



CATEGORICAL EXCLUSION

TYPE II

PROJECT DEVELOPMENT AND ENVIRONMENT STUDY
COUNTY ROAD 510/85 STREET
From County Road 512 to 58 Avenue,
ETDM Number: 14233

Indian River County, Florida
Financial Management Number: 405606-2-22-02
Federal Aid Project No.: 4984-004-S

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

Prepared for
Florida Department of Transportation
District Four
3400 West Commercial Boulevard
Fort Lauderdale, FL 33309-3421

DECEMBER 2017



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19 Florida Department of Transportation
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23
24 Metric Engineering, Inc.
25 DECEMBER 2017
26

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
TYPE 2 CATEGORICAL EXCLUSION DETERMINATION FORM

1. PROJECT DESCRIPTION AND PURPOSE AND NEED

a. Project Information:

Project Name: Project Development And Environment Study

County Road 510/85 Street

Project Limits: From County Road 512 To 58 Avenue

County: Indian River

ETDM Number: 14233

Financial Management Number: 405606-2-22-02

Federal-Aid Project Number: 4984-004-S

Project Manager: Maria Formoso

b. Proposed Improvements: See Attachment A.B

c. Purpose and Need: See Attachment A.A.3

d. Project Planning Consistency: See Attachment A.C and Appendix 1

Currently Adopted CFP-LRTP	COMMENTS				
Y/N	(If N, then provide detail on how implementation and fiscal constraint will be achieved)				
PHASE	Currently Approved TIP	Currently Approved	TIP/STIP \$	TIP/STIP FY	COMMENTS
PE (Final Design)	Y/N	Y/N	\$ 8,284,050/ \$8,284,050	17/18-18/19	Consistent
R/W	Y/N	Y/N	\$6,428,859/ \$6,428,859	19/20-21/22	(If phase completed, note as such otherwise provide comments describing status and activities needed to achieve consistency)
Construction	Y/N	Y/N	\$2,605,523 / N/A	21/22	(provide comments as appropriate describing status and activities needed to achieve consistency)

****Include pages from current TIP/STIP/LRTP***

2. COOPERATING AGENCIES

USACE USCG USFWS EPA NMFS NONE

3. ENVIRONMENTAL ANALYSIS

Significant Impacts?*

Issues/Resources	Yes	No	Enhance	NoInv	Supporting Information**
A. SOCIAL & ECONOMIC					
1. Social	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.A.1 _____
2. Economic	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attachment B.A.2 _____
3. Land Use Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.A.3 _____
4. Mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attachment B.A.4 _____
5. Aesthetic Effects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.A.5 _____
6. Relocation Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.A.6 _____
7. Farmland	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.A.7; Appendix 3 _____
B. CULTURAL					
1. Section 4(f)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.B.1; Appendix 4 _____
2. Historic Sites/Districts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.B.2; Appendix 4 _____
3. Archaeological Sites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.B.3; Appendix 4 _____
4. Recreational Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.B.4; Appendix 4 _____
C. NATURAL					
1. Wetlands and Other Surface Waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.C.1 _____
2. Aquatic Preserves and Outstanding FL Waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.C.2 _____
3. Water Quality and Water Quantity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.C.3; Appendix 5 _____
4. Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Attachment B.C.4 _____
5. Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.C.5 _____
6. Coastal Zone Consist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Attachment B.C.6 _____
7. Coastal Barrier Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Attachment B.C.7 _____
8. Protected Species and Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.C.8; Appendix 6 _____
9. Essential Fish Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.C.9; Appendix 7 _____
D. PHYSICAL					
1. Highway Traffic Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.D.1 _____
2. Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.D.2; Appendix 5 _____
3. Contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.D.3 _____
4. Utilities and Railroads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.D.4 _____
5. Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attachment B.D.5 _____
6. Bicycles and Pedestrians	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attachment B.D.6 _____
7. Navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Attachment B.D.7 _____
a.	<input checked="" type="checkbox"/> A USCG Permit IS NOT required.				
b.	<input type="checkbox"/> A USCG Permit IS required.				

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

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

E. ANTICIPATED PERMITS: See Attachment B.E

- SJRWMD Environmental Resource Permit, Dewatering Permit, Right-of-Way Occupancy Permit
- USACE Dredge and Fill Permit
- Stormwater Pollution Prevention Plan (drains into Outstanding Florida Waters)
- Indian River Farms Water Control District Right-of-Way Occupancy Permit and Environmental Permit
- Sebastian River Improvement District Right-of-Way Occupancy Permit and Environmental Permit

4 COMMITMENTS

Commitments are listed below and **Appendix 8** contains a project commitment tracker.

- FDOT will adhere to the most recent US Fish and Wildlife Service (USFWS) Standard Protection Measures for the Eastern Indigo Snake during construction activities.
- FDOT will mitigate for impacts to wood stork Suitable Foraging Habitat in accordance with the most recent USFWS requirements.
- Prior to construction, FDOT will conduct a gopher tortoise burrow survey of potential gopher tortoise habitat in the impact area in accordance with Florida Fish and Wildlife Conservation Commission (FWC) guidelines.
- Construction activities will not occur adjacent to the Wabasso Scrub Conservation Area during Florida scrub-jay breeding seasons (March 1 through June 30).
- To minimize impacts to Florida scrub-jays, signage indicating “No Food Trash” will be installed at any construction dumpsters between 61 Drive and 58 Avenue (Stations 348+67.07 to 373+80.08).
- No staging of equipment or materials will occur in scrub habitat to avoid potential impacts to scrub jays.
- Signs will be installed near the Wabasso Scrub Conservation Area warning motorists of the presence of sensitive wildlife.
- No palms or oaks will be planted in the vicinity of the Wabasso Scrub Conservation Area to avoid attracting scrub-jays in search of nesting material or acorns.
- The project will provide sufficient lateral and vertical clearance under the Lateral L Canal bridge for a future pedestrian trail that will be constructed by Indian River County as part of the Saint Sebastian River Greenway.
- The project will provide a new swale for collection and treatment of offsite runoff that currently drains into an existing swale along CR 510.

- The existing culvert at the South Prong of the Saint Sebastian River will be replaced by a bridge to provide a more natural riparian setting and reduce the barrier to wildlife movements.
- The project will provide signage, landscape and/or streetscape within the Wabasso community that is consistent with the history of the community and enhances the “main street feel” of the community.
- Impacts to Essential Fish Habitat will be considered during the design phase and minimized using retaining walls or similar measures as well as the 50 percent or greater treatment of stormwater draining into Outstanding Florida Waters like the Indian River Lagoon.

5. PUBLIC INVOLVEMENT:

1. [] A public hearing is not required.
2. [X] A public hearing will be held (insert date). This draft document is publicly available and comments can be submitted to FDOT until (insert date)
 District Contact Information: Maria Formoso, P.E., P.M.P.
 Project Manager
 Florida Department of Transportation- D4
 3400 Commercial Blvd.
 Ft. Lauderdale, FL 33309
 Phone: (954) 777-4677
 Maria.Formoso@dot.state.fl.us
3. [] A public hearing was held on (insert date) and the transcript is available.
4. [] An opportunity for a public hearing was afforded and was documented (insert date).

6. DISTRICT DETERMINATION

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

	____/____/____ Date
FDOT Project Manager	
	____/____/____ Date
FDOT Environmental Manager or Designee	

7. OFFICE OF ENVIRONMENTAL MANAGEMENT CONCURRENCE

Signature below constitutes Location and Design Concept Acceptance:

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of

Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration and FDOT.

Director of the Office of Environmental Management
or Designee

____/____/____
Date

8. SUPPORTING INFORMATION

See Attachment A, Attachment B and Appendices 1 through 8

ATTACHMENT A – PROJECT DESCRIPTION AND PURPOSE AND NEED

A. PURPOSE AND NEED

1. Purpose of this Document

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to evaluate alternatives for mobility and safety improvements to County Road (C.R.) 510 in Indian River County, Florida. This Categorical Exclusion Type II has been prepared in accordance with the FDOT’s *PD&E Manual, Part 1, Chapter 5 (Type 2 Categorical Exclusion)*, updated June 14, 2017, and other chapters, which incorporate the requirements of the National Environmental Policy Act (NEPA), and related federal and state laws.

2. Project Description

The subject project is located just west and south of Sebastian, a city in Indian River County, Florida. This area is within the northern part of Florida’s Treasure Coast, so named after the discovery of treasure from the 1715 Spanish Treasure Fleet, lost in a hurricane near the Sebastian Inlet.

The project entails the investigation of widening a segment of County Road (C.R.) 510 from two to four lanes extending from C.R. 512 (Sebastian Boulevard) to 58 Avenue for a total distance of 5.27 miles (**Figure 1**). C.R. 510 links the local community of Wabasso to C.R. 512 (Sebastian Boulevard), the main east-west arterial serving Sebastian. The project corridor is generally rural in nature and includes a mixture of agricultural, educational, commercial, industrial and residential facilities.

C.R. 510 is owned and maintained by Indian River County and is functionally classified as an urban principal arterial. The proposed project will provide additional capacity to meet the future traffic needs resulting from projected population and employment growth within the projected area expected as a result of various residential development. The Indian River County Metropolitan Planning Organization (MPO) has identified C.R. 510 in their 2040 Long Range Transportation Plan (LRTP) initial roadway needs plan alternative projects, cost feasible plan as a “Core Project” and in their Transportation Improvement Program (TIP).



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2

Figure 1 Project Location

1 **3. Project Purpose and Need**

2 This project consists of improving capacity on C.R. 510 from C.R. 512 to 58 Avenue, in Indian River
3 County (IRC), Florida, in order to achieve an acceptable Level of Service (LOS) on the facility in
4 the future condition. While the roadway currently operates at an acceptable LOS, conditions will
5 deteriorate below acceptable standards if no improvement occurs by 2040, as the roadway will
6 have insufficient capacity to accommodate the project travel demand.

7 It is important to note that this roadway is deemed deficient in the Indian River County 2040 LRTP
8 based on the projected 2035 Average Annual Daily Trips (AADT) volumes derived from the
9 Greater Treasure Coast Regional Planning Model for the Grid Densification Roadway Needs Plan
10 Alternative. The results of the analysis revealed that portions of the project segment are
11 expected to have volume to capacity (V/C) ratios of 0.63 – 1.35 and above 1.65. Roadways are
12 deemed deficient if the volume to capacity (V/C) ratio exceeds 0.9. As such, this segment of C.R.
13 510 will experience congestion by 2035 if additional improvements are not made. Overall, the
14 proposed improvement is anticipated to allow C.R. 510 to continue to serve as a critical arterial
15 in facilitating the west-east movement of local and regional traffic (including truck traffic) as it
16 traverses Indian River County connecting C.R. 512 to S.R. A1A on the barrier island. The increased
17 capacity on C.R. 510 is intended to improve traffic operations along the corridor and enhance
18 access to targeted areas of growth within the county.

19 There are three bridge structures (880047, 880063, 880044), one at M.P. 1.276 - 1.284, one at
20 M.P. 2.226 - M.P. 2.240, and one at M.P. 2.726 - M.P. 2.735. The project is 5.27 miles in length
21 and the acquisition of some right-of-way is anticipated. C.R. 510 is owned and maintained by
22 Indian River County. According to the adopted Indian River County Comprehensive Plan, C.R. 510
23 is classified as an Urban Principal Arterial and is critical in facilitating the west-east movement of
24 traffic in Indian River County. It connects Interstate 95 (I-95) to S.R. A1A. Additionally this
25 roadway provides access to commercial, educational, residential and agricultural uses. The
26 project is anticipated to cost \$100,000,000, of which the great majority will be Federally-funded
27 dollars. C.R. 510 from C.R. 512/85 Street to 58 Avenue is identified as a cost-feasible project in
28 the Indian River County 2040 LRTP.

