP 134.6
(890085) MP 135.6 (890083) MP 138.1
(941001) MP 138.5 (940049) MP 142.2
(940082) MP 142.2 (940142) MP 143.0
(940121) MP 143.3 (944018) MP 144.8
(949901) MP 146.4 (949902) MP 146.5
(940076) MP 150.7 (940951) MP 150.7
(940072) MP 152.5 (940053) MP 152.9
(940134) MP 153.2 (940135) MP 153.1

RAILROAD CROSSING: FEC RAILROAD - MP 150.7

APPROVED BY:

DANIEL P. HOLDEN
LICENSE
No 80502
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

H.W. LOCHNER
4350 W. CYPRESS STREET, SUITE 800
TAMPA, FL 33607
DANIEL P. HOLDEN, P.E. NO. 80502

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

FDOT TURNPIKE INTERMODAL SYSTEMS DEVELOPMENT MANAGER

JENNIFER STULTS
CONCURRING WITH:
CONTEXT CLASSIFICATION

FDOT TURNPIKE DESIGN ENGINEER

MOATAZ HASSAN, P.E.
CONCURRING WITH:
TYPICAL SECTION ELEMENTS
DESIGN SPEED AND POSTED SPEED

FDOT TURNPIKE TRAFFIC OPERATIONS ENGINEER

JOHN R. EASTERLING, IV., P.E.
CONCURRING WITH:
DESIGN SPEED AND POSTED SPEED

CITY OF PORT ST. LUCIE, FL PUBLIC WORKS DIRECTOR

HEATH STOCTON, P.E.
CONCURRING WITH:
TYPICAL SECTION ELEMENTS

MARTIN COUNTY COUNTY ENGINEER

LISA WICHSER, P.E.
CONCURRING WITH:
TYPICAL SECTION ELEMENTS

FDOT DISTRICT FOUR STRUCTURES ENGINEER

RAMON OTERO, P.E.
CONCURRING WITH:
TYPICAL SECTION ELEMENTS

FDOT DISTRICT FOUR BICYCLE/PEDESTRIAN COMPLETE STREETS COORDINATOR

CONCURRING WITH:
CONTEXT CLASSIFICATION

FDOT DISTRICT FOUR PROJECT DEVELOPMENT MANAGER

CESAR J MARTINEZ, P.E.
CONCURRING WITH:
TYPICAL SECTION ELEMENTS
TARGET SPEED

FDOT DISTRICT FOUR DESIGN ENGINEER

JOHN OLSON, P.E.
CONCURRING WITH:
TYPICAL SECTION ELEMENTS
DESIGN SPEED AND POSTED SPEED
TARGET SPEED

FDOT DISTRICT FOUR TRAFFIC OPERATIONS ENGINEER

CONCURRING WITH:
DESIGN SPEED AND
POSTED SPEED
TARGET SPEED

INDEX OF SHEETS

SHEET NO	SHEET DESCRIPTION	GOVERNING AGENCY	SHEET NO	SHEET DESCRIPTION	GOVERNING AGENCY
1	COVER SHEET	TURNPIKE	22	TYPICAL SECTION NO. 21	FDOT DISTRICT 4
2	TYPICAL SECTION NO. 1	TURNPIKE	23	TYPICAL SECTION NO. 22	CITY OF PORT ST. LUCIE
3	TYPICAL SECTION NO. 2	TURNPIKE	24	TYPICAL SECTION NO. 23	FDOT DISTRICT 4
4	TYPICAL SECTION NO. 3	TURNPIKE	25	TYPICAL SECTION NO. 24	FDOT DISTRICT 4
5	TYPICAL SECTION NO. 4	TURNPIKE	26	TYPICAL SECTION NO. 25	TURNPIKE
6	TYPICAL SECTION NO. 5	TURNPIKE	27	TYPICAL SECTION NO. 26	TURNPIKE
7	TYPICAL SECTION NO. 6	TURNPIKE	28	TYPICAL SECTION NO. 27	TURNPIKE
8	TYPICAL SECTION NO. 7	TURNPIKE	29	TYPICAL SECTION NO. 28	TURNPIKE
9	TYPICAL SECTION NO. 8	TURNPIKE	30	TYPICAL SECTION NO. 29	TURNPIKE
10	TYPICAL SECTION NO. 9	TURNPIKE	31	TYPICAL SECTION NO. 30	MARTIN COUNTY
11	TYPICAL SECTION NO. 10	TURNPIKE	32	TYPICAL SECTION NO. 31	FDOT DISTRICT 4
12	TYPICAL SECTION NO. 11	TURNPIKE	33	TYPICAL SECTION NO. 32	TURNPIKE
13	TYPICAL SECTION NO. 12	TURNPIKE	34	TYPICAL SECTION NO. 33	TURNPIKE
14	TYPICAL SECTION NO. 13	TURNPIKE	35	TYPICAL SECTION NO. 34	TURNPIKE
15	TYPICAL SECTION NO. 14	TURNPIKE	36	TYPICAL SECTION NO. 35	FDOT DISTRICT 4
16	TYPICAL SECTION NO. 15	TURNPIKE	37	TYPICAL SECTION NO. 36	CITY OF PORT ST. LUCIE
17	TYPICAL SECTION NO. 16	TURNPIKE	38	TYPICAL SECTION NO. 37	FDOT DISTRICT 4
18	TYPICAL SECTION NO. 17	MARTIN COUNTY	39	TYPICAL SECTION NO. 38	TURNPIKE
19	TYPICAL SECTION NO. 18	FDOT DISTRICT 4	40	TYPICAL SECTION NO. 39	TURNPIKE
20	TYPICAL SECTION NO. 19	FDOT DISTRICT 4	41	TYPICAL SECTION NO. 40	CITY OF PORT ST. LUCIE
21	TYPICAL SECTION NO. 20	CITY OF PORT ST. LUCIE			

SHEET NO.
1

$DATE$ $TIME$ $USER$
I:\TPA\PRJ\000012207\4233741201\roadway\TYPDRD00.dgn

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

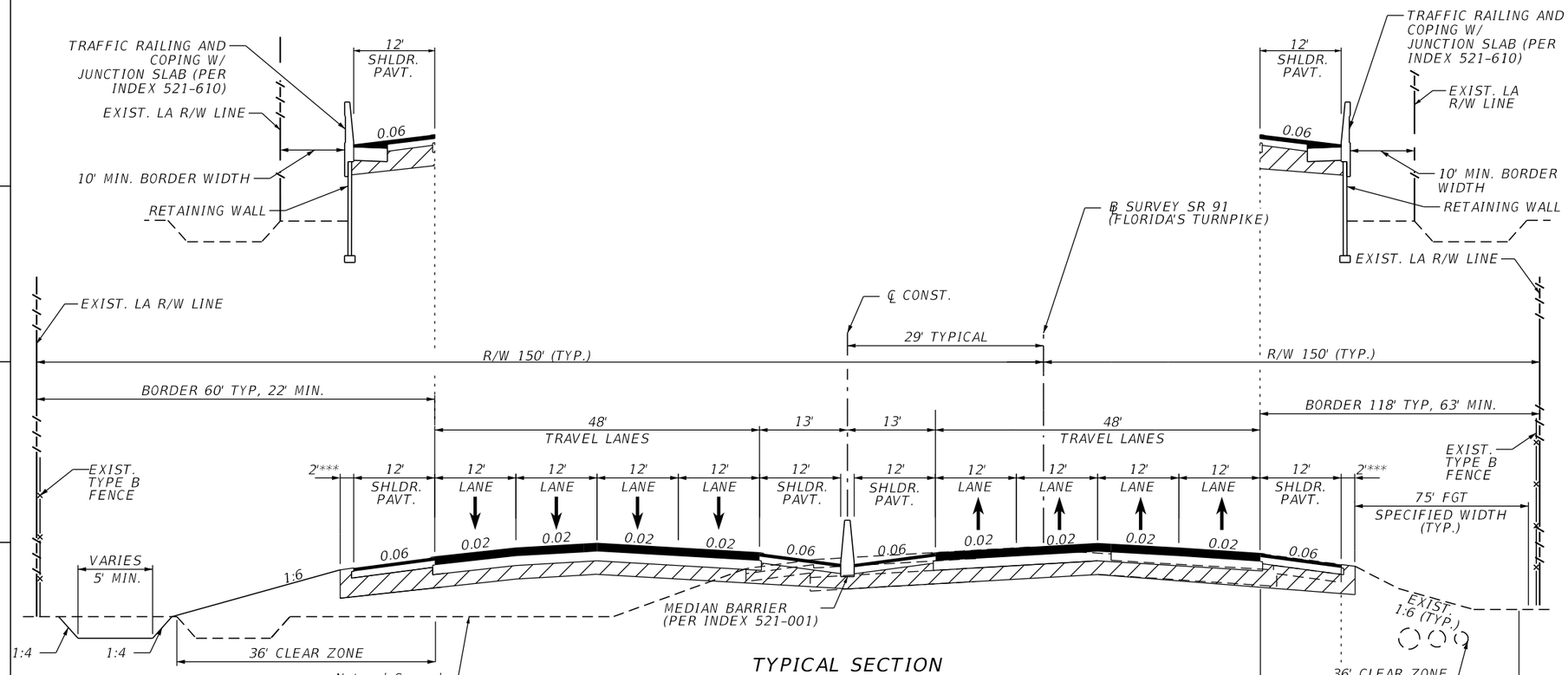
- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

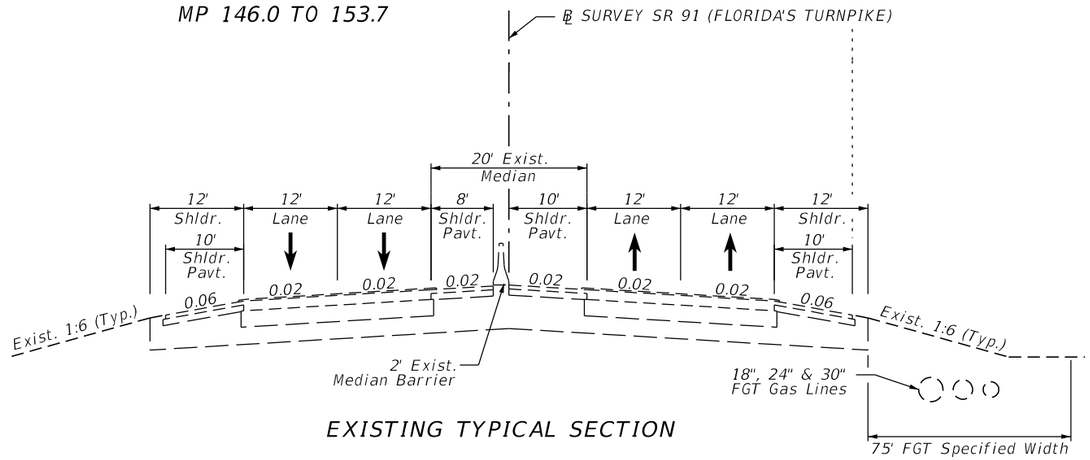
DESIGN VARIATION FOR LATERAL OFFSET AT I-95 NORTHERN CROSSING

DESIGN VARIATION FOR INSIDE SHOULDER WIDTH UNDER OVERPASS STRUCTURES

TYPICAL SECTION No. 01



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
NORTH OF INDIANTOWN ROAD
TO NORTH OF SR 70
MP 117 TO 144.5
MP 146.0 TO 153.7



EXISTING TYPICAL SECTION

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 59,400
ESTIMATED OPENING YEAR = 2025 AADT = 63,400
ESTIMATED DESIGN YEAR = 2045 AADT = 90,100
TRUCK DDHV = 580
K = 10.5% D = 61.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.
** I-95 OVERPASS NEAR M.P. 152 IS NOT BEING RECONSTRUCTED, THEREFORE A DESIGN VARIATION IS REQUIRED FOR LATERAL OFFSET.
*** AN ADDITIONAL 2' OF SHOULDER WIDTH (UNPAVED) HAS BEEN INCLUDED TO PROVIDE SUPPORT AND PREVENT FUTURE EROSION ISSUES ALONG THE EDGE OF PAVED SHOULDER.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	2

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

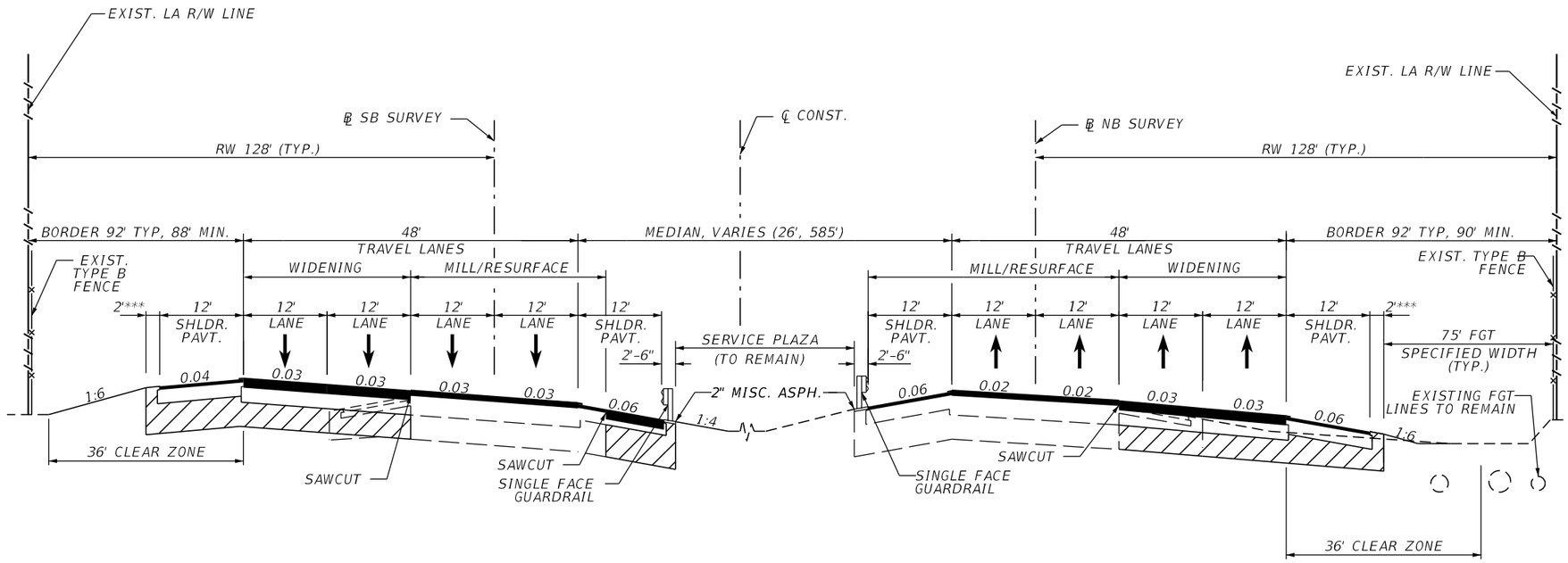
- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR LATERAL OFFSET AT CROSSTOWN PARKWAY OVERPASS

DESIGN VARIATION FOR BORDER WIDTH

TYPICAL SECTION No. 02



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
FT. PIERCE SERVICE PLAZA
MP 144.5 TO MP 146

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 47,900
ESTIMATED OPENING YEAR = 2025 AADT = 51,700
ESTIMATED DESIGN YEAR = 2045 AADT = 77,600
TRUCK DDHV = 490
K = 10.5% D = 60.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