29 C.R. 510 is designated as an emergency evacuation route by both the Florida Division of
30 Emergency Management and Indian River County. By increasing capacity, the improvement on
31 C.R. 510 is anticipated to enhance emergency evacuation and response times by:

- 32 • Improving access to other emergency evacuation routes designated by the Florida
33 Division of Emergency Management (C.R. 510, C.R. 512, and I-95); and
- 34 • Increasing the number of residents from the coastal communities of eastern Indian River
35 County that can be evacuated during an emergency event.

1 The project is also identified within the Indian River County MPO Fiscal Year (FY) 2016/2017 -FY
2 2020/21 TIP. It should additionally be noted that \$4,433,546 is programmed for the PD&E Study
3 and \$4,207,416 is programmed for the right-of-way phase in 2020 within the FY 2016/2017-
4 FY2020/2021 Indian River County MPO TIP.

5 As the Indian River County 2040 LRTP Infill Alternative Land Use scenario matures along the C.R.
6 510 corridor encouraging higher densities and mixed-use development, premium transit service
7 will be considered on C.R. 510 to serve and connect the transit-supportive land uses. Sidewalks
8 and bicycle lanes are additionally anticipated as part of the widening as the corridor is intended
9 to provide for adequate multi-modal facilities. While paved shoulders are currently present, they
10 are also anticipated to be maintained as part of the project. Overall, the project is expected to
11 accommodate multi-modal facilities and enhance corridor access for transit users, bicyclists, and
12 pedestrians.

13 The logical termini begin at the signalized intersection of C.R. 512/85 Street and terminate at the
14 signalized intersection of 58 Avenue. C.R. 510 is designated as an emergency evacuation route
15 by both the Florida Division of Emergency Management and Indian River County. By increasing
16 capacity, the improvement on C.R. 510 is anticipated to enhance emergency evacuation and
17 response times.

18 The primary need for additional capacity on of C.R. 510 from C.R. 512/85 Street to 58 Avenue is
19 in order to achieve an acceptable LOS on the facility in the future condition. While the roadway
20 currently operates at an acceptable LOS, conditions will deteriorate below acceptable standards
21 if no improvement occurs by 2040, as the roadway will have insufficient capacity to
22 accommodate the project travel demand. The need for the project is based on the following
23 primary and secondary criteria.

24

25 **PRIMARY CRITERIA**

26 ***CAPACITY/TRANSPORTATION DEMAND: Improve Traffic Operations (LOS and Volume to***
27 ***Capacity Ratio)***

28 This project is anticipated to improve traffic operations along C.R. 510 by increasing operational
29 capacity to meet the future travel demand projected as a result of Indian River County population
30 and employment growth. The existing and future traffic conditions for the project corridor are as
31 follows (**Tables 1** and **2**):

32

33 It is important to note that this roadway is deemed deficient in the Indian River County 2040 LRTP
34 based on the projected 2040 AADT volumes derived from the Greater Treasure Coast Regional
35 Planning Model for the Grid Densification Roadway Needs Plan Alternative. The results of the
36 analysis revealed that portions of the project segment are expected to have volume to

1

Table 1 Existing (2015) Conditions

Limits		# of Lanes	LOS D	AADT Existing	
From	To	(speed limit)	SV	2015	V/C
C.R. 512	Mako Way	3 Lanes Divided (>40 MPH)	26,280	13,000	0.49
Mako Way	800' West Of Treasure Coast Elementary	2 Lanes Divided (>40 MPH) with LT lanes	16,730	12,800	0.77
800' West Of Treasure Coast Elementary	500' East Of Treasure Coast Elementary	2 Lane Undivided (<35 MPH) with LT lanes	13,320	12,000	0.90
500' East Of Treasure Coast Elementary	66 Avenue	2 Lane Undivided (>40 MPH)	12,740	13,000	1.02
66 Avenue	58 Avenue	2 Lane Undivided (<35 MPH) with LT lanes	13,320	11,000	0.83

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Table 2 Future (2040) Conditions

Limits		# of Lanes	LOS D	AADT BUILD	NO	# of Lanes	LOS D	AADT BUILD	
From	To	(speed limit)	SV	2040	V/C	(speed limit)	SV	2040	V/C
C.R. 512	Mako Way	3 Lanes Divided (>40 MPH)	26,280	16,500	0.63	4 Lanes Divided (>40 MPH)	35,820	18,500	0.52
Mako Way	800' West Of Treasure Coast Elementary	2 Lanes Divided (>40 MPH) with LT lanes	16,730	17,400	1.04	4 Lanes Divided (>40 MPH)	35,820	19,200	0.54
800' West Of Treasure Coast Elementary	500' East Of Treasure Coast Elementary	2 Lanes Undivided (<35 MPH) with LT lanes	13,320	18,000	1.35	4 Lanes Divided (<35 MPH)	29,160	19,000	0.65
500' East Of Treasure Coast Elementary	66 Avenue	2 Lanes Undivided (>40 MPH)	12,740	21,000	1.65	4 Lanes Divided (>40 MPH)	35,820	23,250	0.65
66 Avenue	58 Avenue	2 Lanes Undivided (<35 MPH) with LT lanes	13,320	17,000	1.28	4 Lanes Divided (<35 MPH)	29,160	21,000	0.72

2

3 capacity ratio (V/C) of 0.63 – 1.35 and above 1.65. Roadways are deemed deficient if the volume
 4 to capacity (V/C) ratio exceeds 0.9. As such, this segment of C.R. 510 will experience congestion
 5 by 2040 if additional improvements are not made.

6

7 Overall, the proposed improvement is anticipated to allow C.R. 510 to continue to serve as a
 8 critical arterial in facilitating the west-east movement of local and regional traffic (including truck
 9 traffic) as it traverses Indian River County connecting C.R. 512 to S.R. A1A on the barrier island.
 10 The increased capacity on C.R. 510 is intended to improve traffic operations along the corridor
 11 and enhance access to targeted areas of growth within the county.

12

13 **SECONDARY CRITERIA**

14 ***MODAL INTERRELATIONSHIPS: Enhance Transit, Pedestrian, and Bicycle Access***

15 As the Indian River County 2040 LRTP Infill Alternative Land Use scenario matures along the C.R.
 16 510 corridor encouraging higher densities and mixed-use development, premium transit service
 17 will be considered on C.R. 510 to serve and connect the transit-supportive land uses. Sidewalks
 18 and bicycle lanes are additionally anticipated as part of the widening as the corridor is intended
 19 to provide for adequate multi-modal facilities. While paved shoulders are currently present, they

1 are also anticipated to be maintained as part of the project. Overall, the project is expected to
2 accommodate multi-modal facilities and enhance corridor access for transit users, bicyclists, and
3 pedestrians.

4 Transportation Demand

5 The population of Indian River County is projected to increase from 138,028 in year 2010 to
6 202,295 in year 2040, with a 47% 30-year growth rate (Source: Indian River County 2040 LRTP).
7 As the population of the county increases, developments in the county will continue to grow
8 thereby increasing the amount of traffic on the roads.

9 Employment is projected to grow from 65,244 in 2010 to 90,968 in 2040. Based on the
10 socioeconomic characteristics of the Indian River County 2040 LRTP Infill Alternative Land Use
11 scenario,

- 12 • Population within the proximate Traffic Analysis Zones (TAZs) 2-mile buffer is projected
13 to grow from 21,096 in 2010 to 34,434 in 2040 (1.65% annual growth rate).
- 14 • Employment within the proximate TAZs 2-mile buffer is projected to increase from 3,421
15 in 2010 to 5,588 in 2040 (1.65% annual growth rate).

16 Further, 2 Planned Unit Developments and 0 approved Developments of Regional Impact are
17 present along the corridor.

18 System Linkage

19 The proposed capacity improvements to C.R. 510 will help improve connectivity within the
20 roadway network by enhancing mobility to the C.R. 510 corridor. Enhancing mobility in this area
21 will provide an additional route and improve the movement of people, goods and services to and
22 from Indian River County.

23 Plan Consistency

24 C.R. 510 from C.R. 512/85 Street to 58 Avenue is identified as a cost-feasible project, not currently
25 funded for construction in the Indian River County 2040 LRTP. The project is also identified within
26 the Indian River County Metropolitan Planning Organization's (MPO) FY 2016/2017 - FY 2020/21
27 Transportation Improvement Program (TIP). It should additionally be noted that \$4,433,546 is
28 programmed for the Project Development and Environment (PD&E) Study and \$4,207,416 is
29 programmed for the Right of Way phase in 2020 within the FY 2016/2017- FY2020/2021 Indian
30 River County MPO TIP. Additional information on planning consistency is provided in **Appendix**
31 **1**.

32

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1 Social Demands & Economic Development

2 *Enhance Emergency Evacuation and Response Times*

3 C.R. 510 is designated as an emergency evacuation route by both the Florida Division of
4 Emergency Management and Indian River County. By increasing capacity, the improvement on
5 C.R. 510 is anticipated to enhance emergency evacuation and response times by:

- 6 • Improving access to other emergency evacuation routes designated by the Florida
7 Division of Emergency Management (C.R. 510, C.R. 512, and I-95); and
- 8 • Increasing the number of residents from the coastal communities of eastern Indian
9 River County that can be evacuated during an emergency event.

10 The population of Indian River County is projected to increase from 138,028 in year 2010 to
11 202,295 in year 2040, with a 47% 30-year growth rate (Source: Indian River County 2040 LRTP).
12 As the population of the county increases, developments in the county will continue to grow
13 thereby increasing the amount of traffic on the roads. Employment is projected to grow from
14 65,244 in 2010 to 90,968 in 2040.

15 Economic Development: Currently, the land around the proposed project is mainly agricultural
16 and industrial. A review on satellite view illustrated green space and undisturbed land with a low
17 density residential land use area in the northern part of the proposed project. Within the
18 proposed project are two major employers; i.e., a Publix Supermarket and a Winn-Dixie. There
19 are also two churches and five (5) parks. The North Indian River County Library is identified as a
20 cultural facility. The median household income of the Sebastian South community is \$53,750,
21 above the countywide median household income of \$47,341.

22 The 2040 Indian River County LRTP Public Process and Land Use Vision Plan identified land uses
23 centered on an "infill and clustered" development pattern. The future land use plan included the
24 following focus growth areas:

- 25 • Downtown districts
- 26 • Neighborhood commercial districts
- 27 • Neighborhood infill development districts
- 28 • US 1 development corridor
- 29 • Regional workplace districts
- 30 • Airport workplace districts
- 31 • Fellsmere Annex

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1 **B. PROPOSED IMPROVEMENTS**

2 **1. Alternatives Considered**

3 The alternatives considered include the No Build Alternative, Transportation Systems
4 Management and Operations Alternatives (TSM&O), and Build Alternatives. A multi-phase
5 alternative development, evaluation and selection process was employed to properly assess all
6 Alternatives considered for the proposed improvements of C.R. 510 within the project limits.