** CROSSTOWN PARKWAY OVERPASS IS NOT BEING RECONSTRUCTED, THEREFORE A DESIGN VARIATION IS REQUIRED FOR LATERAL OFFSET.

*** AN ADDITIONAL 2' OF SHOULDER WIDTH (UNPAVED) HAS BEEN INCLUDED TO PROVIDE SUPPORT AND PREVENT FUTURE EROSION ISSUES ALONG THE EDGE OF PAVED SHOULDER.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	3

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

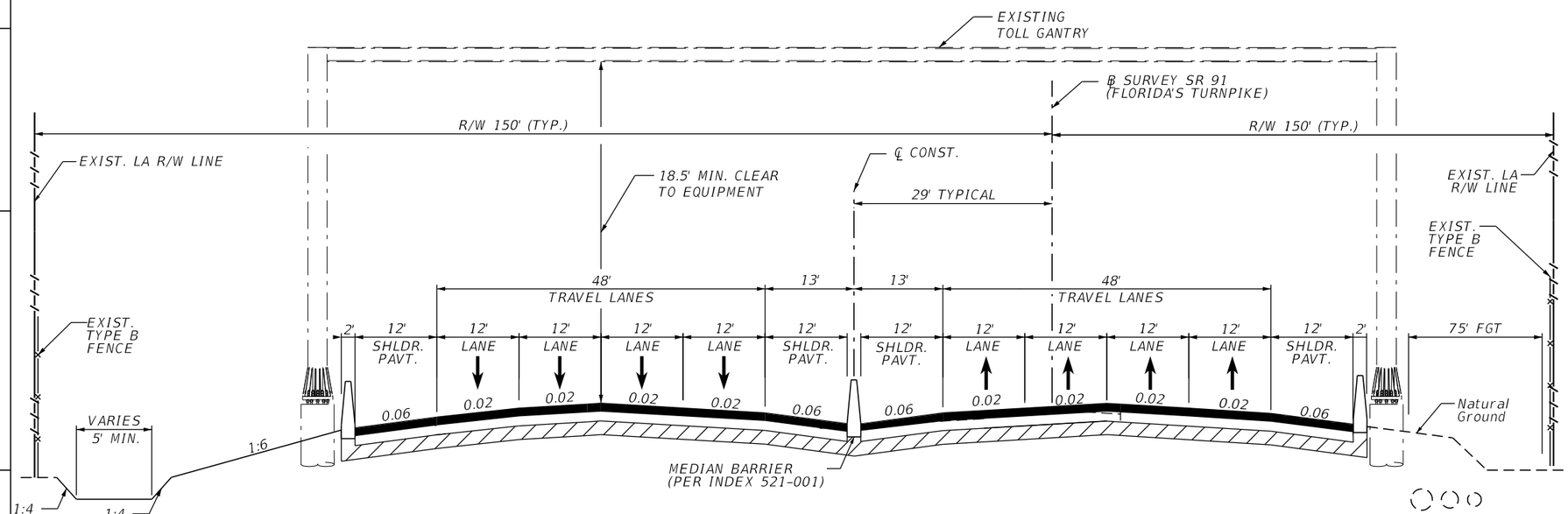
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 03



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
EXISTING TOLL GANTRIES
MP 132.549*
MP 137.607
MP 141.369
MP 149.701

SEE TYPICAL SECTION 01 FOR CLEAR ZONE, BORDER WIDTH AND TRAFFIC DATA.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	4

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

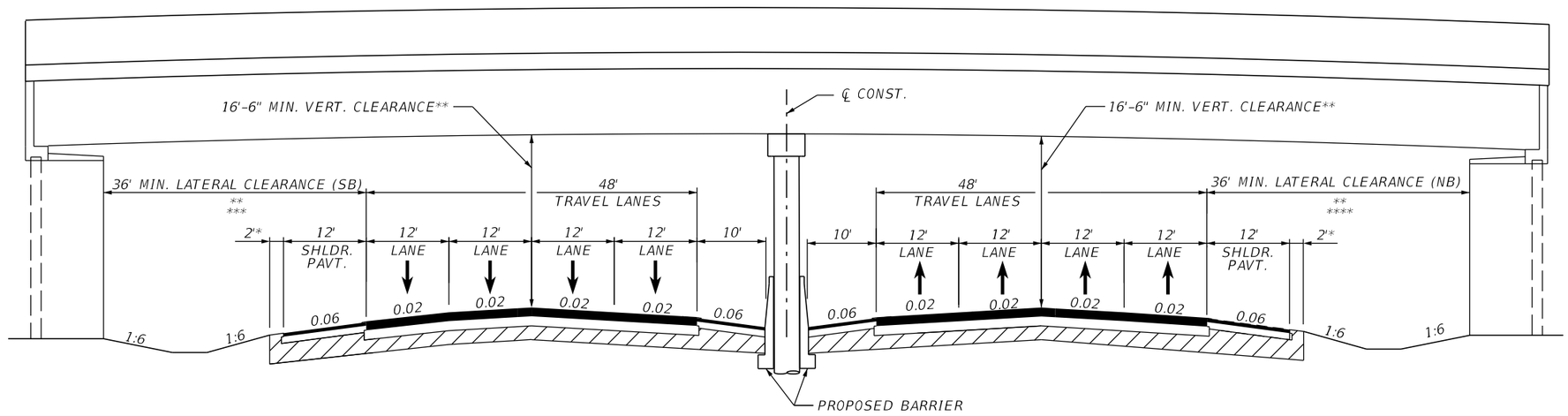
- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR LATERAL OFFSET AT I-95 NORTHERN CROSSING

DESIGN VARIATION FOR INSIDE SHOULDER WIDTH UNDER OVERPASS STRUCTURES

TYPICAL SECTION No. 04



TYPICAL SECTION

SR 91 (FLORIDA'S TURNPIKE)
UNDER
CR 708 (BRIDGE RD) - MP 125.5
SR 76 (KANNER HWY) - MP 130.0
SR 9 (I-95) SOUTHERN CROSSING - MP 131.6*****
SE BECKER BLVD - MP 138.5
SR 716 (SW PORT ST. LUCIE BLVD) RAMP A - MP 143.3*****
SW ST. LUCIE WEST BLVD - MP 146.4*****
SR 9 (I-95) NORTHERN CROSSING - MP 151.9**

* AN ADDITIONAL 2' OF SHOULDER WIDTH (UNPAVED) HAS BEEN INCLUDED TO PROVIDE SUPPORT AND PREVENT FUTURE EROSION ISSUES ALONG THE EDGE OF PAVED SHOULDER.

** THE I-95 NORTHERN CROSSING HAS A 16'-2.4" MIN. VERT. CLEARANCE AND A 24'-0" LATERAL CLEARANCE ALONG BOTH DIRECTIONS OF TRAVEL. SHOULDER BARRIER IS PROPOSED TO MITIGATE DEFICIENT LATERAL OFFSET.

*** SOUTHBOUND MIN. LATERAL CLEARANCE AT ST. LUCIE WEST BLVD. IS 41' TO AVOID CONFLICT WITH THE EXISTING FOUNDATION.

**** NORTHBOUND MIN. LATERAL CLEARANCE MAY NEED TO BE INCREASED TO ACCOMMODATE FGT SPECIFIED WIDTH.

***** THESE CROSSINGS HAVE PIERS ALONG NORTHBOUND MAINLINE OUTSIDE LATERAL CLEARANCE LIMIT.

SEE TYPICAL SECTION 01 FOR CLEAR ZONE, BORDER WIDTH AND TRAFFIC DATA.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	5

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

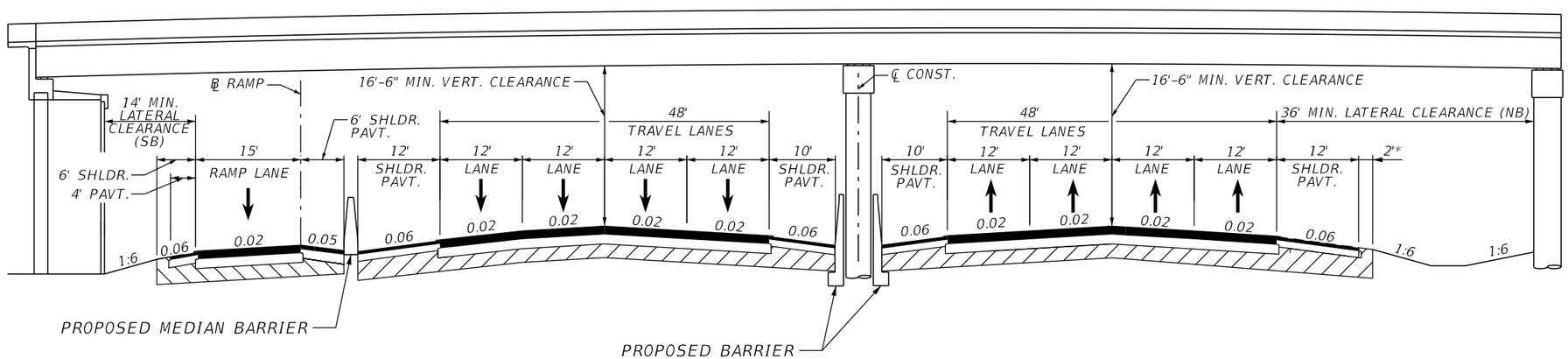
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR INSIDE SHOULDER WIDTH UNDER OVERPASS STRUCTURES

TYPICAL SECTION No. 05



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
UNDER
SR 714 (SW MARTIN HWY) RAMP A - MP 134.3
SR 714 (SW MARTIN HWY) RAMP C - MP 134.3
SR 716 (SW PORT ST. LUCIE BLVD) - MP 143.0

* AN ADDITIONAL 2' OF SHOULDER WIDTH (UNPAVED) HAS BEEN INCLUDED TO PROVIDE SUPPORT AND PREVENT FUTURE EROSION ISSUES ALONG THE EDGE OF PAVED SHOULDER.

SEE TYPICAL SECTION 01 FOR CLEAR ZONE, BORDER WIDTH AND TRAFFIC DATA.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	6

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

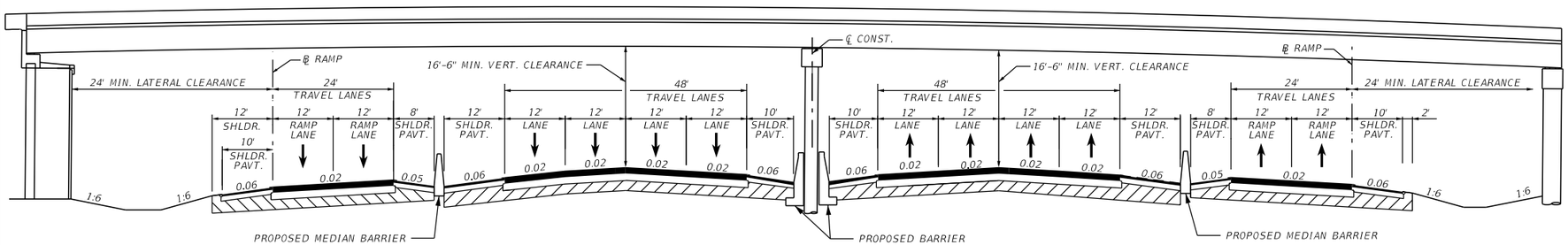
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR INSIDE SHOULDER WIDTH
UNDER OVERPASS STRUCTURES

TYPICAL SECTION No. 06



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
UNDER
SR 714 (SW MARTIN HWY) - MP 134.6

SEE TYPICAL SECTION 01 FOR CLEAR ZONE, BORDER WIDTH AND TRAFFIC DATA.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	7

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

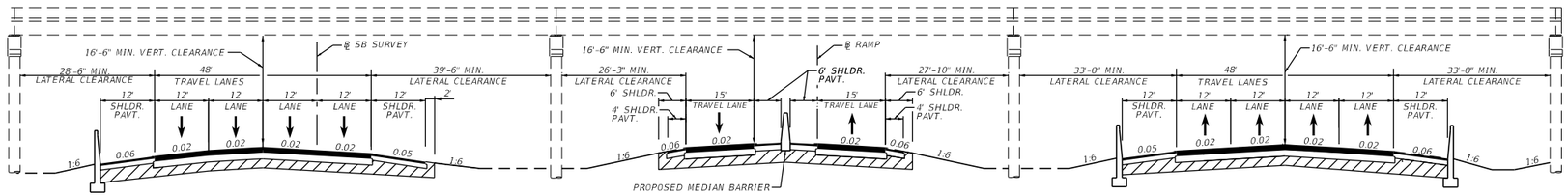
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR LATERAL OFFSET AT
CROSSTOWN PARKWAY OVERPASS

TYPICAL SECTION No. 07



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
UNDER
CROSSTOWN PKWY - MP 144.8

SEE TYPICAL SECTION 01 FOR CLEAR ZONE, BORDER WIDTH AND TRAFFIC DATA.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	8

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

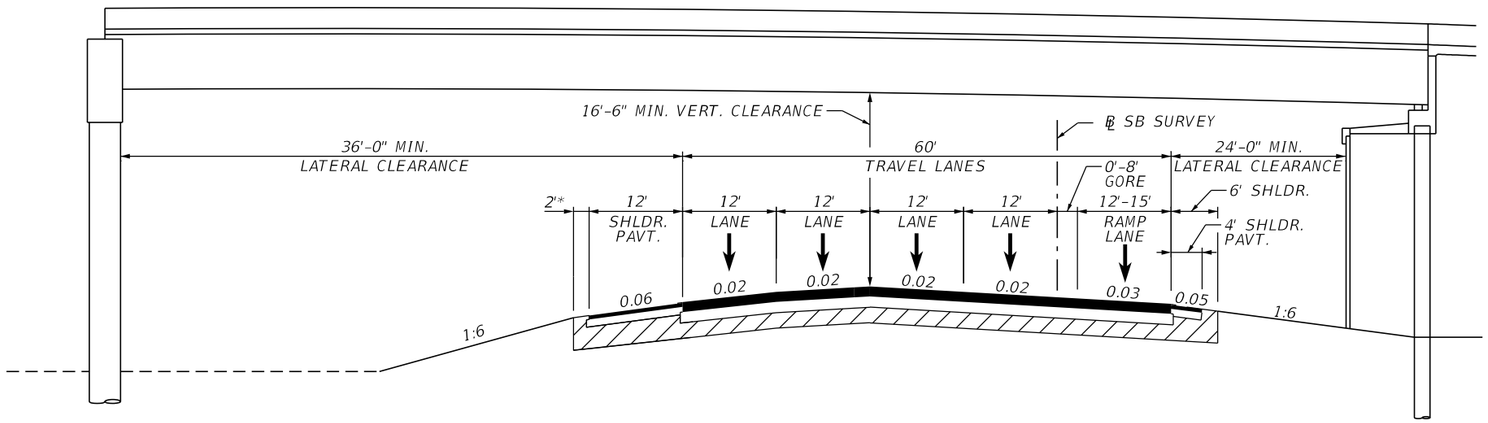
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 08



TYPICAL SECTION

SR 91 (FLORIDA'S TURNPIKE) SB
UNDER
CROSSTOWN PKWY RAMP - MP 144.8

* AN ADDITIONAL 2' OF SHOULDER WIDTH (UNPAVED) HAS BEEN INCLUDED TO PROVIDE SUPPORT AND PREVENT FUTURE EROSION ISSUES ALONG THE EDGE OF PAVED SHOULDER.