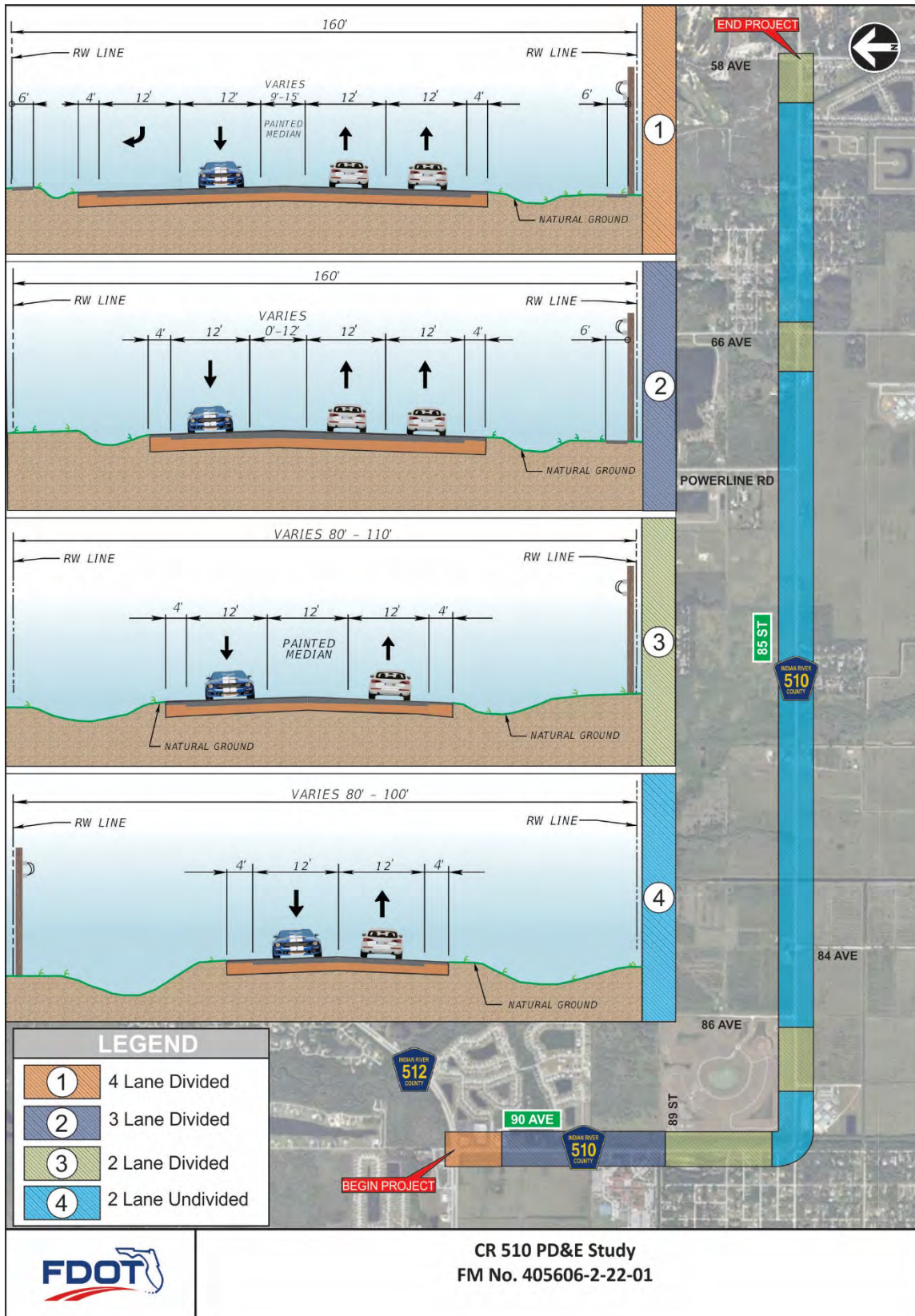
7 **No Build Alternative**

8 The “No Build” alternative assumes the retainment of existing conditions. Existing typical sections
9 are shown in **Figure 2**. It is used as a benchmark condition in order to compare the costs and
10 benefits of implementing the proposed improvements to those incurred by continuing to use the
11 existing facility. In this case, the “No Build” alternative would entail the retainage of the existing
12 conditions within the project limits with its present geometric, operational and access
13 deficiencies. The existing facility within the project confines is inadequate in terms of future
14 capacity. It is evident that adoption of this alternative would not solve any of the existing needs
15 associated with the project. However, the “No Build” alternative will be maintained as a viable
16 option providing an effective yardstick or baseline condition by which other project alternatives
17 will be compared throughout the project alternative selection process.

18 **TSM&O Alternatives**

19 The Transportation Systems Management and Operations alternatives are comprised of minor
20 improvements options that are usually generated to alleviate specific traffic congestion/safety
21 problems, or to obtain maximum utilization out of the existing facility by improving operational
22 efficiency. These alternatives do not serve as a benchmark function but rather they insure that
23 a wide range of realistic alternatives are considered by decision makers. The various TSM&O
24 alternatives that were investigated include the upgrade of the existing facility by means of
25 intersection widening and turning lane storage enhancements, improved/modified signalization,
26 improved signing, markings and delineation.

27 Even though some beneficial effects can be obtained through the use of low cost improvements,
28 the overall capacity restriction of maintaining the existing roadway section precludes the
29 attainment of any significant improvement in the overall project level of service. It is because of
30 this fact that these alternatives were considered to have minimum value. Therefore, it is
31 recommended that the TSM&O alternatives be rejected and only the major reconstruction
32 options be considered for further study. As stated, several of the proposed intersection
33 improvements previously identified will be incorporated into the design of the major project
34 alternatives.



1

2

Figure 2 Existing Typical Sections

1 **Build Alternatives**

2 Prior to initiating the development of alternatives, the project was broken down into four (4)
3 distinct segments. Each segment has rather unique characteristics as well as potential differences
4 in right-of-way, operational, geometric and environmental features and are shown on **Figure 3**.
5 The segmental breakdown methodology ensures that the generated alternatives are more
6 responsive to the needs of each segment rather than to the generalized project's needs.

7 After a comprehensive alternative generation and evaluation process which includes more than
8 twelve (12) typical section/alignment combinations, one (1) alternative was selected as being the
9 most effective option within each segment. **Figures 4 - 7** depict the Recommended Alternative
10 Features per segment, and **Figure 8** depicts the typical section details.

11 A brief description of the recommended alternative per segment follows:

12 **Segment 1**

13 **Typical Section E1 with East Alignment** is a 4-lane urban typical sections with a Design Speed of
14 45 mph. The total proposed right-of-way for this section is 108-feet. This typical section features
15 11-foot travel lanes, 7-foot bicycle lanes, a 22-foot median, and 6-foot sidewalks with a 6-foot
16 utility strip behind the sidewalks. An access class 5 is proposed for this segment. **Figure 4** shows
17 some of the most distinctive features of this option within Segment 1, including the proposed
18 median openings.

19 **Segment 2**

20 **Typical Section E1 with East/North Alignment** is a 4-lane urban typical sections with a Design
21 Speed of 45 mph. The total proposed right-of-way for this section is 108-feet. This typical section
22 features 11-foot travel lanes, 7-foot bicycle lanes, a 22-foot median, and a 6-foot utility strip
23 behind the sidewalks. The horizontal curve within this segment will be reconstructed to allow 45
24 mph design speed and improve safety conditions. The access provided for the Vero Lake Estate
25 to C.R. 510 has been limited to 87 Street. Also, access to C.R. 510 from 86 Street and 86 Place has
26 been eliminated. This alternative proposes to close the existing C.R. 510 and remove the existing
27 bridge over Lateral Canal D. **Figure 5** illustrates some of the most distinctive features of this
28 option within Segment 2.

29 **Segment 3**

30 **Typical Section A with Center Alignment** is a 4-lane sub-urban typical section with a design speed
31 of 50 mph. The total proposed right-of-way for this section is 168 feet. This typical section
32 features 12-foot travel lanes, 7-foot bicycle lanes, 4-foot inside shoulders, curb and gutter on
33 both sides and 5-foot sidewalks with a wide buffer between the roadway and the sidewalks.

1 Additionally, there is a 32-foot drainage easement along the north side of the roadway to treat
2 offsite drainage impacted by the project. Median openings have been given throughout the
3 segment to allow access for the various stakeholders/property owners along the segment. **Figure**
4 **6** illustrates some of the most distinctive features of this option within Segment 3.

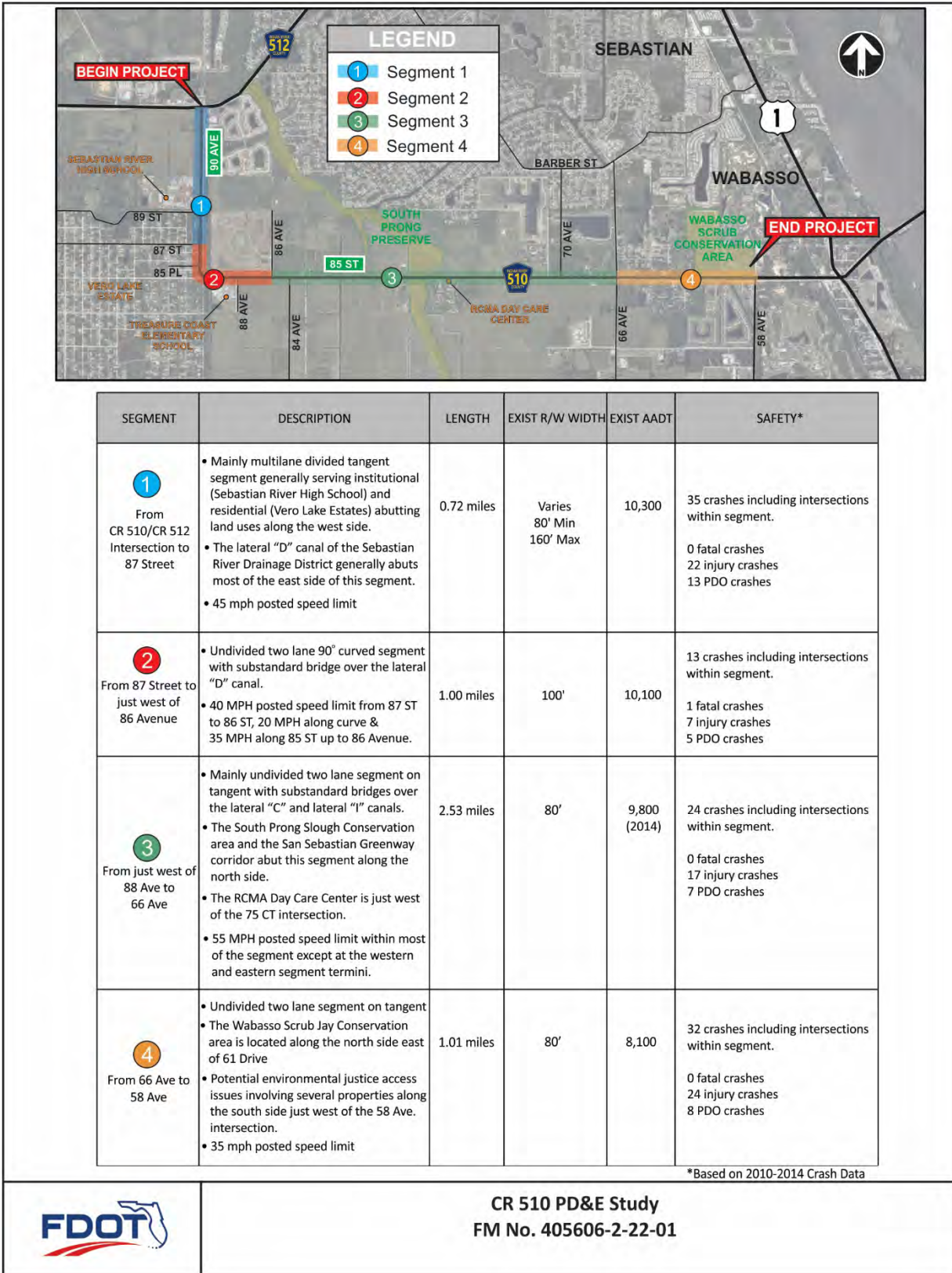
5 **Segment 4**

6 **Typical Section E with North Alignment** from 66 Avenue to 61 Drive and **South Alignment** from
7 61 Drive to 58 Avenue is a 4-lane urban typical section with a Design Speed of 45 mph. The total
8 proposed right-of-way for this section is 104-feet. This typical section features 11-foot travel
9 lanes, 7-foot bicycle lanes, 6-foot sidewalks against the curb and a 22 -foot median. **Figure 7**
10 illustrates some of the salient characteristics of this alternative within this segment including the
11 various partial median openings that have been given to the communities along this segment.

12 **Stormwater Ponds**

13 For stormwater treatment and attenuation design the project was divided into 10 separate
14 stormwater management basins. Four (4) potential pond locations per basin were evaluated as
15 per the Pond Siting Report prepared as part of this PD&E study (**Figures 9 and 10**). During final
16 design, only one recommended pond will be selected per basin for water quality treatment and
17 storage capacity.

18

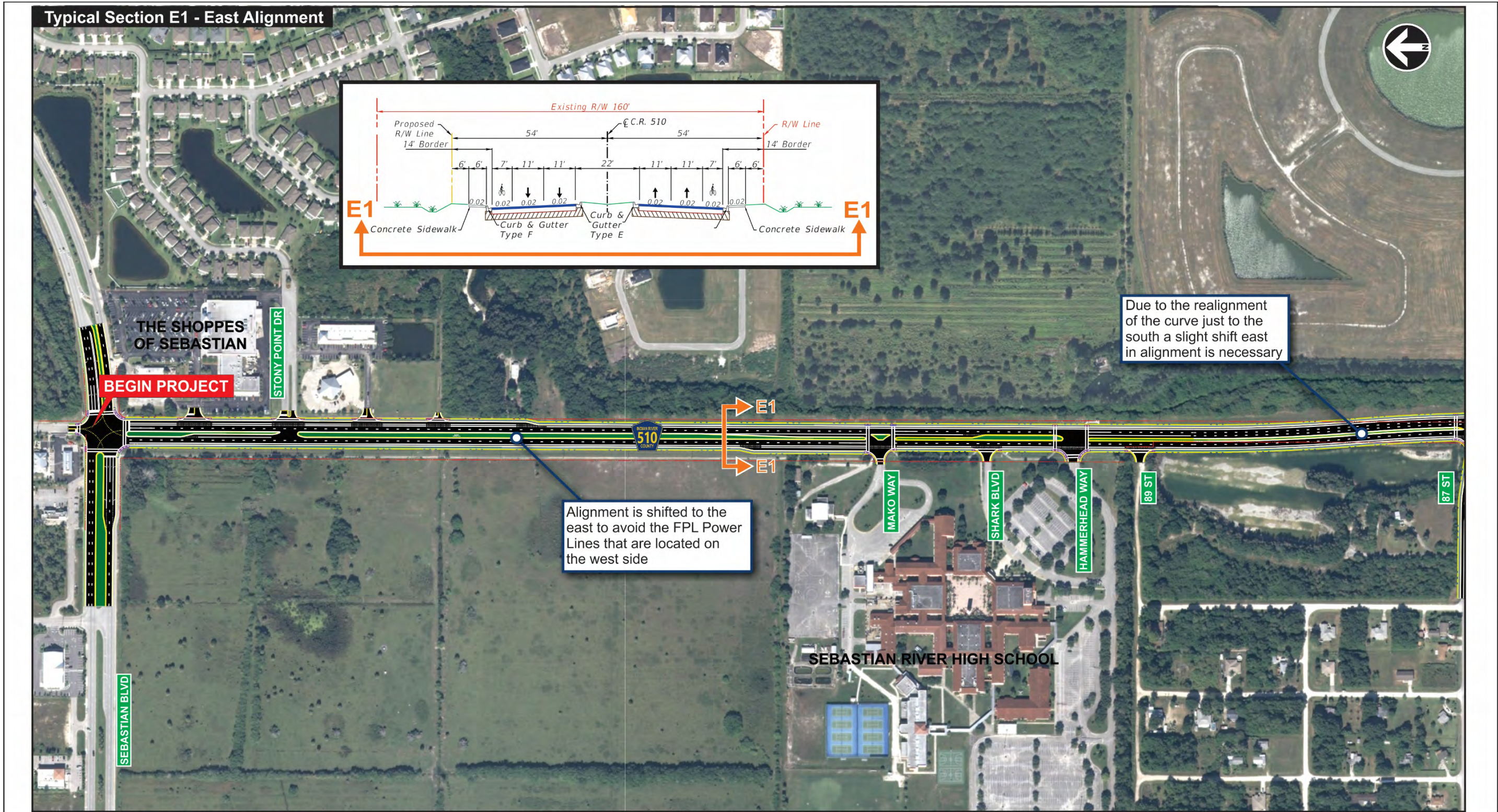


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Figure 3 Project Segmentation



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Figure 4 Segment 1 Typical Section with Alignment Features