SEE TYPICAL SECTION 01 FOR CLEAR ZONE, BORDER WIDTH AND TRAFFIC DATA.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	9

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

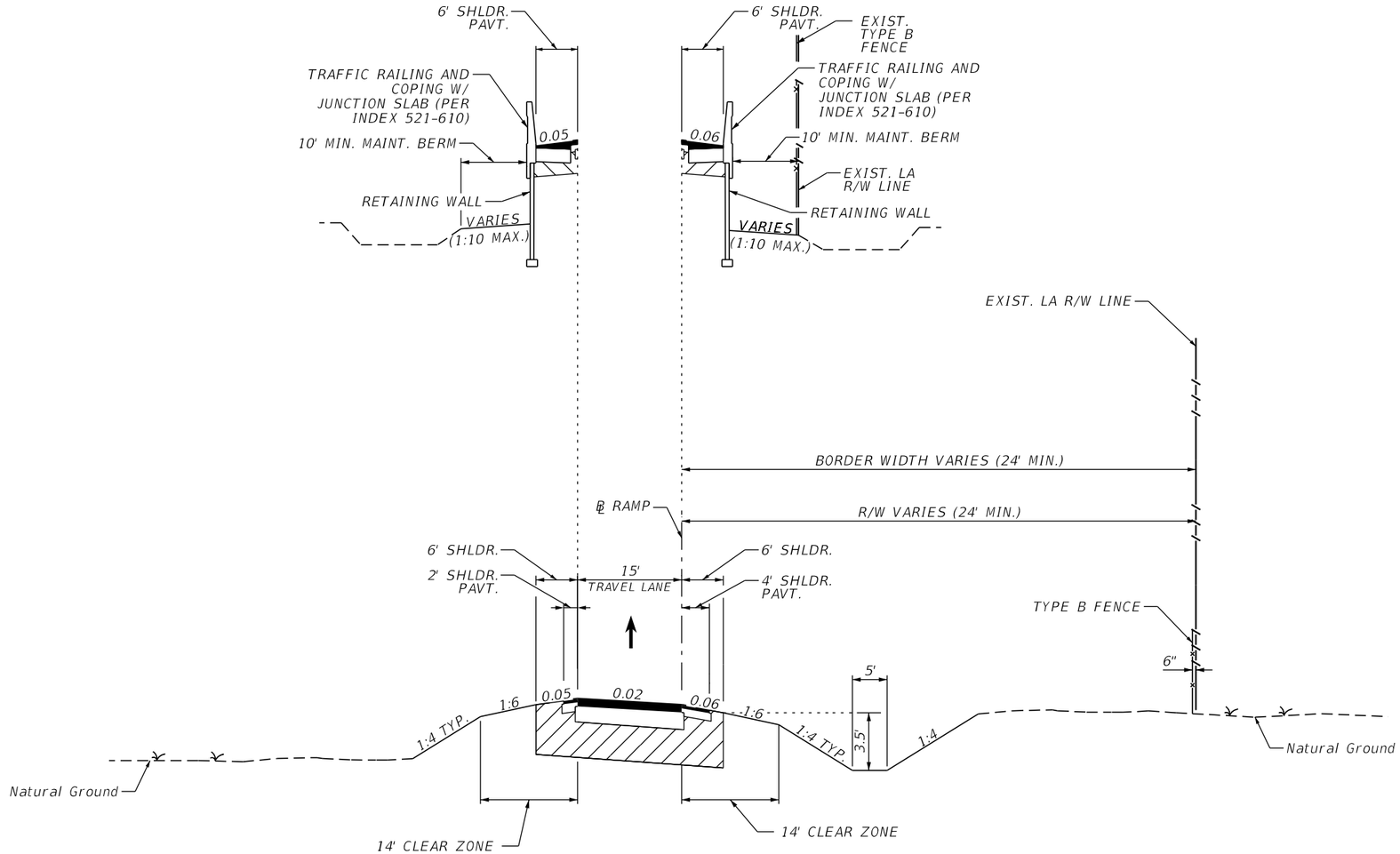
CRITERIA

(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR HORIZONTAL CURVE LENGTH

TYPICAL SECTION No. 09



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
SINGLE LANE RAMP

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	10

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

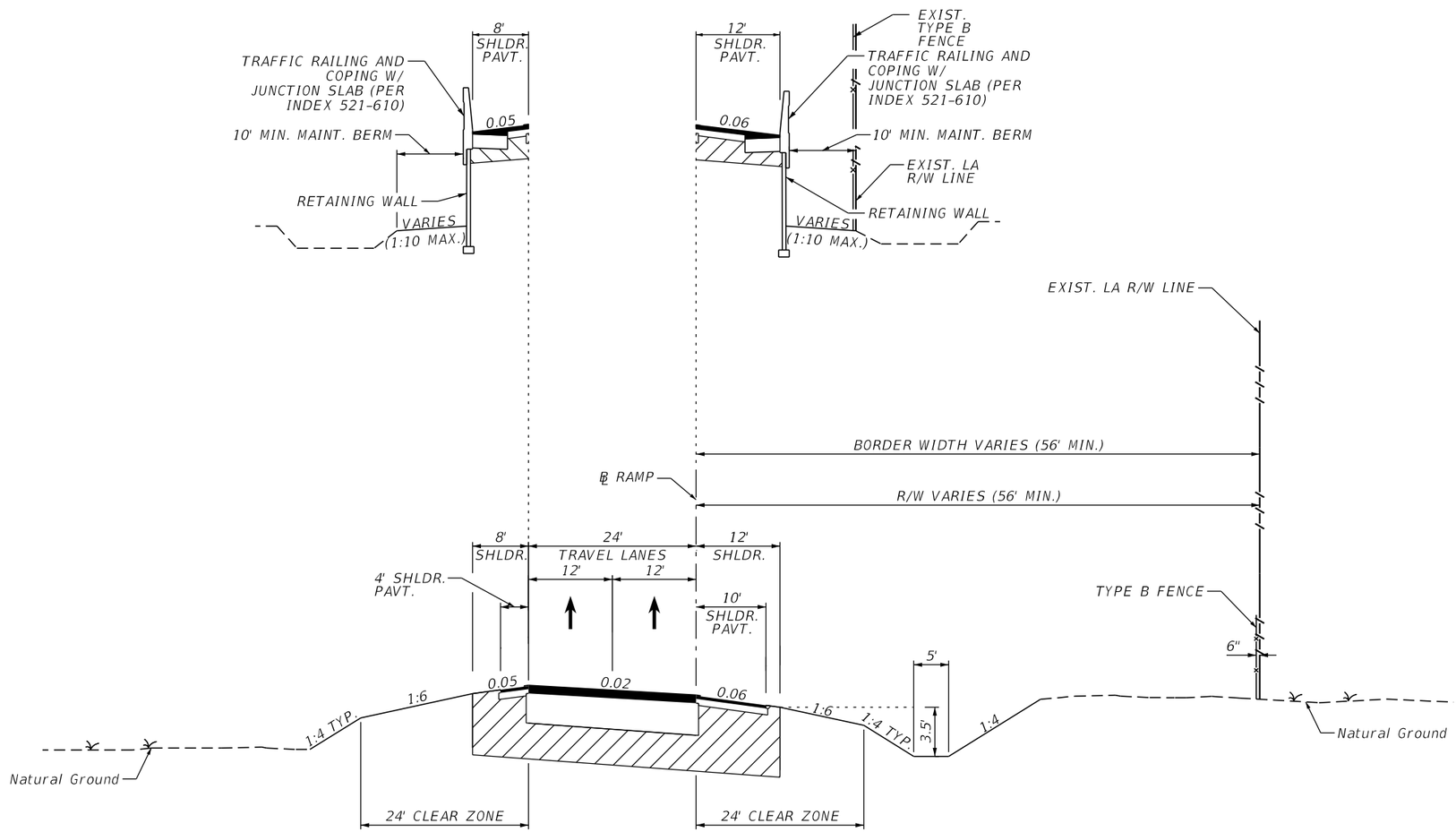
CRITERIA

(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR HORIZONTAL CURVE LENGTH

TYPICAL SECTION No. 10



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
DOUBLE LANE RAMP

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	11

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

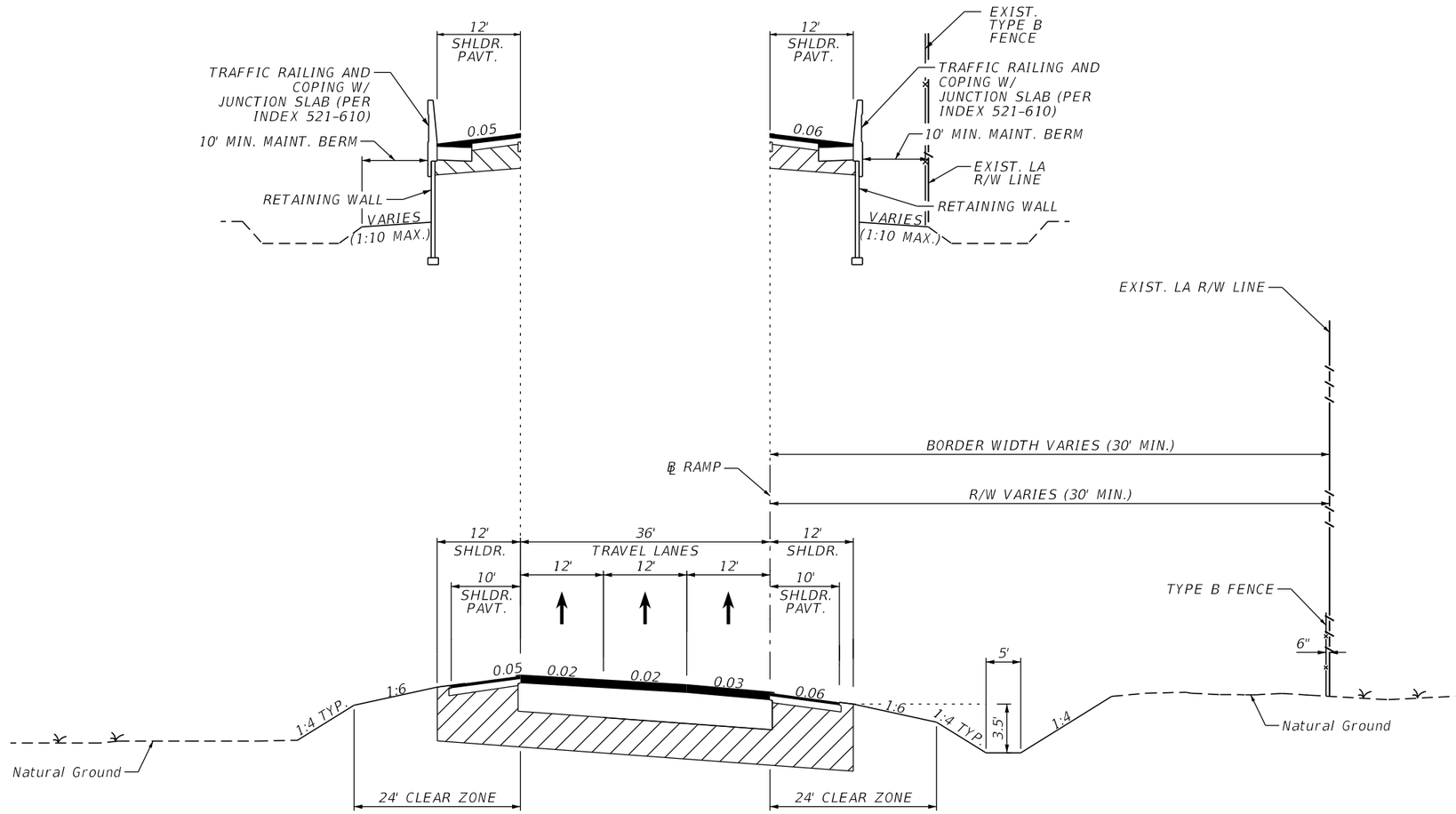
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR HORIZONTAL CURVE LENGTH

TYPICAL SECTION No. 11



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
TRIPLE LANE RAMP

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	12

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

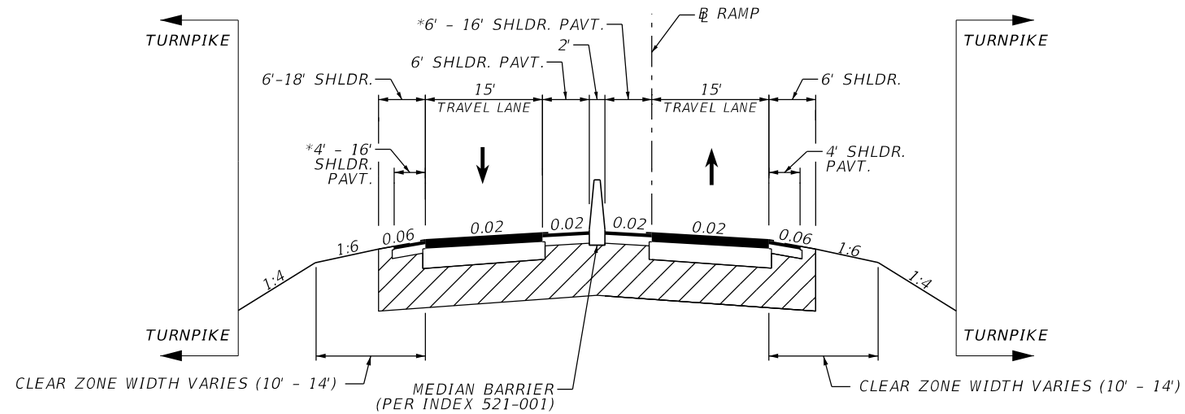
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR INSIDE SHOULDER CROSS SLOPE

TYPICAL SECTION No. 12



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
CROSSTOWN PARKWAY RAMP
MP 144.8

* INCREASED SHOULDER WIDTH REQUIRED FOR HORIZONTAL STOPPING SIGHT DISTANCE

TRAFFIC DATA

CURRENT YEAR = 2022 AADT = N.A.
ESTIMATED OPENING YEAR = 2025 AADT = 6,900
ESTIMATED DESIGN YEAR = 2045 AADT = 9,800
TRUCK DDHV = 30
K = 13.0% D = 55.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 50 MPH (TANGENT) 40 MPH (LOOP)
POSTED SPEED = 50 MPH (TANGENT) 35 MPH (LOOP)

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	13

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

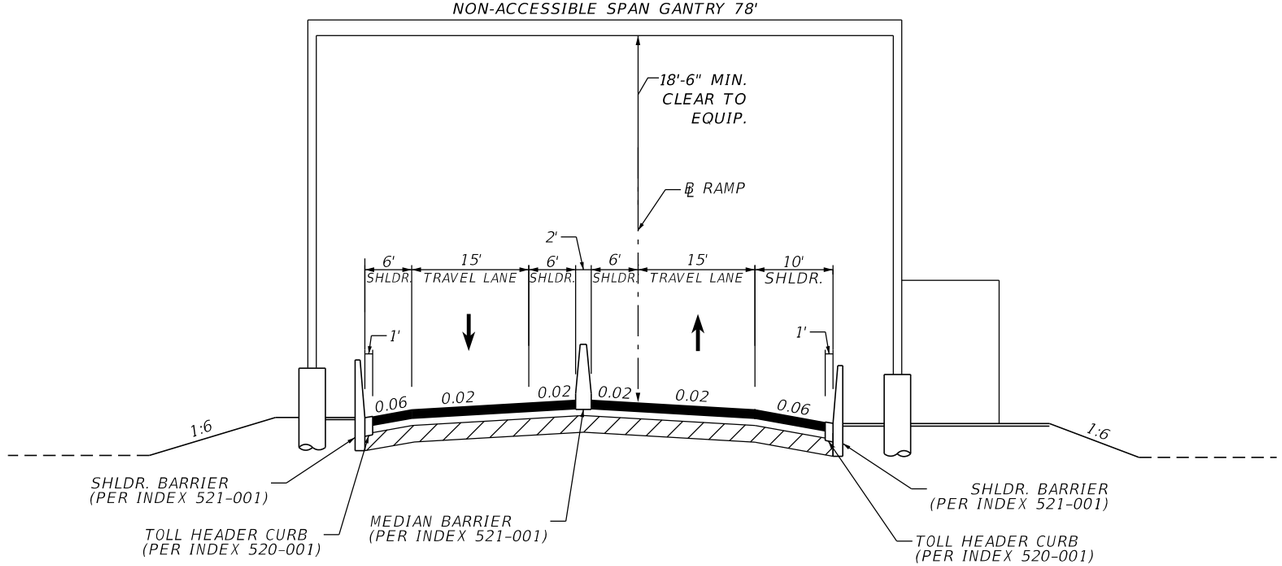
- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR INSIDE SHOULDER CROSS SLOPE