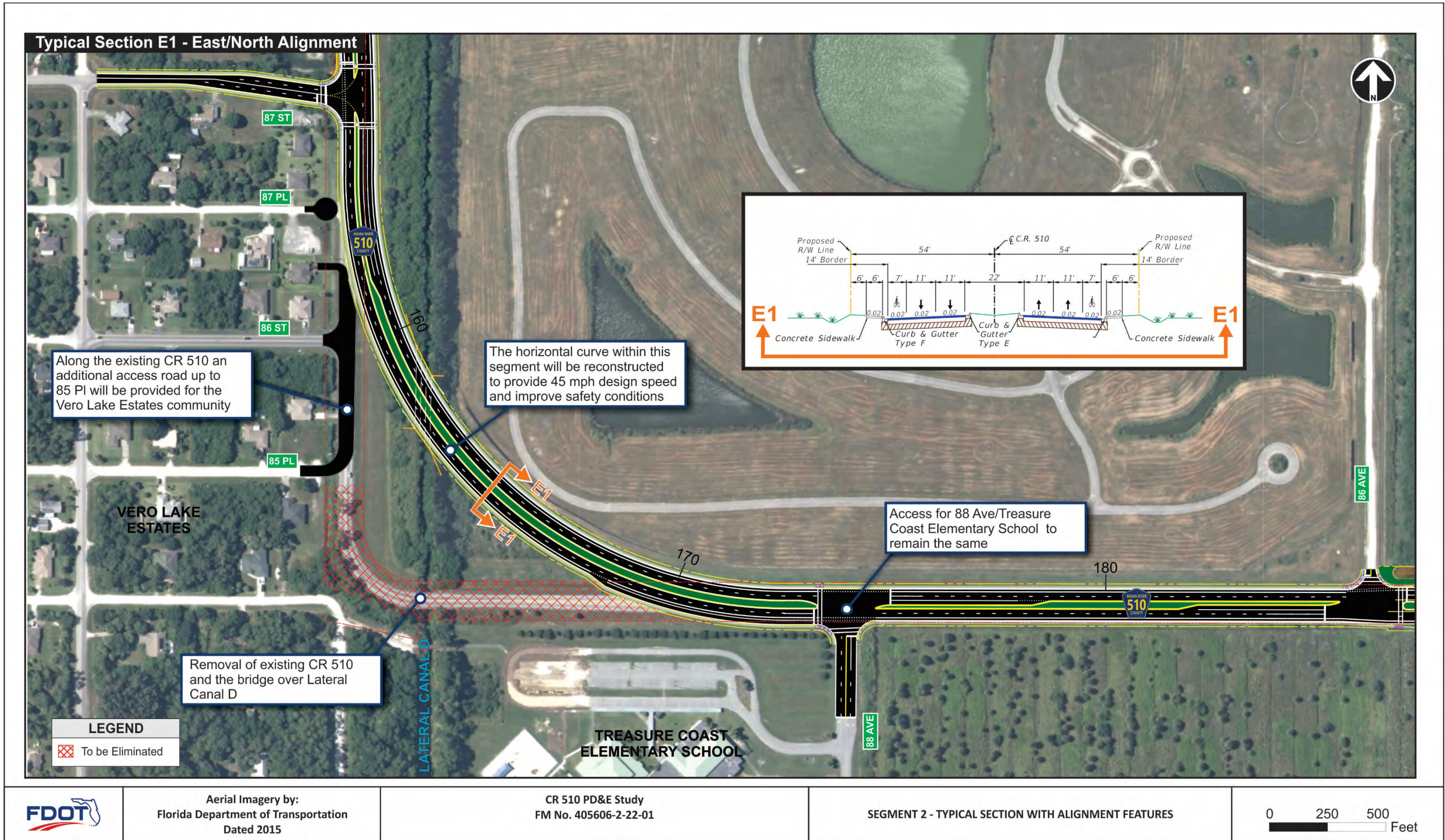


Figure 5 Segment 2 Typical Section with Alignment Features

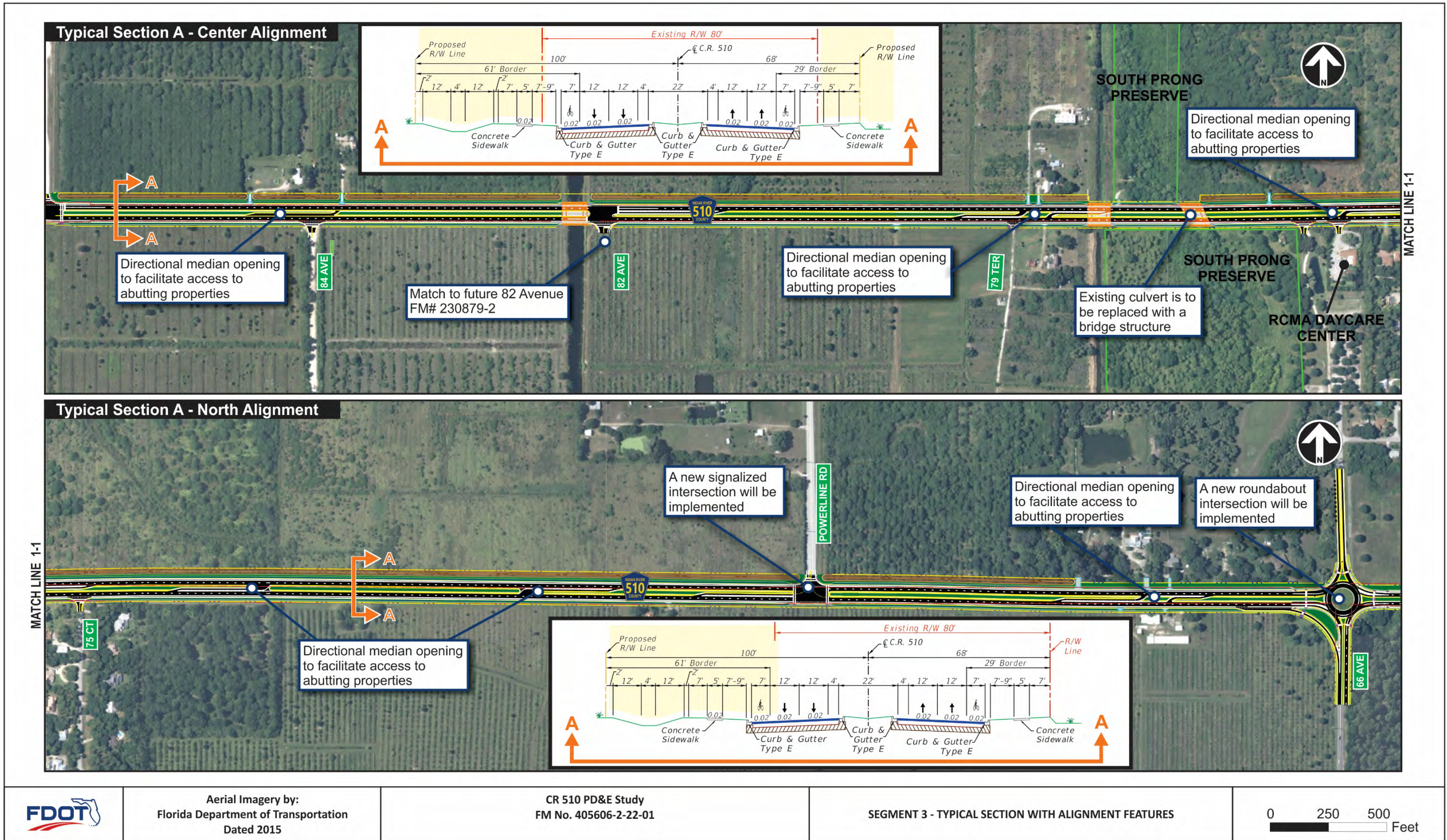
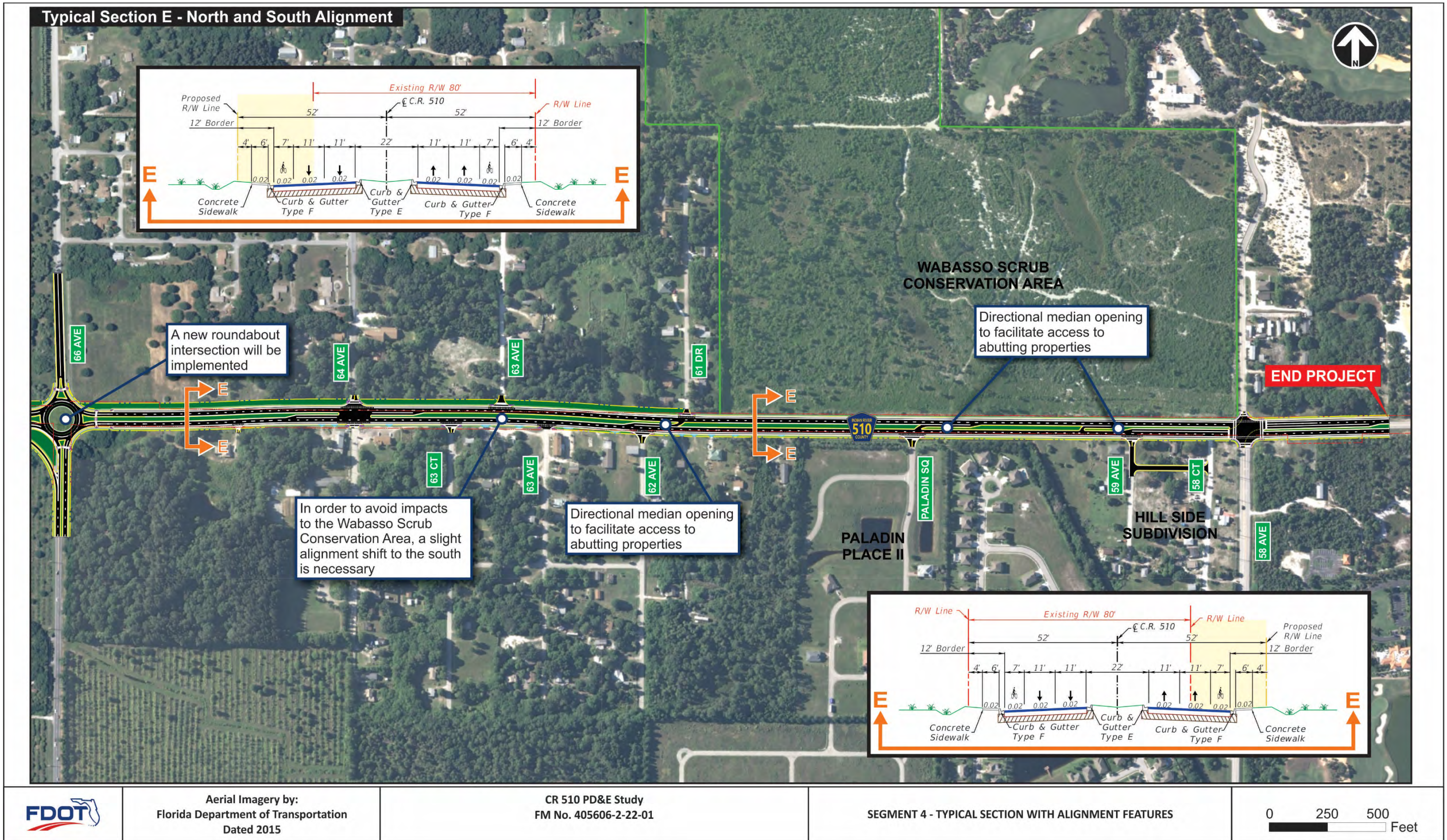
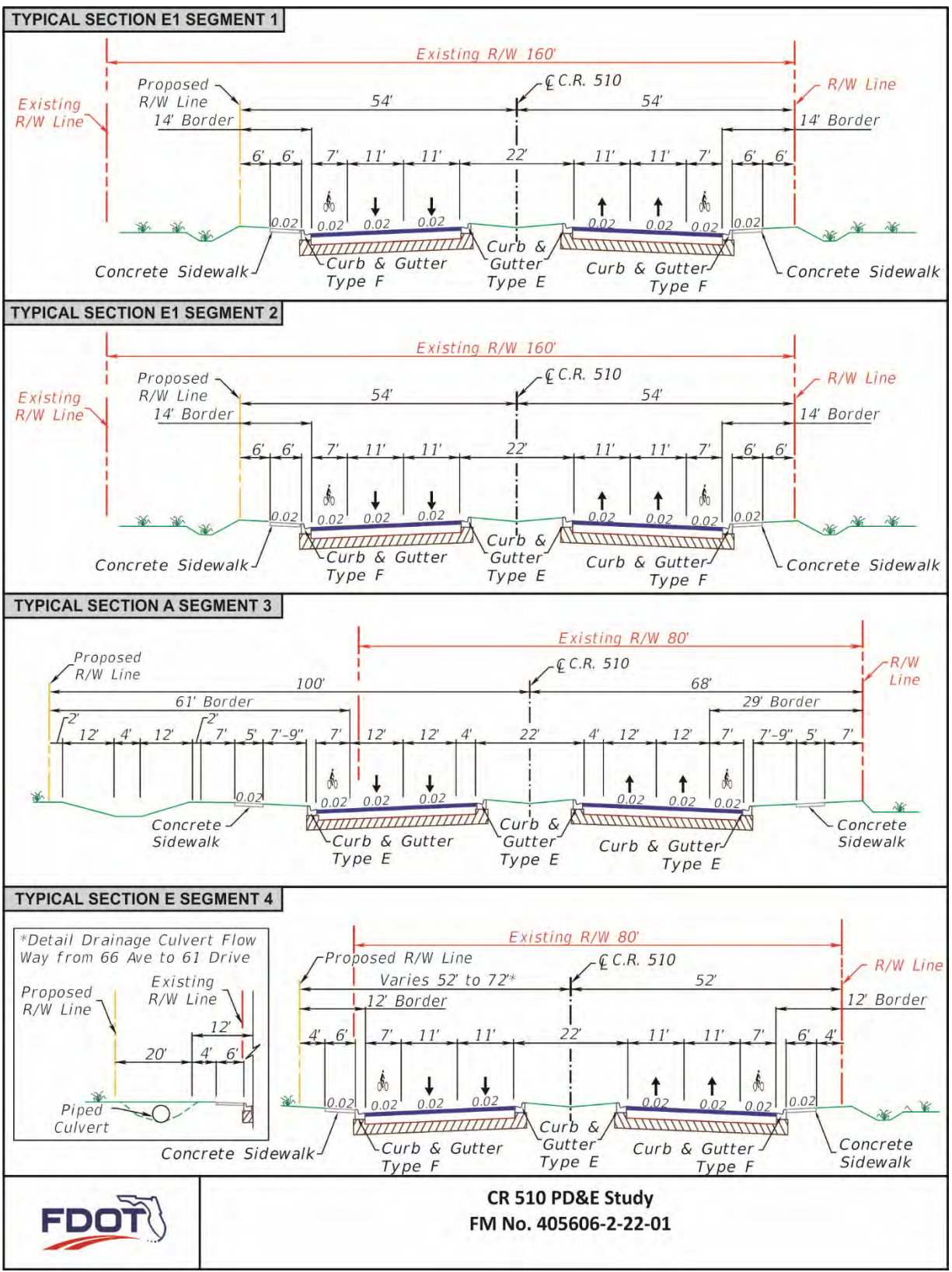


Figure 6 Segment 3 Typical Section with Alignment Features



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Figure 7 Segment 4 Typical Section with Alignment Features



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Figure 8 Typical Section Details

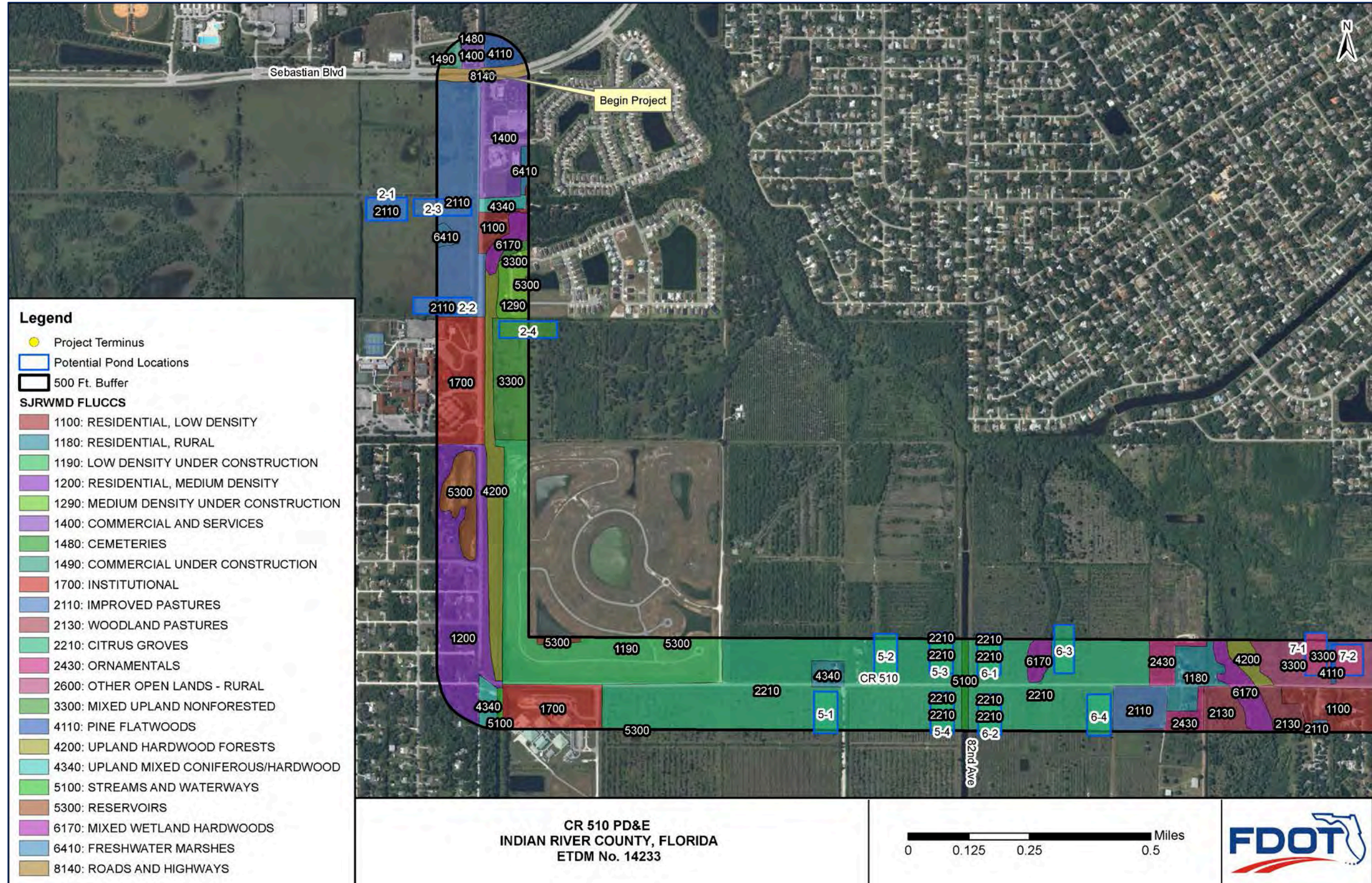


Figure 9 Proposed Stormwater Ponds and Land Use in Western Half of Project Area

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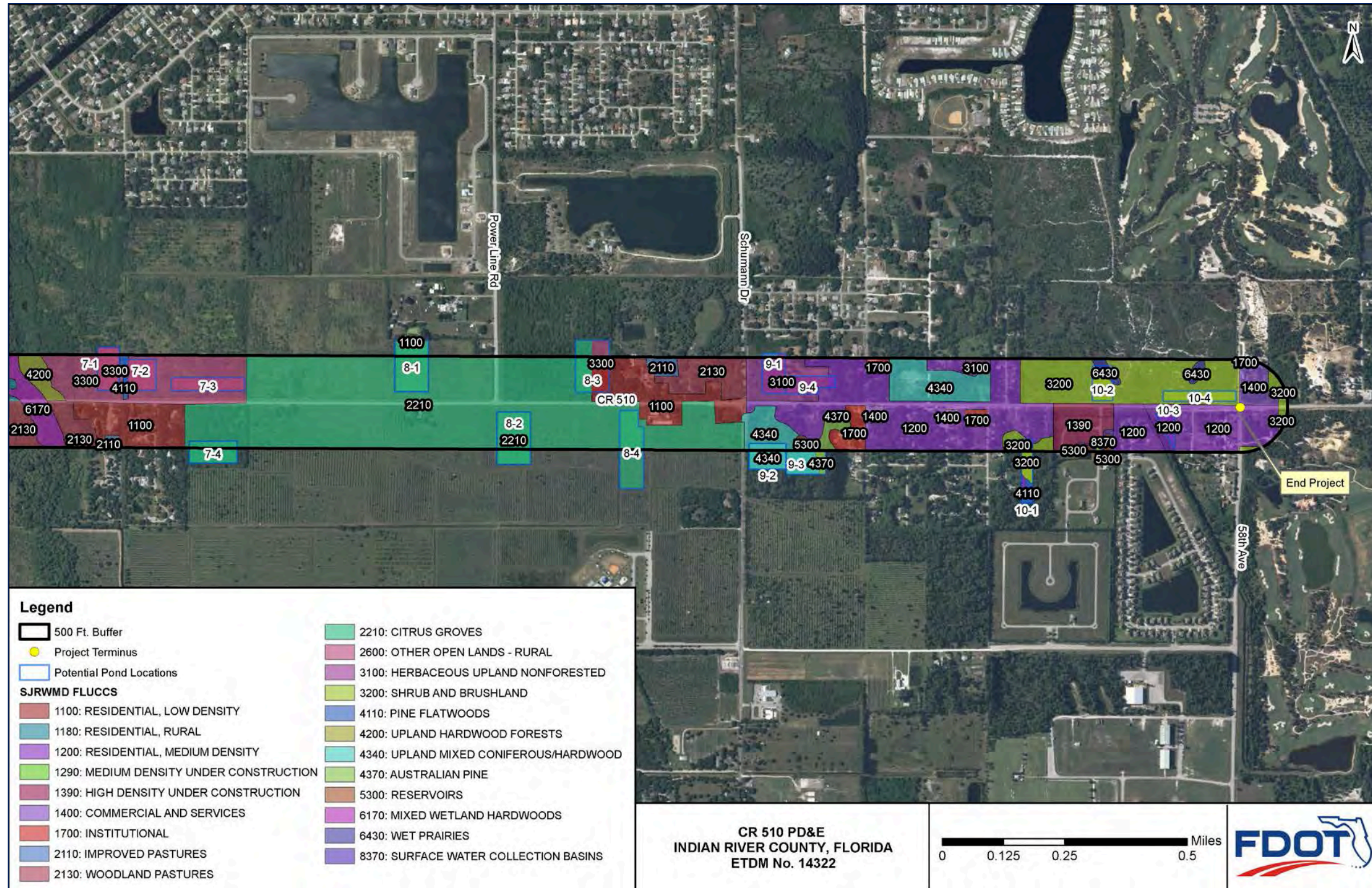


Figure 10 Proposed Land Use in Eastern Half of Project Area

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3

1 **C. PROJECT PLANNING CONSISTENCY**

2 C.R. 510 from C.R. 512/85 Street to 58 Avenue is identified as a cost-feasible project, not currently
3 funded for construction in the Indian River County 2040 LRTP. The project is also identified within
4 the Indian River County MPO FY 2016/2017 -FY 2020/21 TIP. It should additionally be noted that
5 \$4,433,546 is programmed for the PD&E Study and \$4,207,416 is programmed for the right-of-
6 way phase in 2020 within the FY 2016/2017- FY2020/2021 Indian River County MPO TIP. See
7 **Appendix 1** for additional information on planning consistency.

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ATTACHMENT B – ENVIRONMENTAL ANALYSIS

A. SOCIAL & ECONOMIC:

The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 4 - Sociocultural Effects Evaluation (dated June 14, 2017).

1. Social

Potential impacts to the social environment were assessed in the Socio-Cultural Effects (SCE) Evaluation. No community groups were identified that would be impacted by the proposed project. Because the project follows the existing C.R. 510 corridor it is not anticipated to cause any divisions of neighborhoods. No disproportionate impacts to special populations are anticipated. The improvements to mobility and accessibility of surrounding neighborhoods may have a positive effect on the social environment. Public involvement efforts included an alternatives development workshop as well as a public hearing (to be held in summer 2018) in which alternatives are displayed and the public is provided an opportunity to comment. For these reasons, a determination of *Not Significant* is made regarding social impacts.

2. Economic

Potential impacts to the economic environment were assessed in the SCE Evaluation. Because the project is anticipated to support business development and job creation, a determination of *Enhanced* is made regarding economic impacts.

3. Land Use Changes

During this PD&E study, a review of potential impacts to land use patterns, planning consistency and growth trends was conducted. The proposed project will not result in a change in the character or aesthetics of the existing landscape and is not anticipated to significantly impact existing or future land use. The proposed project is included in the Capital Improvements Element of the *Indian River County 2030 Comprehensive Plan* and the Indian River MPO most recently adopted 2040 LRTP. These plans prioritize roadway improvements to maintain traffic levels of service as growth occurs, which the proposed project would help to accomplish. For these reasons, a determination of *Not Significant* is made regarding land use changes.

4. Mobility

The proposed project would add sidewalks and bicycle lanes along this segment of C.R. 510 that are currently do not exist and would help improve accessibility to schools, neighborhoods, and parks. The project also includes provision of a raised median along this segment of CR 510. Adequate median openings are proposed along the entire project thus mobility is not anticipated

1 to be negatively affected by the raised median. Due to the provision of median openings, new
2 bicycle lanes and sidewalks, the project is considered an *Enhancement* to mobility.

3 **5. Aesthetic Effects**

4 The project was also evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 5 –
5 Aesthetic Effects (dated June 14, 2017). No community features associated with aesthetic effects
6 were identified within the 200-foot project buffer. No historic resources determined to be eligible
7 for the National Register of Historic Places were located within the study area. Traffic noise levels
8 are predicted to approach or exceed the FDOT NAC B [66 dB(A)] at six residences. However, Noise
9 abatement is not considered reasonable and feasible for the six impacted residences. The project
10 will provide a raised median as well as a sod buffer behind the sidewalk that allows the
11 opportunity for landscaping and streetscaping improvements. Due to the existing rural nature of
12 the surrounding area and presence of an existing roadway, impacts to aesthetics are anticipated
13 to be minimal and a determination of *Not Significant* was made regarding aesthetics.

14 **6. Relocation Potential**

15 The Recommended Alternative would require the relocation of residents at 5845 85 Street. The
16 proposed project, as presently conceived, will not displace any businesses within the community.
17 There are multiple residential properties that are nearby and available, so it is anticipated that
18 displaced persons would be able to relocate. The Florida Department of Transportation will carry
19 out a Right of Way and Relocation Program in accordance with Florida Statute 339.09 and the
20 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-
21 646 as amended by Public Law 100-17). The brochures that describe in detail the FDOT's
22 Relocation Assistance Program and Right of Way acquisition program are "Residential Relocation
23 Under the Florida Relocation Assistance Program", "Relocation Assistance Business, Farms and
24 Non-profit Organizations", "Sign Relocation Under the Florida Relocation Assistance Program",
25 "Mobile Home Relocation Assistance", and "Relocation Assistance Program Personal Property
26 Moves". All of these brochures are distributed at all public hearings and made available upon
27 request to any interested persons. A public hearing is anticipated to be held in Summer of 2018
28 (**Appendix 2**). For these reasons, a determination of *Not Significant* is made regarding relocation
29 impacts.