TYPICAL SECTION No. 13

NON-ACCESSIBLE SPAN GANTRY 78'



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
CROSSTOWN PARKWAY RAMP
TOLL GANTRY

SEE TYPICAL SECTION 12 FOR ADDITIONAL INFORMATION.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	14

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

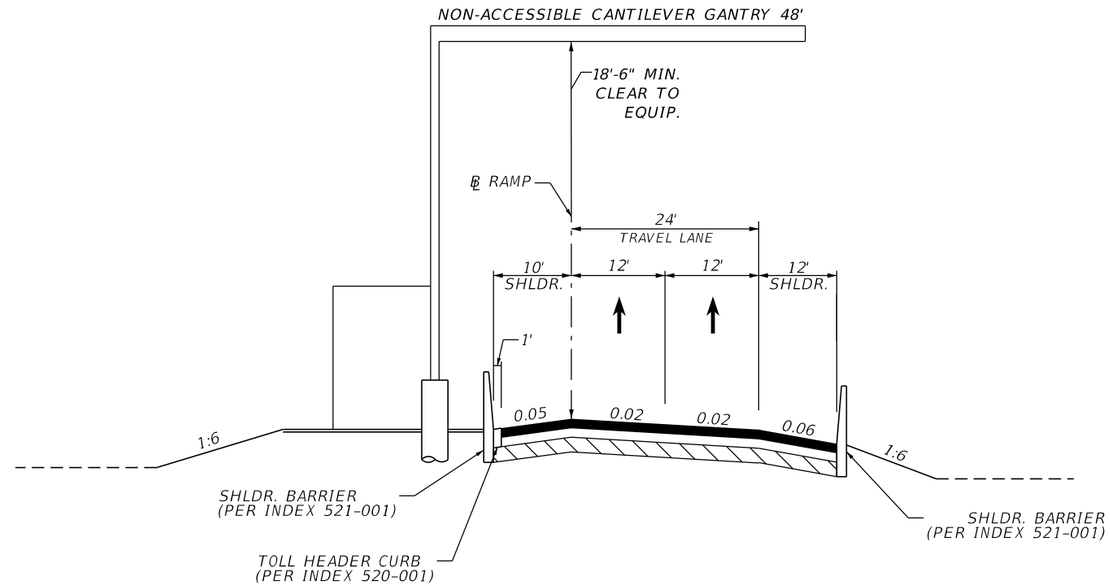
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 14



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
CR 712 (MIDWAY ROAD) NORTHBOUND ON-RAMP
TOLL GANTRY

SEE TYPICAL SECTION 10 FOR ADDITIONAL INFORMATION.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	15

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

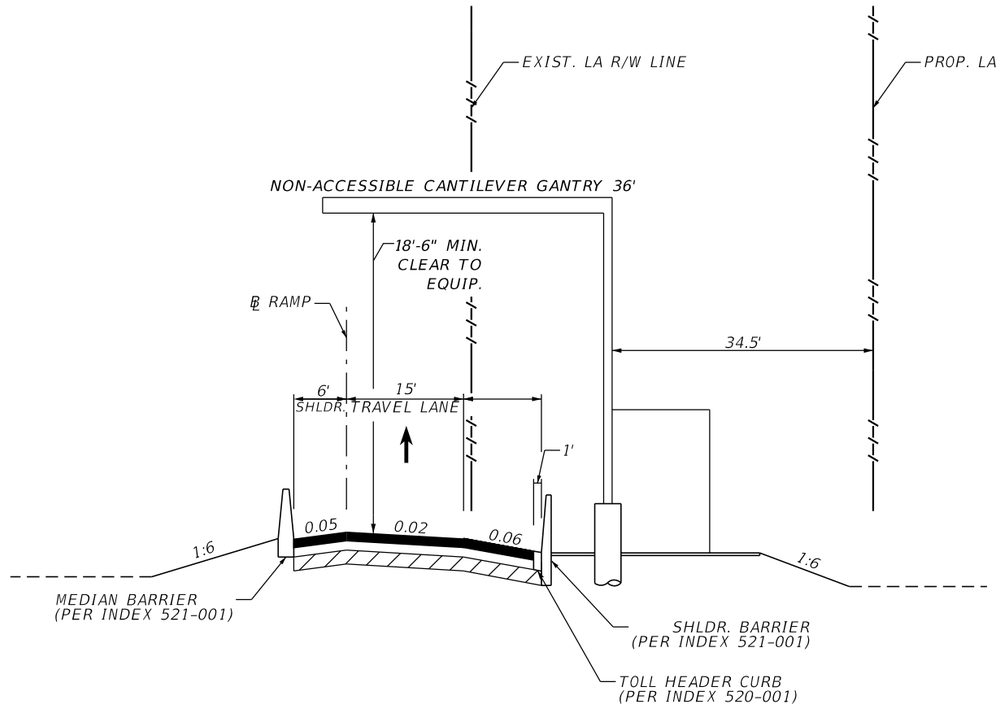
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 15



TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
CR 712 (MIDWAY ROAD) SOUTHBOUND OFF-RAMP
TOLL GANTRY

SEE TYPICAL SECTION 09 FOR ADDITIONAL INFORMATION.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	16

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

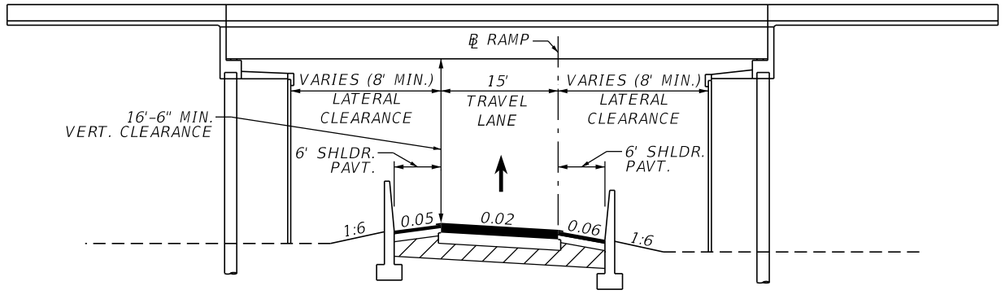
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR LATERAL OFFSET

TYPICAL SECTION No. 16



TYPICAL SECTION

SR 91 (FLORIDA'S TURNPIKE)
SR 714 (SW MARTIN HWY)
RAMP D1 UNDER RAMP A
MP 134.3

SEE TYPICAL SECTION 09 FOR ADDITIONAL INFORMATION.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	17

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
(X)	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
(X)	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- ( ) STATE HIGHWAY SYSTEM
- (X) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

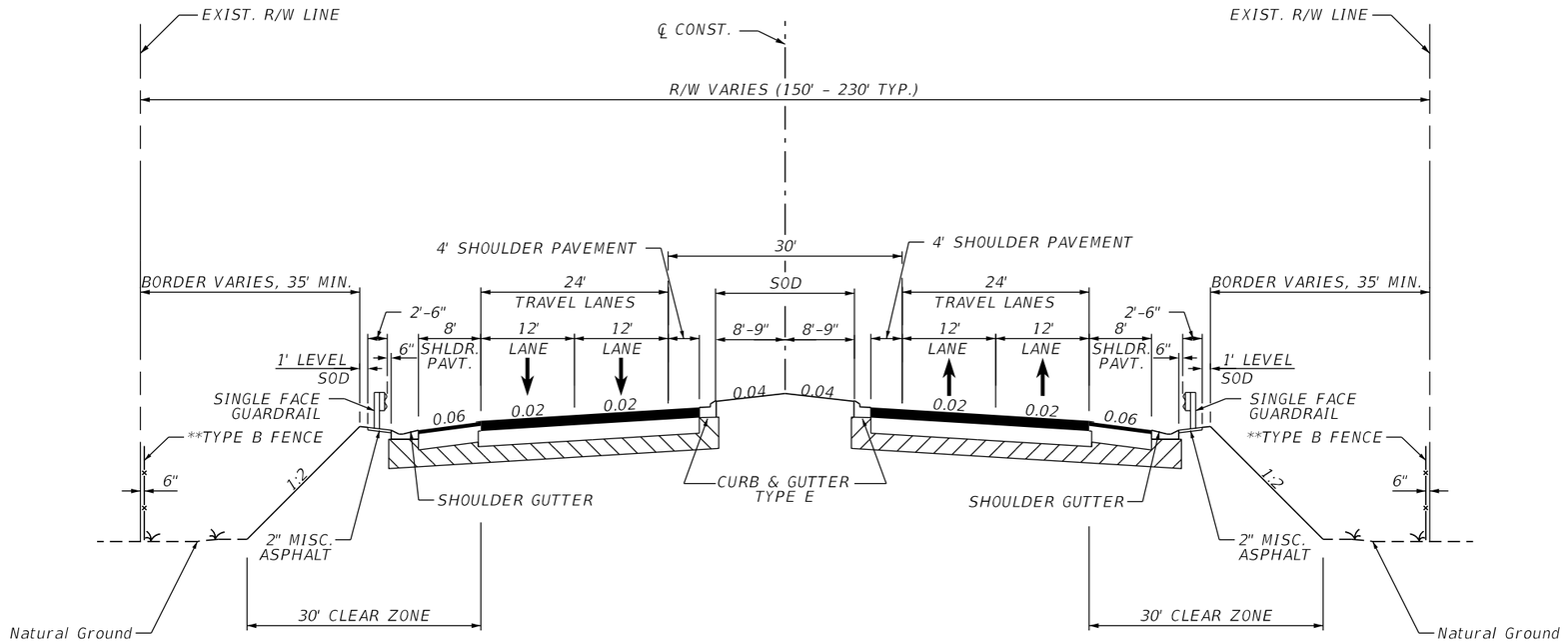
- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- (X) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 17



TYPICAL SECTION
CR 708 (BRIDGE ROAD)
OVER TURNPIKE MAINLINE (SR 91)
MP 125.5

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 7,000
ESTIMATED OPENING YEAR = 2025 AADT = 8,500
ESTIMATED DESIGN YEAR = 2045 AADT = 19,000
TRUCK DDHV = 50
K = 9.9% D = 58.5% T = 15.1% (24 HOUR)
DESIGN HOUR T = 3.9%
DESIGN SPEED = 55 MPH
POSTED SPEED = 55 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

** TYPE B FENCE IS ONLY ALONG THE L/A RW LIMITS.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	18

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
(X)	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
(X)	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
( )	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

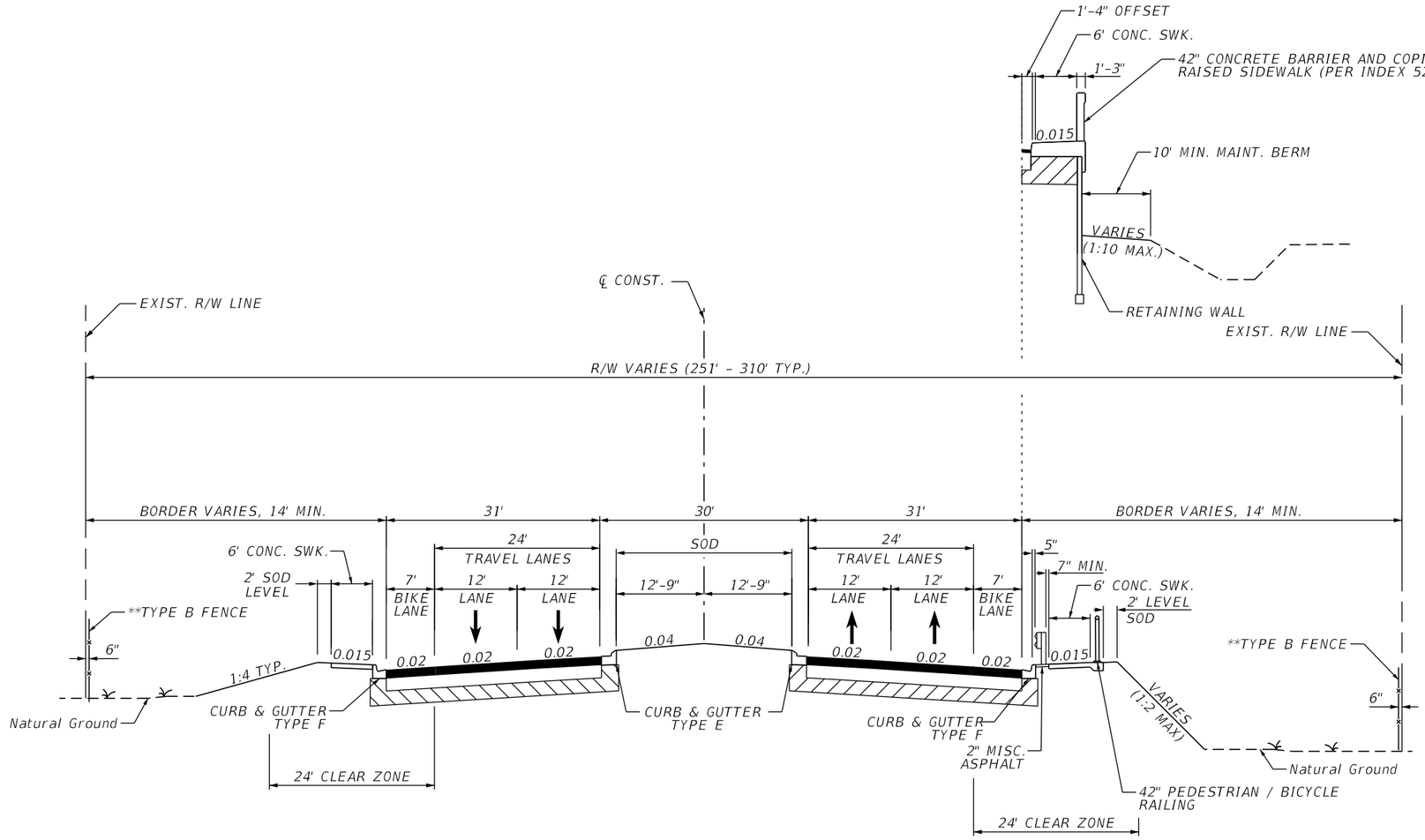
( )	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
(X)	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 18



TYPICAL SECTION
SR 76 (KANNER HIGHWAY)
OVER TURNPIKE MAINLINE (SR 91)
MP 130.0

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 22,200
ESTIMATED OPENING YEAR = 2025 AADT = 23,300
ESTIMATED DESIGN YEAR = 2045 AADT = 31,200
TRUCK DDHV = 80
K = 9.0% D = 58.5% T = 10.2% (24 HOUR)
DESIGN HOUR T = 4.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH
ROADWAY ID: 89060000

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

** TYPE B FENCE IS ONLY ALONG THE L/A RW LIMITS.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	19

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
(X) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
( ) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
( ) FREEWAY/EXPWY.
(X) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