30 31 **7. Farmlands**

32 In accordance with the Farmland Protection Policy Act of 1984 and the FDOT PD&E Manual, Part
33 2, Chapter 6 – Farmland (dated June 14, 2017), this project was reviewed for involvement with
34 farmlands. As noted in the Efficient Transportation Decision Making (ETDM) Summary Report,

1 approximately 235.1 acres of Farmland of Unique Importance were identified within the 200-foot
2 project buffer, totaling 45 percent of the project footprint. Coordination regarding impacts to
3 farmland soils was conducted with the Natural Resources Conservation Service (NRCS) and NRCS
4 Form NRCS-CPA-106 was completed (**Appendix 3**). Because a score of 79.3 was calculated, below
5 the threshold of 160, no further action is required and a determination of *Not Significant* was
6 made for impacts to farmlands.

7 **B. CULTURAL:**
8 **1. Section 4(f)**

9 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 7 – Section
10 4(f) Resources (dated June 14, 2017). A review of potential historic and recreational Section 4(f)
11 resources was conducted during the development of the Cultural Resources Assessment Survey
12 (CRAS) and the Section 4(f) Determination of Applicability. No historic resources that are eligible
13 for protection under Section 4(f) were identified. The Ansin Tract, South Prong Preserve and the
14 Wabasso Scrub Conservation Area are considered eligible recreational Section 4(f) resources and
15 are located in the project area. There would be no impacts to the Ansin Tract or the Wabasso
16 Scrub Conservation Area. De minimis impacts totaling 0.93 acres are anticipated for the South
17 Prong Preserve to accommodate additional right-of-way for the proposed widening of CR 510.
18 The only existing facilities on the South Prong Preserve that would be impacted are the entrance
19 drives, which would be replaced. The proposed project would also replace an existing culvert
20 with a bridge in the South Prong Preserve. The project would also install sidewalks and bike lanes
21 along C.R. 510, enhancing accessibility.

22 After preliminary coordination with the Florida Department of Environmental Protection (DEP),
23 Office of Operations, DEP has determined that this project is consistent with the Management
24 Plan and the project will have minimal impacts on the site while enhancing accessibility. Once
25 the design has been advanced and prior to construction, DEP has requested that Indian River
26 County submit a request to modify the Management Plan including modified text and a modified
27 Master Site Plan showing the changes. It should be noted that due to the change in the proposed
28 profile required for the new bridges at both Lateral Canal L and the South Prong Slough, the
29 project may incur additional impacts to the preserve in order to provide maintenance access for
30 the canal as well as to the existing driveways on the property. Further details will be evaluated
31 during the design phase.

32 For these reasons, a determination of *Not Significant* is made regarding Section 4(f) resources.
33 See **Appendix 4** for a history of coordination with the Official with Jurisdiction for the South Prong
34 Preserve and DEP as well as for a copy of the concurrence letter from the State Historic
35 Preservation Officer (SHPO).

1 **2. Historic Sites/Districts**

2 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 8 –
3 Archaeological and Historical Resources (dated June 14, 2017). The historic resources survey
4 resulted in the identification of 37 historic resources including four historic canals (8IR1050,
5 8IR1728–8IR1730), three bridges (8IR1726–8IR1727, 8IR1733), one vault (8IR1117), one cattle
6 pen (8IR1157), and 28 structures (8IR309, 8IR313, 8IR314, 8IR809, 8IR1099, 8IR1100–8IR1103,
7 8IR1114–8IR1116, 8IR1118–8IR1119, 8IR1731, 8IR1742–8IR1754). None of these resources are
8 considered eligible for listing in the National Register of Historic Places. Therefore, a
9 determination of *Not Significant* was made for these resources. A letter of concurrence signed
10 by the SHPO is included in **Appendix 4**.

11 **3. Archaeological Sites**

12 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 8 –
13 Archaeological and Historical Resources (dated June 14, 2017). No newly recorded archaeological
14 sites were identified during the preparation of the CRAS and no cultural material was recovered
15 during field investigations. Three previously recorded archaeological sites: 8IR1142, 8IR1143, and
16 8IR1164 are located within the area of potential effect (APE). 8IR1142 and 8IR1143 were
17 determined to be National Register–ineligible in 2005 and 8IR1164 was determined ineligible in
18 2006. For these reasons, a determination of *Not Significant* was made regarding impacts to
19 archaeological sites. A letter of concurrence signed by the SHPO is included in **Appendix 4**.

20 **4. Recreation Areas**

21 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 7 – Section
22 4(f) Resources (dated June 14, 2017). There are three parks or other recreational facilities within
23 the study area. They are the Wabasso Scrub Conservation Area, the South Prong Preserve/Saint
24 Sebastian River Greenway, and the Ansin Tract (**Figure 11**). North County Regional Park and St.
25 Sebastian River Preserve State Park are located approximately one-half mile from the projects
26 western terminus, outside the study area, and would not be impacted. No direct impacts are
27 anticipated for the Ansin Tract or the Wabasso Scrub Conservation Area. Direct impacts are
28 anticipated to the South Prong Preserve. Potential impacts to recreational Section 4(f) resources
29 are summarized in **Table 3**.

30 De minimis impacts are anticipated to the South Prong Preserve where additional right-of-way
31 will be necessary to accommodate additional travel lanes. Impacts to the South Prong Preserve
32 under the recommended alternative would be relatively minor in size (0.93 acres out of a total
33 of 37.26 acres) and would occur immediately adjacent to existing right-of-way for C.R. 510. The

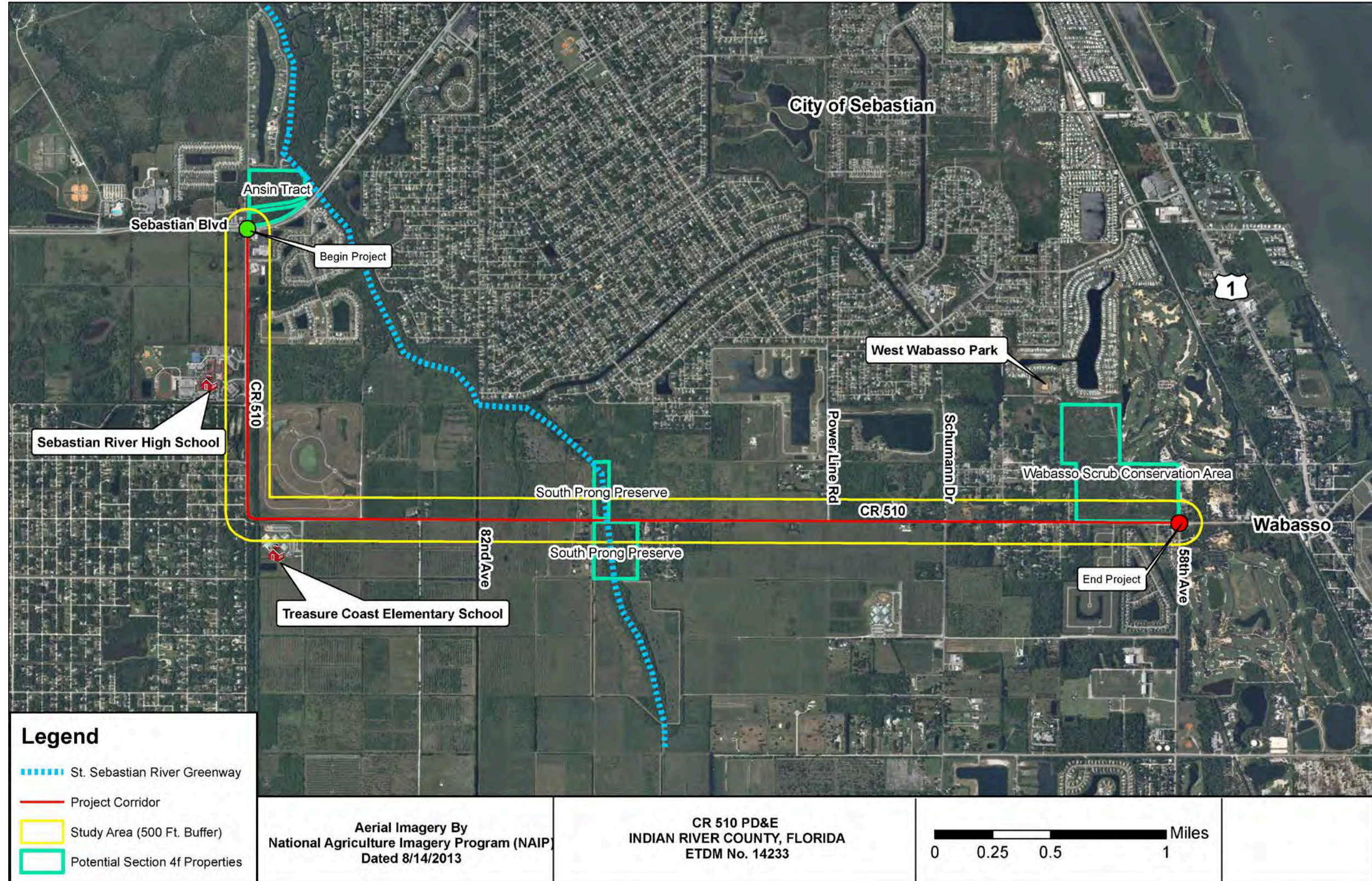


Figure 11 Potential Recreational Section 4(f) Resources in Study Area

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1 **Table 3 Recreational Section 4(f) Resource Impact Summary**

Property Name	Directly Impacted by Project?	Size of Property (acres)	Area of Impacts (acres)	Anticipated Impacts	Property Uses
South Prong Preserve	Yes	37.26	0.93	New right-of-way, wetland fill, replace culvert with bridge, install sidewalks	Recreation, Conservation, Water Quality
Ansin Tract	No	28.63	0	None	Recreation, Conservation
Wabasso Scrub Conservation Area	No	111.13	0	None	Conservation, Recreation

2
 3 only existing facilities on the South Prong Preserve that would be impacted are the entrance
 4 drives, which would be replaced.

5 The project would enhance recreational access to the South Prong Preserve by linking it to
 6 schools and residential areas with sidewalks and bicycle lanes. The bridge also enhances the
 7 natural environment by removing a barrier to wildlife movement and increasing the area stream
 8 bed. Therefore, a determination of *Not Significant* is made for recreation.

9 **B. NATURAL:**

10 Impacts to the natural environment are summarized in **Table 4** and described below.

11
 12 **1. Wetlands & Other Surface Waters**

13 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 9 –
 14 Wetlands and OSW (dated June 14, 2017). A Natural Resources Evaluation (NRE) was completed
 15 for this project and describes potential impacts to wetlands and Other Surface Waters (OSW).
 16 Five types of wetlands or OSWs are mapped by Saint Johns River Water Management District in
 17 the project area and were confirmed during field investigations. They are Streams and
 18 Waterways (Florida Land Use Cover and Forms Classification System [FLUCCS] 5100), Reservoirs
 19 (FLUCCS 5300), Mixed Wetland Hardwoods (FLUCCS 6170), Freshwater Marshes (FLUCCS 6410),
 20 and Wet Prairies (FLUCCS 6430). Roadside ditches and swales occur along C.R. 510 and adjacent
 21 lands and are classified as OSWs. Three major canals drain the project area and are also
 22 considered OSWs.