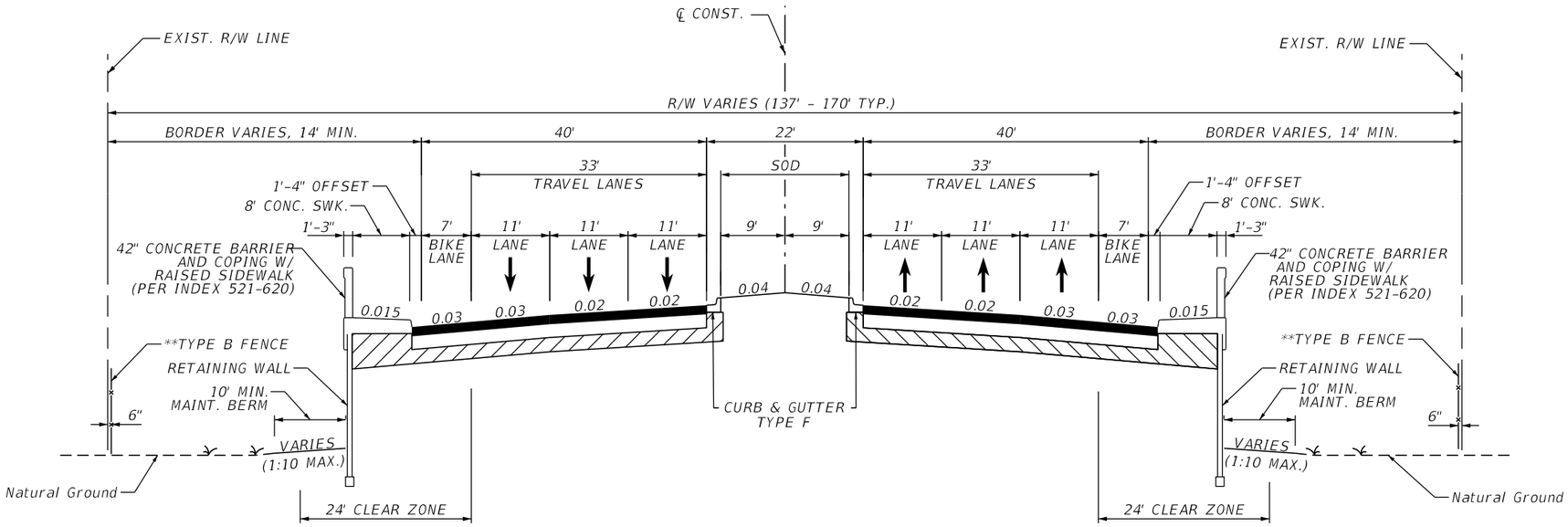
( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
(X) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 19



TYPICAL SECTION
SR 714 (SW MARTIN HIGHWAY)
OVER TURNPIKE MAINLINE (SR 91)
MP 134.6

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 32,500
ESTIMATED OPENING YEAR = 2025 AADT = 34,500
ESTIMATED DESIGN YEAR = 2045 AADT = 48,000
TRUCK DDHV = 140
K = 9.0% D = 62.3% T = 16.8% (24 HOUR)
DESIGN HOUR T = 7.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH
ROADWAY ID: 89090000

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

** TYPE B FENCE IS ONLY ALONG THE L/A RW LIMITS.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	20

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
(X)	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
(X)	MINOR ARTERIAL		

HIGHWAY SYSTEM

( )	NATIONAL HIGHWAY SYSTEM
( )	STRATEGIC INTERMODAL SYSTEM
( )	STATE HIGHWAY SYSTEM
(X)	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

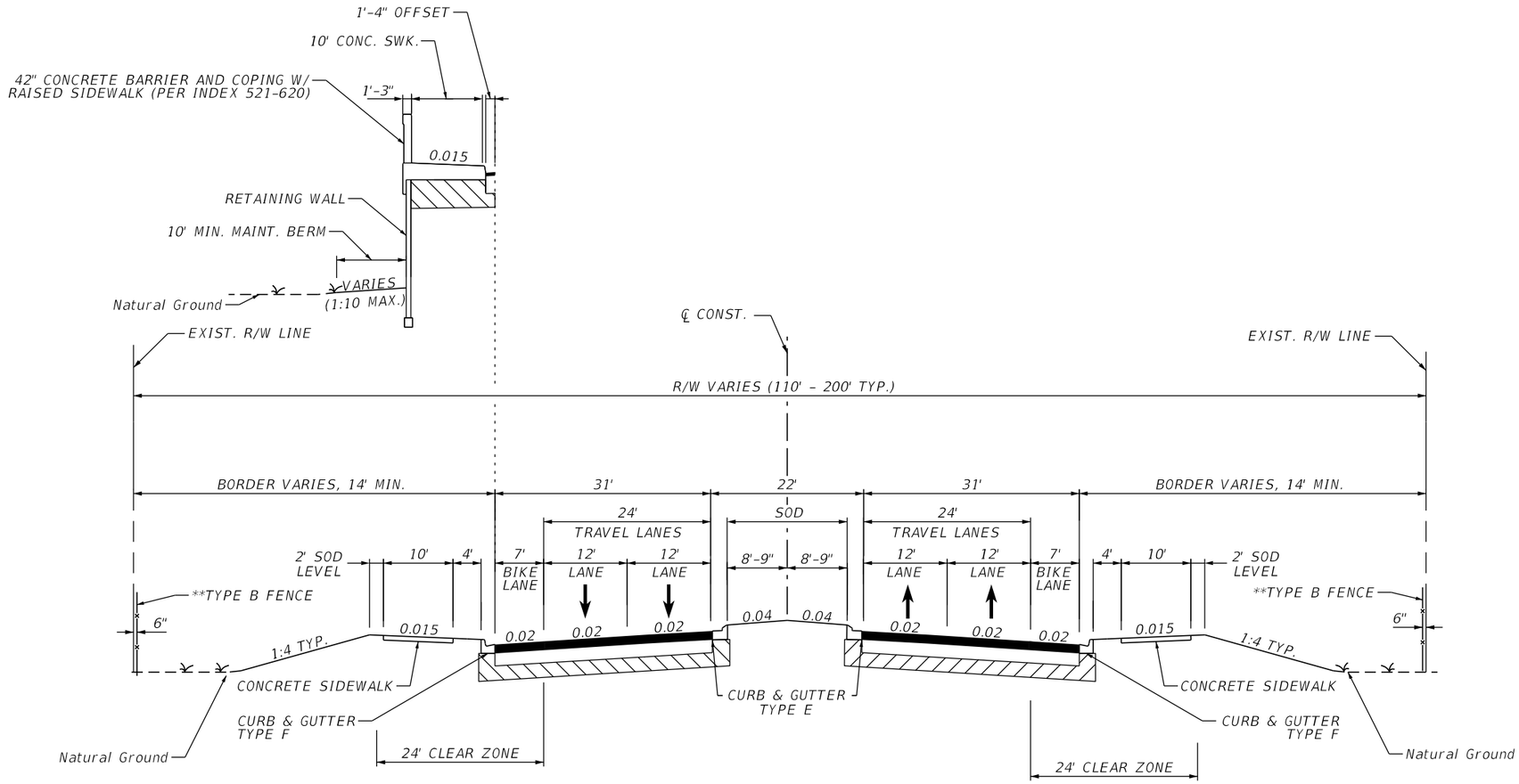
( )	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
(X)	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 20



TYPICAL SECTION
BECKER ROAD
OVER TURNPIKE MAINLINE (SR 91)
MP 138.5

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 35,100
ESTIMATED OPENING YEAR = 2025 AADT = 36,700
ESTIMATED DESIGN YEAR = 2045 AADT = 47,700
TRUCK DDHV = 70
K = 9.0% D = 50.9% T = 11.1% (24 HOUR)
DESIGN HOUR T = 5.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 40 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

** TYPE B FENCE IS ONLY ALONG THE L/A RW LIMITS.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	21

$DATE$ $TIME$ $FILE$

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	(X)	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
(X)	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

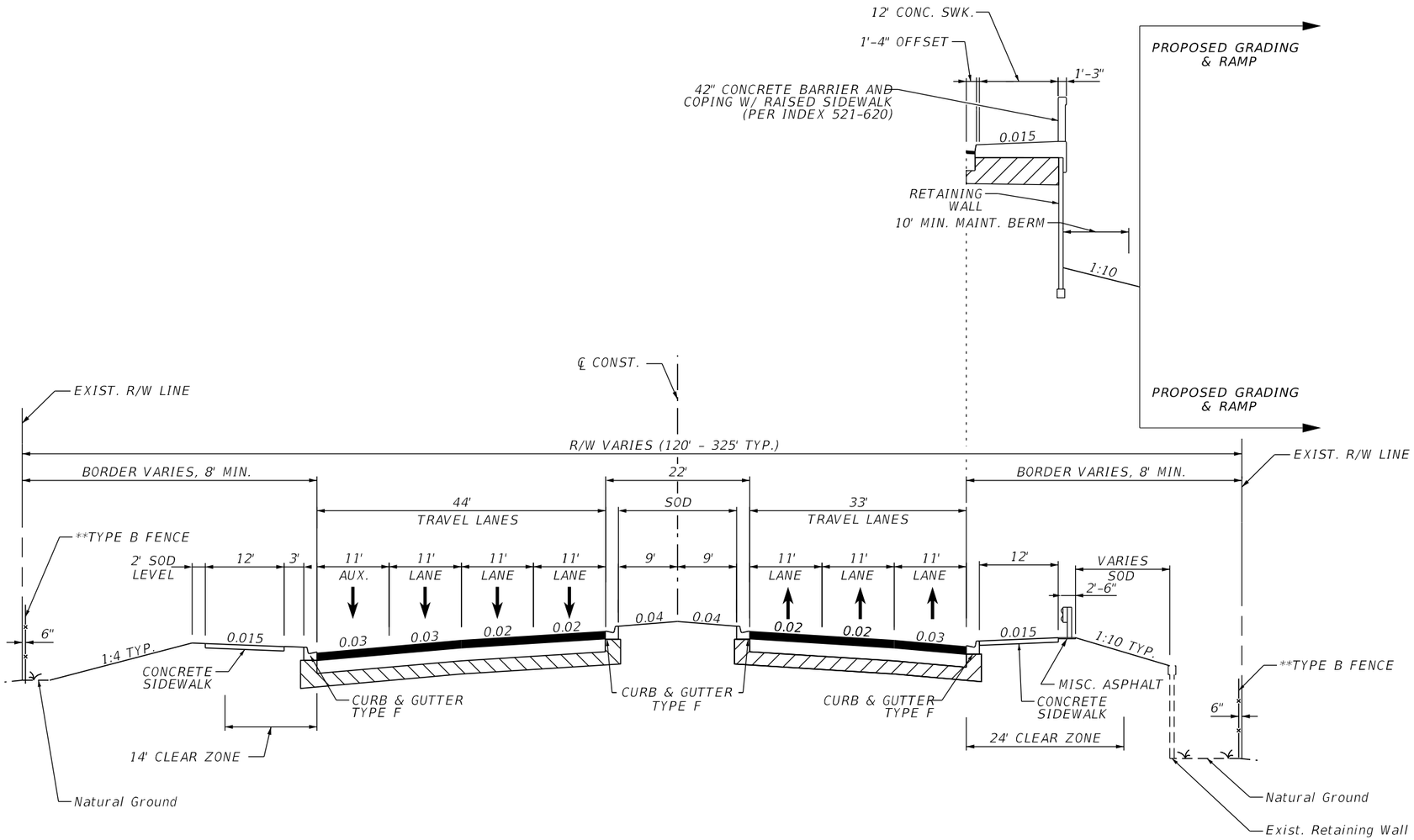
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR SUBSTITUTION OF WIDER SIDEWALKS FOR BICYCLE LANES

TYPICAL SECTION No. 21



TYPICAL SECTION
SR 716 (SW PORT ST. LUCIE BOULEVARD)
OVER TURNPIKE MAINLINE (SR 91)
MP 143.0

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 56,400
ESTIMATED OPENING YEAR = 2025 AADT = 57,800
ESTIMATED DESIGN YEAR = 2045 AADT = 67,600
TRUCK DDHV = 140
K = 9.0% D = 51.0% T = 12.4% (24 HOUR)
DESIGN HOUR T = 6.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45MPH
ROADWAY ID: 94120000

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

** TYPE B FENCE IS ONLY ALONG THE L/A RW LIMITS.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	22

$DATE$ $TIME$ $FILE$

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
(X)	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- ( ) STATE HIGHWAY SYSTEM
- (X) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

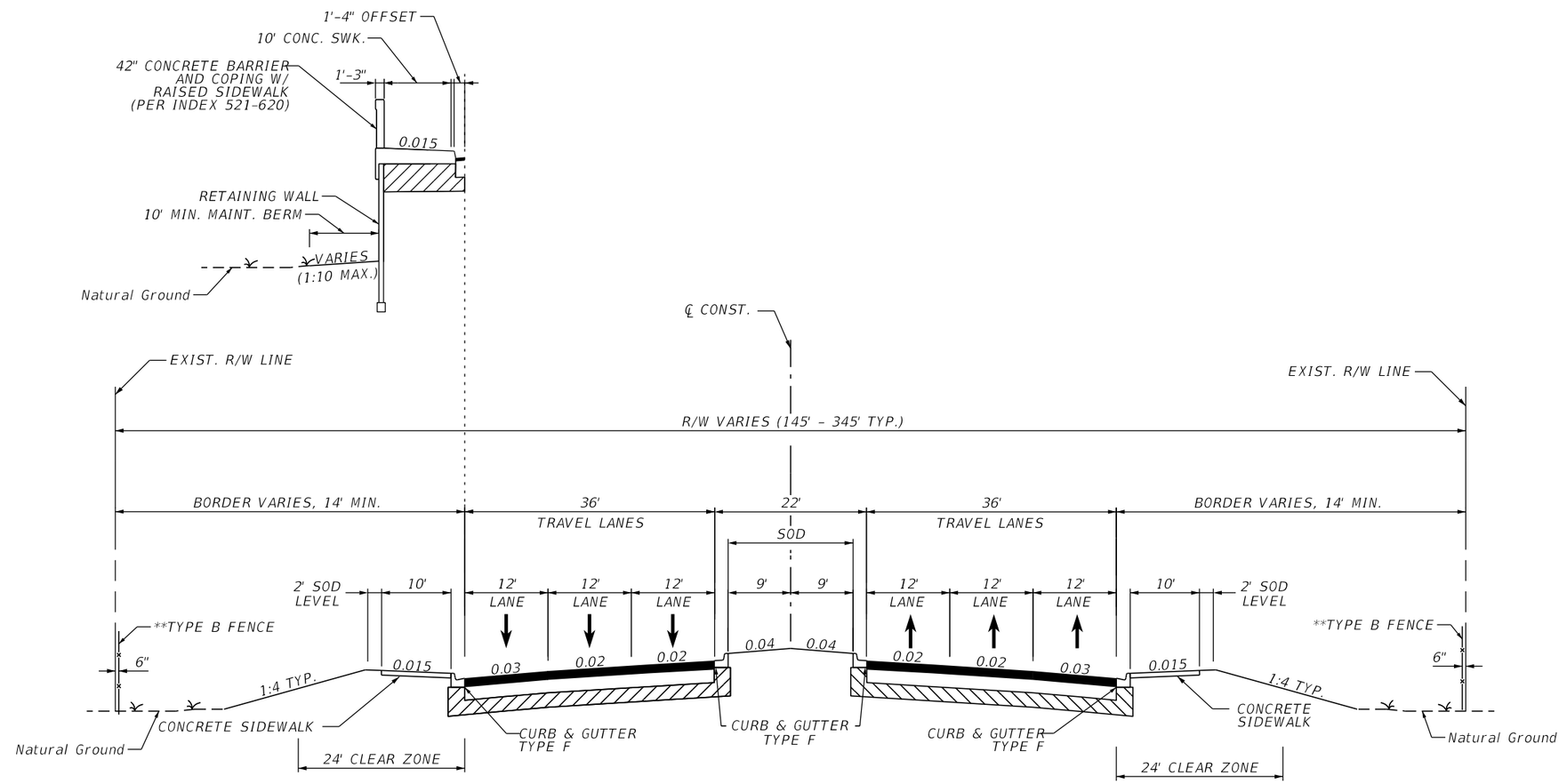
- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 22



TYPICAL SECTION
SW ST. LUCIE WEST BOULEVARD
OVER TURNPIKE MAINLINE (SR 91)
MP 146.4

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 32,400
ESTIMATED OPENING YEAR = 2025 AADT = 34,800
ESTIMATED DESIGN YEAR = 2045 AADT = 51,000
TRUCK DDHV = 130
K = 9.5% D = 51.0% T = 7.3% (24 HOUR)
DESIGN HOUR T = 4.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 40 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

** TYPE B FENCE IS ONLY ALONG THE L/A RW LIMITS.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	23

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.+
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
(X)	C3R : SUBURBAN RES.++	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
(X)	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- (X) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

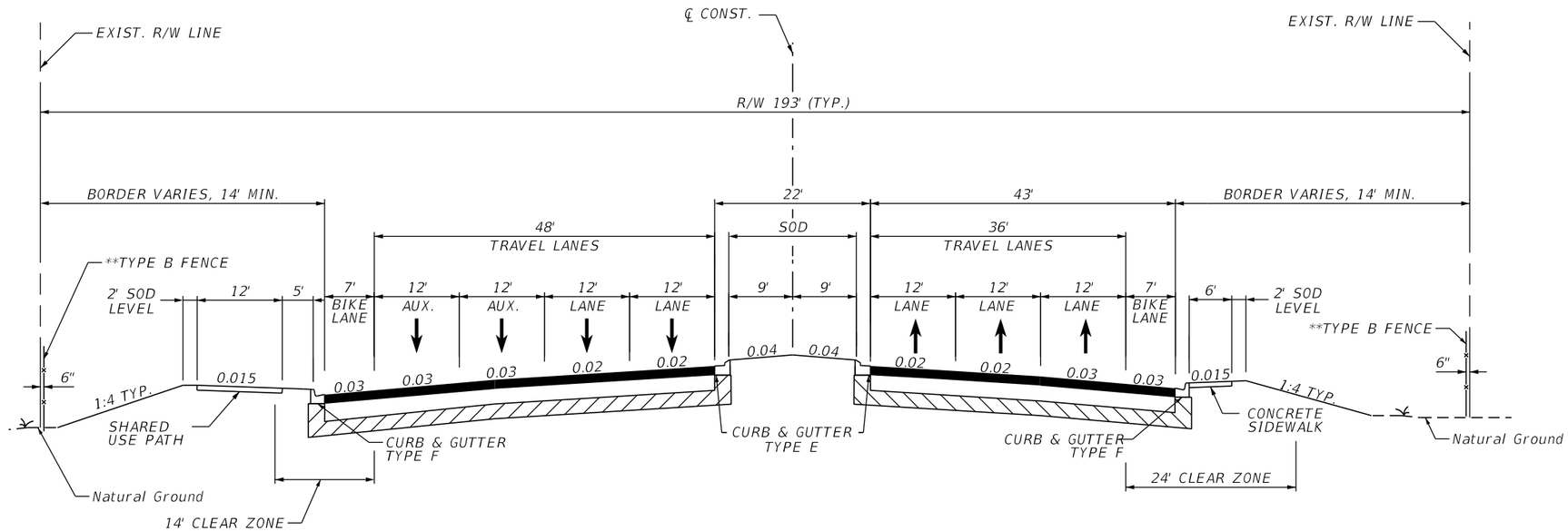
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 23

\+ E of Turnpike Mainline (SR 91)
++ W of Turnpike Mainline (SR 91)



TYPICAL SECTION
SR 70 (OKEECHOBEE ROAD)
UNDER TURNPIKE MAINLINE (SR 91)
MP 153.1

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 37,600
ESTIMATED OPENING YEAR = 2025 AADT = 39,400
ESTIMATED DESIGN YEAR = 2045 AADT = 51,400
TRUCK DDHV = 230
K = 9.0% D = 56.2% T = 23.9% (24 HOUR)
DESIGN HOUR T = 12.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH
ROADWAY ID: 94030000

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

** TYPE B FENCE IS ONLY ALONG THE L/A RW LIMITS.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	24

$DATE$ $TIME$ $FILE$

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
(X) C3R : SUBURBAN RES.++
( ) N/A : L.A. FACILITY
(X) C3C : SUBURBAN COMM.+
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
( ) FREEWAY/EXPWY.
(X) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
(X) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

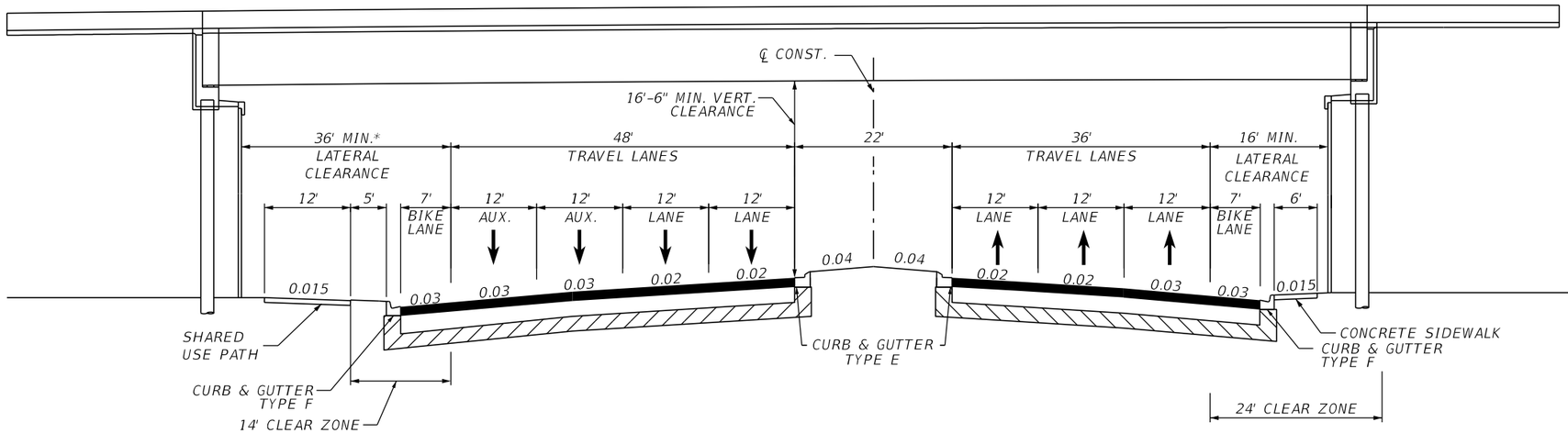
CRITERIA

(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 24

\+ E of Turnpike Mainline (SR 91)
++ W of Turnpike Mainline (SR 91)



TYPICAL SECTION

SR 70 (OKEECHOBEE RD.)
UNDER
SR 91 (FLORIDA'S TURNPIKE)
MP 153.1

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 37,600
ESTIMATED OPENING YEAR = 2025 AADT = 39,400
ESTIMATED DESIGN YEAR = 2045 AADT = 51,400
TRUCK DDHV = 230
K = 9.0% D = 56.2% T = 23.9% (24 HOUR)
DESIGN HOUR T = 12.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH
ROADWAY ID: 94030000

* WESTBOUND MIN. LATERAL CLEARANCE IS INCREASED TO AVOID CONFLICT WITH THE EXISTING FOUNDATION.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	25

$DATE$ $TIME$ $FILE$

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

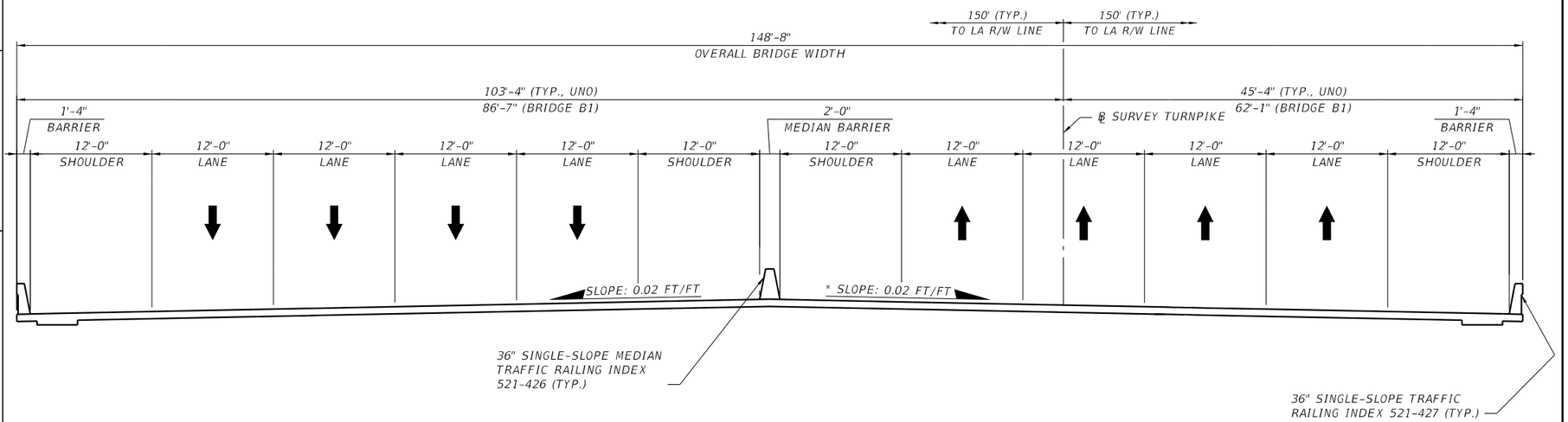
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 25



PROPOSED TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
BRIDGE OVER LOXAHATCHEE CREEK - MP 117.5
BRIDGE OVER CYPRESS CREEK - MP 119.1
BRIDGE OVER PHIPP CANAL* - MP 126.5
BRIDGE OVER BESSEY CREEK - MP 135.6
BRIDGE OVER TEN MILE CREEK - MP 152.5

TRAFFIC DATA
BRIDGE OVER BESSY CREEK

CURRENT YEAR** = 2022 AADT = 59,400
ESTIMATED OPENING YEAR = 2025 AADT = 63,400
ESTIMATED DESIGN YEAR = 2045 AADT = 90,100
TRUCK DDHV = 580
K = 10.5% D = 61.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

TRAFFIC DATA
BRIDGE OVER TEN MILE CREEK

CURRENT YEAR** = 2022 AADT = 46,300
ESTIMATED OPENING YEAR = 2025 AADT = 50,000
ESTIMATED DESIGN YEAR = 2045 AADT = 74,800
TRUCK DDHV = 470
K = 10.5% D = 61.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

TRAFFIC DATA
BRIDGE OVER LOXAHATCHEE CREEK, CYPRESS CREEK, AND PHIPP CANAL

CURRENT YEAR** = 2022 AADT = 50,800
ESTIMATED OPENING YEAR = 2025 AADT = 54,300
ESTIMATED DESIGN YEAR = 2045 AADT = 77,800
TRUCK DDHV = 470
K = 10.5% D = 57.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

* NORTHBOUND CROSS SLOPE IS IN REVERSE CROWN AT THIS LOCATION DUE TO A HORIZONTAL CURVE.

** THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	26

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

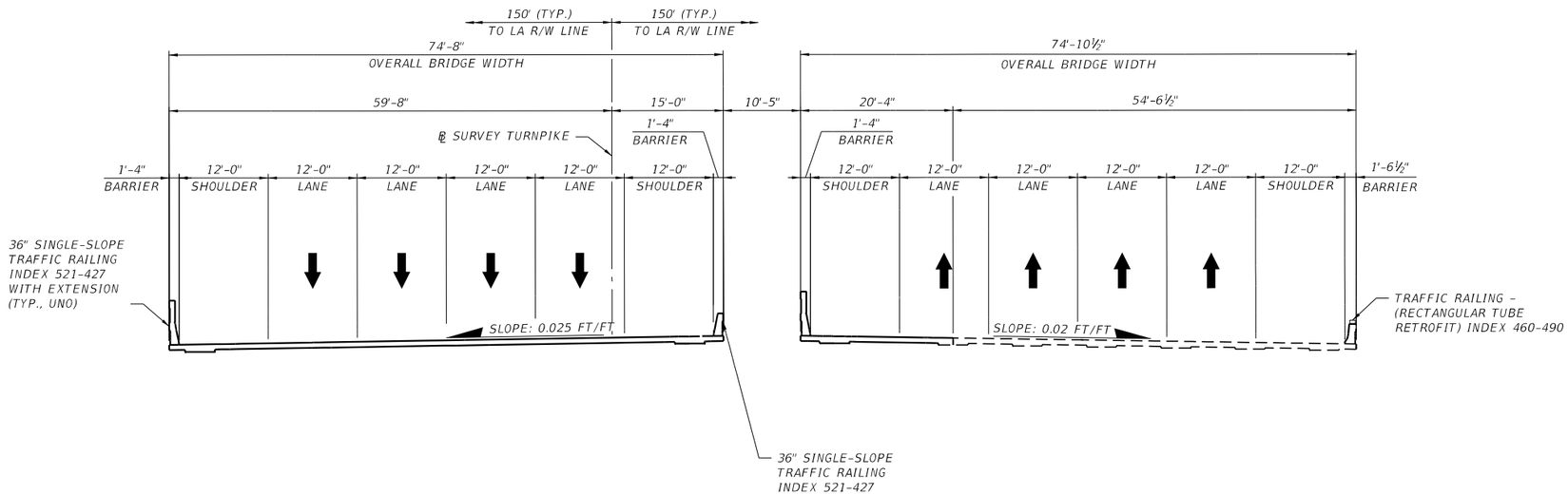
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 26



PROPOSED TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
BRIDGE OVER ST. LUCIE CANAL
MP 131.0

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 50,800
ESTIMATED OPENING YEAR = 2025 AADT = 54,300
ESTIMATED DESIGN YEAR = 2045 AADT = 77,800
TRUCK DDHV = 470
K = 10.5% D = 57.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	27

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

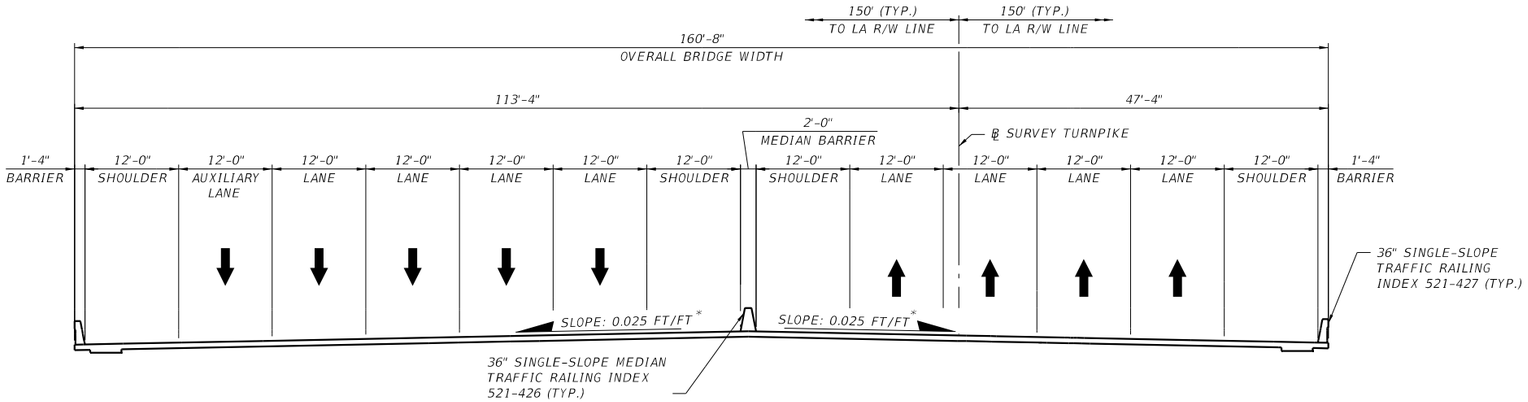
(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 27



PROPOSED TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
BRIDGE OVER CANAL C-23 - MP 138.1
BRIDGE OVER CANAL C-24* - MP 142.2

TRAFFIC DATA
BRIDGE OVER C-24

CURRENT YEAR** = 2022 AADT = 54,600
ESTIMATED OPENING YEAR = 2025 AADT = 58,500
ESTIMATED DESIGN YEAR = 2045 AADT = 84,800
TRUCK DDHV = 540
K = 10.5% D = 61.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

TRAFFIC DATA
BRIDGE OVER C-23

CURRENT YEAR** = 2022 AADT = 59,400
ESTIMATED OPENING YEAR = 2025 AADT = 63,400
ESTIMATED DESIGN YEAR = 2045 AADT = 90,100
TRUCK DDHV = 580
K = 10.5% D = 61.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

* THE BRIDGE OVER C-24 HAS A SOUTHBOUND CROSS SLOPE OF 0.02. THE NORTHBOUND CROSS SLOPE HAS A REVERSE CROWN CROSS SLOPE OF 0.02 DUE TO A HORIZONTAL CURVE.

** THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	28

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12/16/2022 11:30:29 AM I:\TPA\PRJ\000012207\42337412201\roadway\TYPDRD02.dgn

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

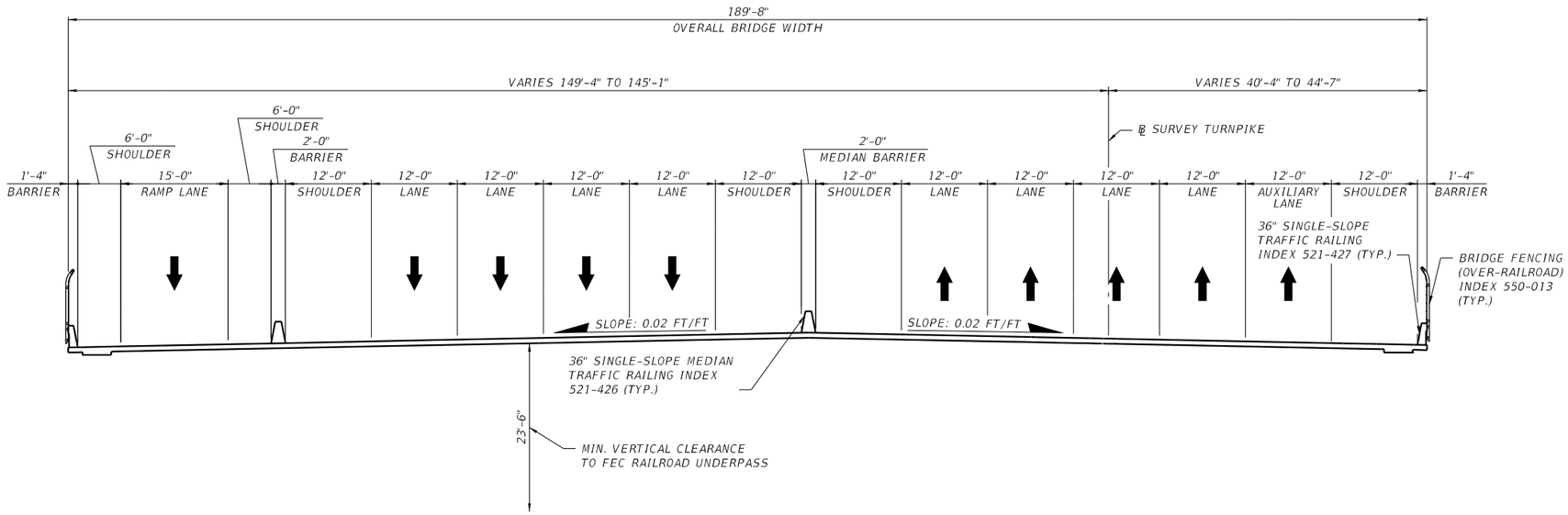
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 28



PROPOSED TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
BRIDGE OVER GLADES CUT OFF ROAD AND FEC RAILROAD
MP 150.7

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 46,300
ESTIMATED OPENING YEAR = 2025 AADT = 50,000
ESTIMATED DESIGN YEAR = 2045 AADT = 74,800
TRUCK DDHV = 470
K = 10.5% D = 61.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	29

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

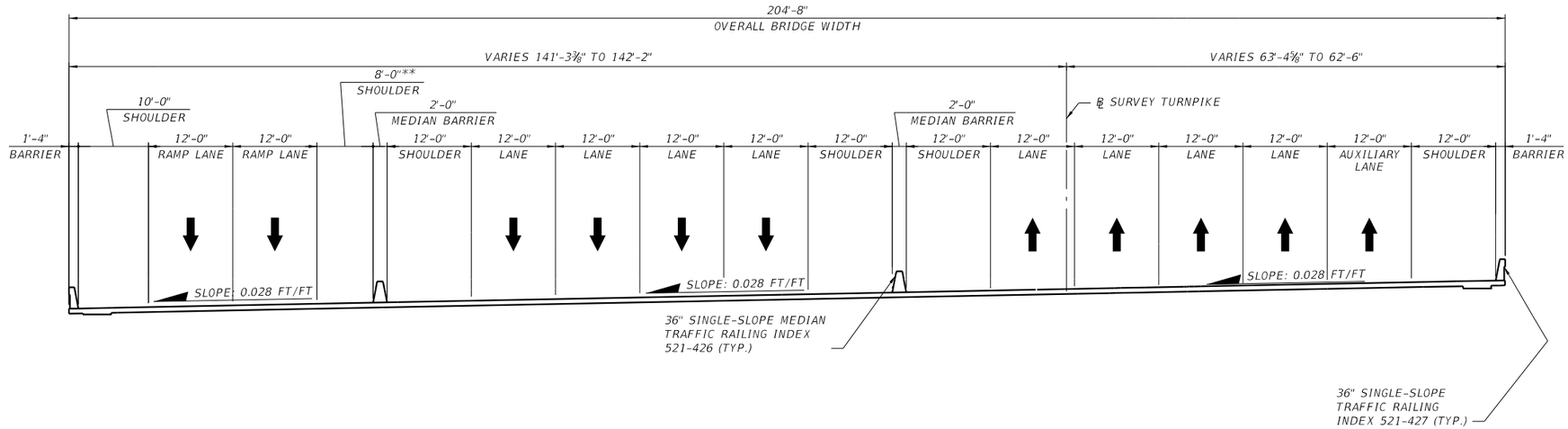
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 29



PROPOSED TYPICAL SECTION
SR 91 (FLORIDA'S TURNPIKE)
BRIDGE OVER OKEECHOBEE ROAD
MP 153.1

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 32,200
ESTIMATED OPENING YEAR = 2025 AADT = 35,000
ESTIMATED DESIGN YEAR = 2045 AADT = 53,900
TRUCK DDHV = 330
K = 10.5% D = 58.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 70 MPH
POSTED SPEED = 70 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

** AN ADDITIONAL 2' OF SHOULDER WIDTH HAS BEEN INCLUDED TO MATCH THE 8' INSIDE SHOULDER WIDTH ON BOTH BRIDGE APPROACHES.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	30

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
(X)	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
(X)	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- ( ) STATE HIGHWAY SYSTEM
- (X) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

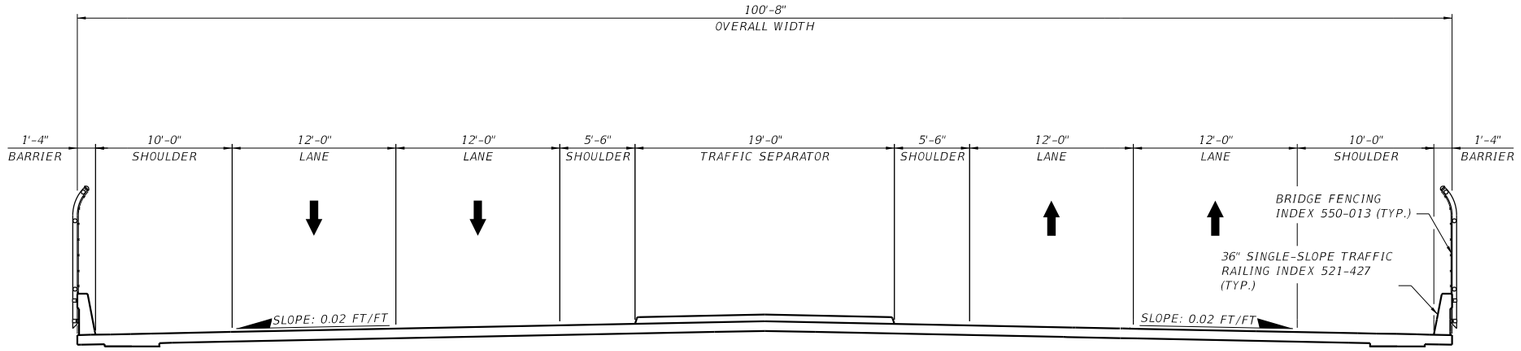
- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- (X) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 30



PROPOSED TYPICAL SECTION
CR 708 (BRIDGE ROAD)
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 125.5

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 7,000
ESTIMATED OPENING YEAR = 2025 AADT = 8,500
ESTIMATED DESIGN YEAR = 2045 AADT = 19,000
TRUCK DDHV = 50
K = 9.9% D = 58.5% T = 15.1% (24 HOUR)
DESIGN HOUR T = 3.9%
DESIGN SPEED = 55 MPH
POSTED SPEED = 55 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	31

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
(X) C3R : SUBURBAN RES.
( ) N/A : L.A. FACILITY
( ) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
( ) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
(X) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

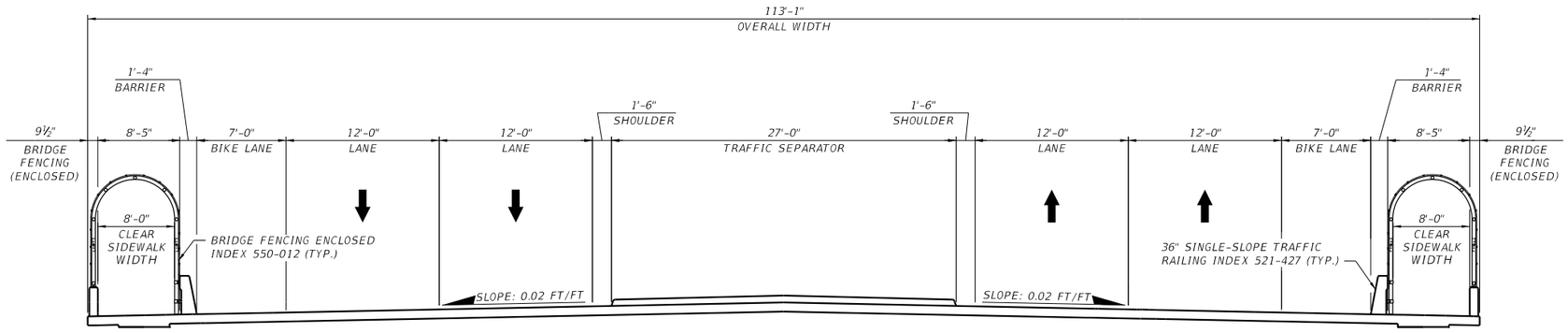
( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
(X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 31



PROPOSED TYPICAL SECTION
SR 76 (KANNER HIGHWAY)
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 130.0

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 22,200
ESTIMATED OPENING YEAR = 2025 AADT = 23,300
ESTIMATED DESIGN YEAR = 2045 AADT = 31,200
TRUCK DDHV = 80
K = 9.0% D = 58.5% T = 10.2% (24 HOUR)
DESIGN HOUR T = 4.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH
ROADWAY ID: 89060000

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	32

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

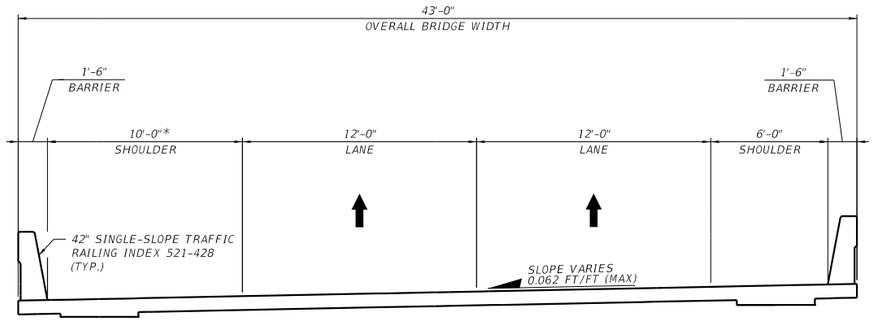
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR OUTSIDE SHOULDER WIDTH

TYPICAL SECTION No. 32



PROPOSED TYPICAL SECTION
SR 714 (SW MARTIN HIGHWAY) RAMP A
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 134.3

* AN ADDITIONAL 4' OF SHOULDER WIDTH HAS BEEN INCLUDED TO PROVIDE ADEQUATE HORIZONTAL STOPPING SIGHT DISTANCE.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	33

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

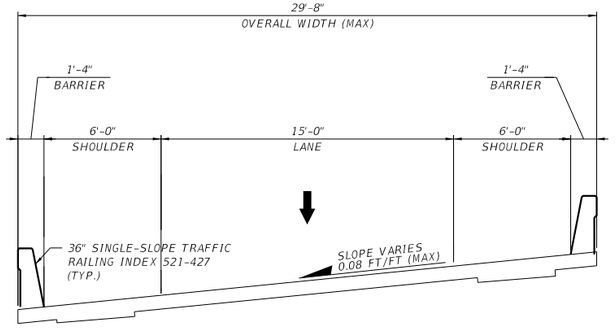
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 33



PROPOSED TYPICAL SECTION
SR 714 (SW MARTIN HIGHWAY) RAMP C
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 134.3

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FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	34

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

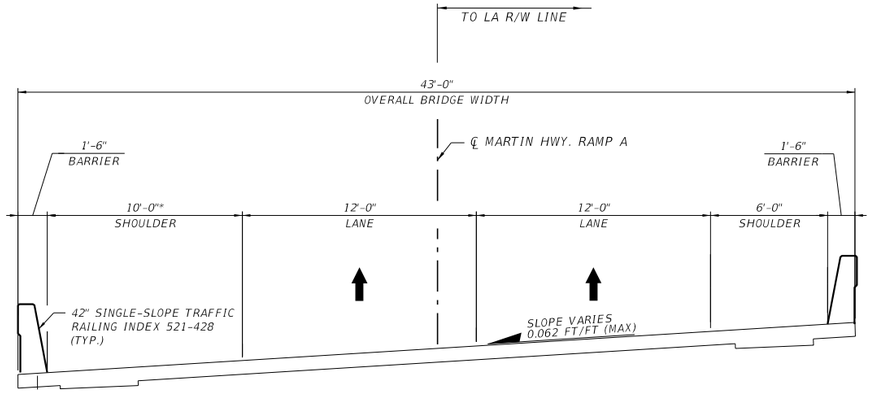
CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR OUTSIDE SHOULDER WIDTH

TYPICAL SECTION No. 34



PROPOSED TYPICAL SECTION
SR 714 (SW MARTIN HIGHWAY) RAMP A
BRIDGE OVER RAMP D1
MP 134.3

*AN ADDITIONAL 4' OF SHOULDER WIDTH HAS BEEN INCLUDED TO PROVIDE ADEQUATE HORIZONTAL STOPPING SIGHT DISTANCE

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	35

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
(X)	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

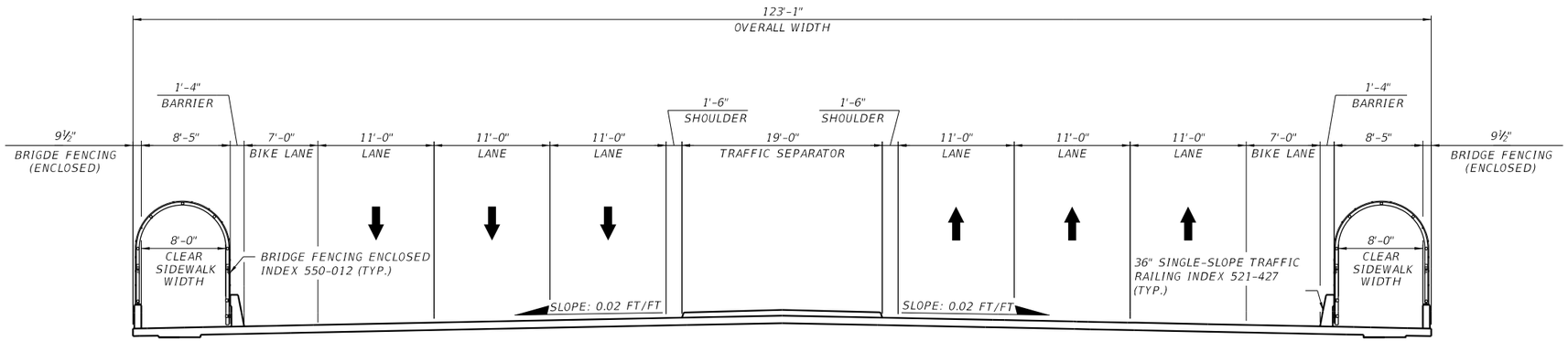
- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- (X) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 35



PROPOSED TYPICAL SECTION
SR 714 (SW MARTIN HIGHWAY)
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 134.6

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 32,500
ESTIMATED OPENING YEAR = 2025 AADT = 34,500
ESTIMATED DESIGN YEAR = 2045 AADT = 48,000
TRUCK DDHV = 140
K = 9.0% D = 62.3% T = 16.8% (24 HOUR)
DESIGN HOUR T = 7.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH
TARGET SPEED = 45 MPH
ROADWAY ID: 89090000

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	36

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
(X)	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
(X)	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- ( ) STATE HIGHWAY SYSTEM
- (X) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

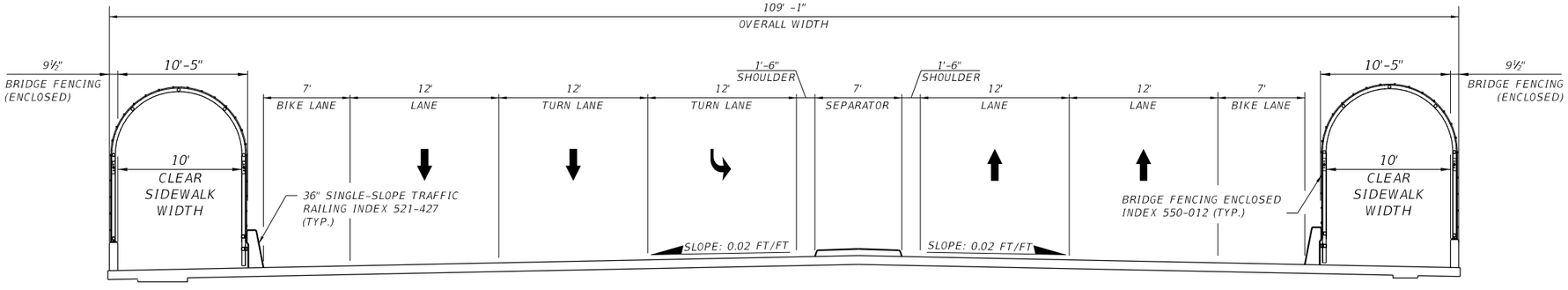
- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 36



PROPOSED TYPICAL SECTION
BECKER ROAD
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 138.5

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 35,100
ESTIMATED OPENING YEAR = 2025 AADT = 36,700
ESTIMATED DESIGN YEAR = 2045 AADT = 47,700
TRUCK DDHV = 70
K = 9.0% D = 50.9% T = 11.1% (24 HOUR)
DESIGN HOUR T = 5.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 40 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	37

$DATE$ $TIME$ $FILE$

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	(X)	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
(X)	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
(X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

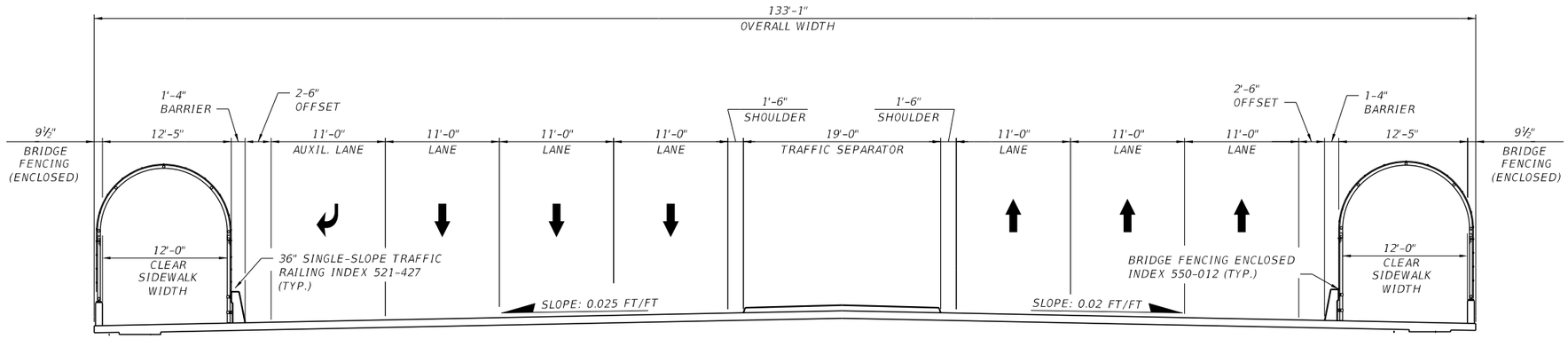
CRITERIA

(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION FOR SUBSTITUTION OF
WIDER SIDEWALKS FOR BICYCLE LANES

TYPICAL SECTION No. 37



PROPOSED TYPICAL SECTION
SR 716 (SW PORT ST. LUCIE BOULEVARD)
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 143.0

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 56,400
ESTIMATED OPENING YEAR = 2025 AADT = 57,800
ESTIMATED DESIGN YEAR = 2045 AADT = 67,600
TRUCK DDHV = 140
K = 9.0% D = 51.0% T = 12.4% (24 HOUR)
DESIGN HOUR T = 6.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 40 MPH
TARGET SPEED = 45 MPH
ROADWAY ID: 94120000

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	38

$DATE$ $TIME$ $FILE$

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

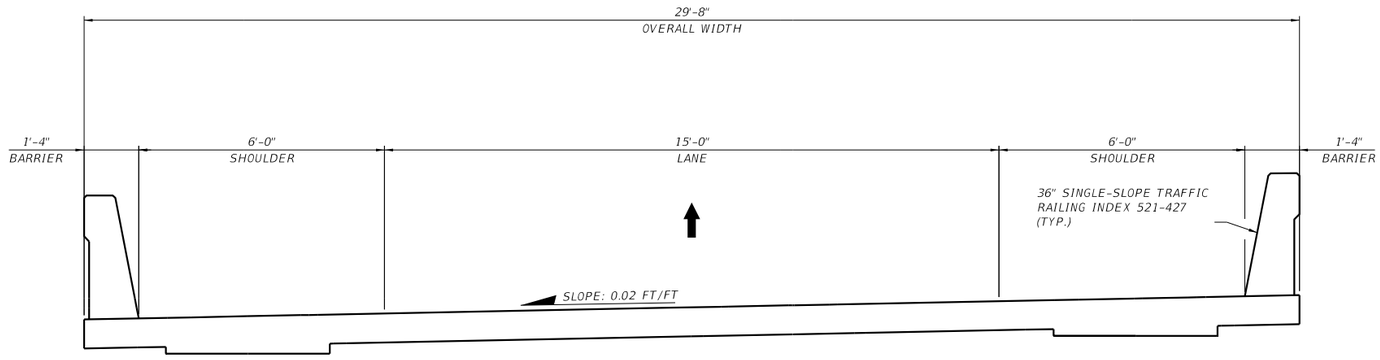
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 38



PROPOSED TYPICAL SECTION
SR 716 (SW PORT ST. LUCIE BOULEVARD) RAMP A
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 143.3

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	39

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

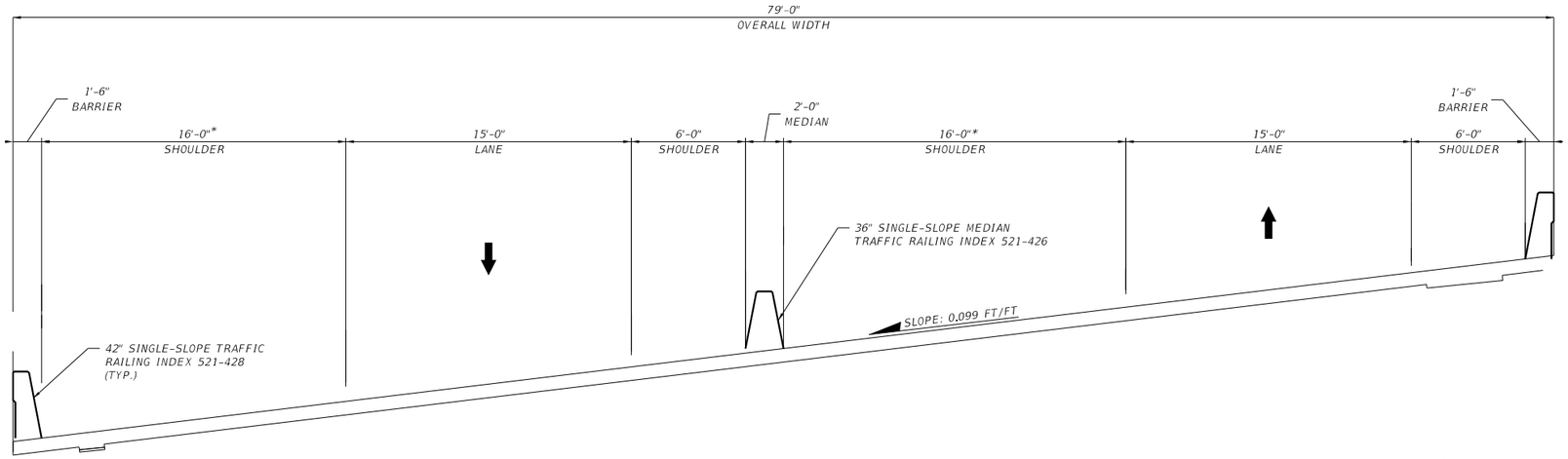
- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 39



* INCREASED SHOULDER WIDTH REQUIRED FOR HORIZONTAL STOPPING SIGHT DISTANCE

PROPOSED TYPICAL SECTION
CROSSTOWN PARKWAY RAMP
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 144.8

TRAFFIC DATA

CURRENT YEAR = 2022 AADT = N.A.
ESTIMATED OPENING YEAR = 2025 AADT = 6,900
ESTIMATED DESIGN YEAR = 2045 AADT = 9,800
TRUCK DDHV = 30
K = 13.0% D = 55.0% T = 19.2% (24 HOUR)
DESIGN HOUR T = 10.0%
DESIGN SPEED = 50 MPH (TANGENT) 40 MPH (LOOP)
POSTED SPEED = 50 MPH (TANGENT) 35 MPH (LOOP)

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	40

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
(X) C3C : SUBURBAN COMM.
( ) C2 : RURAL
( ) C4 : URBAN GENERAL
( ) C2T : RURAL TOWN
( ) C5 : URBAN CENTER
( ) C3R : SUBURBAN RES.
( ) C6 : URBAN CORE
( ) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
( ) MAJOR COLLECTOR
( ) FREEWAY/EXPWY.
( ) MINOR COLLECTOR
(X) PRINCIPAL ARTERIAL
( ) LOCAL
( ) MINOR ARTERIAL

HIGHWAY SYSTEM

( ) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
( ) STATE HIGHWAY SYSTEM
(X) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

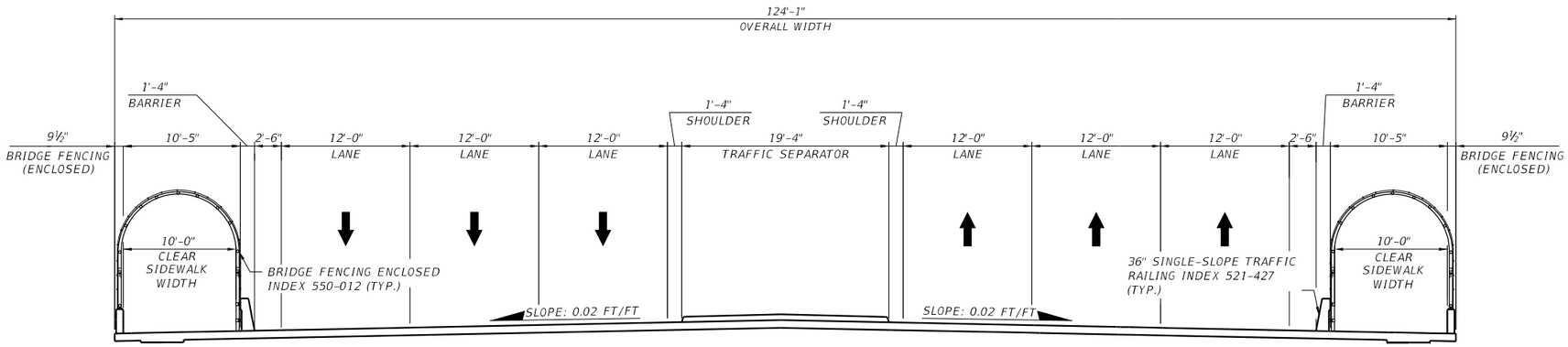
( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
(X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 40



PROPOSED TYPICAL SECTION
SW ST. LUCIE WEST BOULEVARD
BRIDGE OVER SR 91 (FLORIDA'S TURNPIKE)
MP 146.4

TRAFFIC DATA

CURRENT YEAR* = 2022 AADT = 32,400
ESTIMATED OPENING YEAR = 2025 AADT = 34,800
ESTIMATED DESIGN YEAR = 2045 AADT = 51,000
TRUCK DDHV = 130
K = 9.5% D = 51.0% T = 7.3% (24 HOUR)
DESIGN HOUR T = 4.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 40 MPH

* THE CURRENT YEAR DATA IS A PROJECTION FROM THE ORIGINAL DATA GATHERED IN 2016.

FINANCIAL PROJECT ID	SHEET NO.
423374-1-22-01	41

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