1 The “No-Build” and TSM&O alternatives would have no impacts on wetlands. However, the “No-
 2 Build” and TSM&O alternatives would not address the needs of the proposed project. The

3 **Table 4. Alternatives Evaluation Matrix for Natural Resources**

Alternative	Direct Impacts to Jurisdictional Wetlands (Acres)	Direct Impacts to Stream/Waterways and Reservoirs (Acres)	Direct Impacts to Wood Stork SFH (Acres)	Direct Impacts to Upland Habitats (Acres)
No Build	-	-	-	-
TSM&O	-	-	-	-
Recommended Alternative	0.65	0.54	2.983	23.08
Pond 2-1	-	-	-	2.55
Pond 2-2	-	-	-	2.53
Pond 5-3	-	-	-	2.58
Pond 5-4	-	-	0.0000229	2.65
Pond 6-1	-	-	0.0000229	2.55
Pond 6-2	-	-	0.0000229	2.63
Pond 7-1	-	-	-	2.53
Pond 7-4	-	-	-	2.83
Pond 8-1	-	-	-	4.56
Pond 8-2	-	-	-	4.7
Pond 9-2	-	-	-	2.53
Pond 9-3	-	-	-	2.5
Pond 10-1	-	-	-	1.71
Pond 10-3	-	-	-	-

4
 5 recommended alternative is a build alternative and impacts were avoided and minimized by
 6 locating the project on an existing transportation corridor. None of the proposed pond sites
 7 would impact wetlands. Under the recommended alternative 0.65 acres of direct impacts to
 8 Mixed Wetland Hardwoods (FLUCCS 6170) are anticipated. Potential long-term indirect wetland
 9 impacts include reduced cover of vegetation due to shading beneath the bridge at the south
 10 prong of the Saint Sebastian River and associated reduction of wetland functions for water quality
 11 and wildlife at that location.

1 Roadside ditches and swales occur along C.R. 510 and adjacent lands and are classified as OSW.
2 Furrows occur in agricultural fields adjacent to C.R. 510. These furrows are not considered
3 jurisdictional wetlands by the US Army Corps of Engineers (USACE) because their creation is
4 classified as normal farming activity (Section 404(f)(1)(A)). The furrows are classified as OSW by
5 the State of Florida (62-340.600 Florida Administrative Code [FAC]). Many of the OSWs that were
6 cut into uplands contain exotic or invasive plant species and so are relatively low quality. Brazilian
7 pepper is found throughout the project area and grows in dense stands in some areas, often
8 adjacent to wetlands/OSW.

9 Direct wetland impacts occur in Segment 3, to two distinct wetland Assessment Areas (AAs), AA5
10 and AA7. There would be no direct impacts to jurisdictional wetlands in Segments 1, 2, or 4. AA5
11 was assigned a Uniform Mitigation Assessment Method (UMAM) score of 0.43. Direct impacts to
12 AA5 under the Recommended Alternative are anticipated to be approximately 0.1 acre, with a
13 UMAM functional loss score of -0.00129 for the impact assessment area. AA7 was assigned a
14 UMAM score of 0.76. Direct impacts to AA7 under the Recommended Alternative are anticipated
15 be approximately 0.55 acres, with a UMAM functional loss score of -0.0417 for the impact
16 assessment area.

17 Impacts to wetlands were sequentially avoided and then minimized by following the existing C.R.
18 510 right-of-way as much as possible and by limiting the width of right-of-way along wetlands at
19 the South Prong Slough. Minimization measures, which may include reductions in the typical
20 section, use of retaining walls to minimize roadway embankments and similar measures will be
21 considered during the project design phase. FDOT Standards Specifications for Road and Bridge
22 Construction will be implemented to further minimize impacts. Because at least part of the
23 project area drains into an Outstanding Florida Water (OFW), the Indian River Lagoon, the
24 stormwater management system is being planned to achieve 50 percent greater treatment of
25 water than under standard specifications, reducing impacts to downstream wetlands. Wetland
26 impacts were also minimized by replacing the culverts at the south prong of the Saint Sebastian
27 River with a bridge. The bridge is anticipated to facilitate movement of water and wildlife and
28 create more natural conditions that will be an improvement over existing conditions.
29 Unavoidable impacts to wetlands will be mitigated pursuant to Section 373.4137, F.S., to satisfy
30 all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. §1344. Wetland
31 mitigation will follow the UMAM to gauge the function and value of the impacted wetlands as
32 well as mitigation properties. Mitigation could potentially be achieved through use of the Senate
33 Bill program in cooperation with the Saint Johns River Water Management District (SJRWMD), or
34 through use of a Mitigation Bank. The Basin 22 Mitigation Bank is located within the Central
35 Indian River Lagoon drainage basin, its service area includes the proposed project, and the bank
36 contains approximately 109.58 acres of freshwater herbaceous and freshwater forested state

1 wetland mitigation credits. Federal wetland mitigation credits are available from the Mary A
2 Ranch wetland mitigation bank. For these reasons, a determination of *Not Significant* is made
3 regarding wetlands and surface waters.

4 **2. Aquatic Preserves and Outstanding Florida Waters**

5 In accordance with Chapter 18-20, Florida Administrative Code, and the FDOT PD&E Manual, Part
6 2, Chapter 10 – Aquatic Preserves and Outstanding Florida Waters (dated June 14, 2017), the
7 project corridor was evaluated for the potential presence of aquatic preserves. No aquatic
8 preserves are located within the project area.

9 The south prong of the Saint Sebastian River crosses the project corridor at the South Prong
10 Preserve. Stormwater run-off within the project will ultimately drain into the central Indian River
11 Lagoon via man-made canals and conveyances leading to the Indian River County North Canal.
12 This canal and the Saint Sebastian River discharge water into a portion of the Indian River Lagoon
13 that is a designated OFW. The stormwater management system is being planned to achieve 50
14 percent greater treatment of water than under standard specifications, reducing impacts to the
15 downstream OFW. A determination of *Not Significant* is made regarding Aquatic Preserves and
16 OFW.

17 **3. Water Quality and Quantity**

18 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 11 – Water
19 Quality and Water Quantity (dated June 14, 2017). A Water Quality Impact Evaluation was
20 developed for this project and a copy of the Water Quality Impact Evaluation Checklist is included
21 in **Appendix 5**. No Sole Source Aquifer as identified by the U.S. Environmental Protection Agency
22 (USEPA) occurs in the project area. All necessary precautions and Best Management Practices
23 (BMPs) pertaining to construction will be followed to prevent adverse impacts to the Floridan
24 Aquifer. Potential impacts from erosion during construction will be minimized through
25 implementation of erosion control measures and BMPs during construction. Because at least part
26 of the project area drains into an OFW, the Indian River Lagoon, the stormwater management
27 system is being planned to achieve 50 percent greater treatment of water than under standard
28 specifications, reducing impacts to water quality. A determination of *Not Significant* was made
29 regarding impacts to water quality.

30 **4. Wild and Scenic Rivers**

31 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 12 – Wild
32 and Scenic Rivers (dated June 14, 2017). The Saint Sebastian River (Sebastian Creek) is listed in
33 the National Park Service’s Nationwide Rivers Inventory. After coordination with the National

1 Park Service it has been determined that the project will not directly affect, invade or
2 (unreasonably) diminish the outstanding river values of Saint Sebastian River. No wild and scenic
3 rivers are located within the project area, so a determination of *No Involvement* was made for
4 this project.

5 **5. Floodplains**

6 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 13 -
7 Floodplains (dated June 14, 2017). A review of the Flood Insurance Rate Map (FIRM) published
8 by Federal Emergency Management Agency (FEMA), indicates that the study area is located in
9 Special Flood Zones A, AE, X and X500. The portion of the study area located in Zone A has a 1%
10 annual chance of being flooded by the base flood (100-year storm) with no base flood elevation
11 determined. Areas located in Zone AE also have a 1% annual chance of being flooded by the 100-
12 year storm with base flood elevations determined. Areas identified in Zones X & X500 are
13 estimated to have less than 1 foot or no flooding at all during the 100-year storm.

14 The northbound/southbound portion of C.R. 510, between C.R. 512 and just north of 86 Street,
15 is located in Zone AE with base elevations ranging from 18.5 to 20.0-feet North America Vertical
16 Datum (NAVD) (20.0 to 21.5-feet National Geodetic Vertical Datum [NGVD]). The
17 eastbound/westbound portion of C.R. 510, located between 90 Avenue and 58 Avenue, is mainly
18 located in Zone X. A negligible portion of the eastbound/westbound corridor is located in Zones
19 A and AE. The portion of C.R. 510 located in Zone AE has a base flood elevation of 15.5-feet NAVD
20 (17.0-feet NGVD).

21 The modifications to drainage structures included in this project will result in an insignificant
22 change in their capacity to carry floodwater. This change will cause minimal increases in flood
23 heights and flood limits. These minimal increases will not result in any significant adverse impacts
24 on the natural and beneficial floodplain values or any significant change in flood risks or damage.
25 There will not be a significant change in the potential for interruption or termination of
26 emergency service or emergency evacuation routes.

27 *Although this project involves work within the horizontal limits of the 100-year floodplain, no work*
28 *is being performed below the 100-year flood elevation and, as a result, this project does not*
29 *encroach upon the base floodplain.*

30 This project will affect several cross drains due to the widening of the CR-510 roadway. One
31 culvert is recommended for extension and three culverts are recommended for replacement. All
32 existing bridges are proposed to be replaced. Bridge No. 12-880047 at Lateral Canal D will be
33 replaced with a culvert, bridges No. 12-880063 and 12-880044 will be replaced with new bridges.

1 Additionally, an existing culvert at the South Prong of the Saint Sebastian River will be replaced
2 with a bridge.

3 The Saint Sebastian River is referred to by the National Parks Service's Nationwide Rivers
4 Inventory as Sebastian Creek. It runs from river-mile zero at the confluence with the Indian River
5 to river-mile ten, at Wabasso Road Bridge south of C.R. 512. It is not a designated Wild and Scenic
6 River or a study river. The south prong of the Saint Sebastian River crosses the project area at the
7 South Prong Preserve. Riparian vegetation borders the river in most of the project area and is
8 predominantly surrounded by current and former agricultural land uses. Some of that land,
9 particularly to the east of the river, is now abandoned from agricultural use and contains dense
10 shrubs with high levels of exotic vegetation. The river corridor in the project area is not used for
11 navigation but is used for outdoor recreation such as birdwatching and hiking. Outstandingly
12 Remarkable Values identified by the National Parks Services Include scenery, recreation, fish and
13 wildlife. Under the recommended alternative there would be an improvement to the
14 recreational, fish and wildlife values of the river because a culvert will be replaced with a bridge.
15 That bridge will facilitate the natural flow of water and enhance the movement of wildlife and
16 recreational users. There are no significant anticipated impacts to scenery or cultural values of
17 the river. Water quality will be protected by providing stormwater ponds and achieving a 50
18 percent greater treatment threshold than under standard road conditions due to outfall into
19 Outstanding Florida Waters. The National Parks Service responded through the ETDM process
20 indicating no involvement with recreation areas. Alternatives were designed to minimize harm,
21 including using an existing roadway corridor (C.R. 510), minimizing the project footprint near the
22 river, and replacing a culver with a bridge. Unavoidable impacts to wetlands will be mitigated. It
23 is not anticipated that the proposed project will preclude designation as a Wild and Scenic River.
24 Therefore, it has been determined that potential impacts to floodplains are *Not Significant*.

25 **6. Coastal Zone Consistency**

26 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 14 - Coastal
27 Zone Consistency (dated June 14, 2017). This project was reviewed for consistency with the
28 Florida Coastal Zone Management Plan. Because the proposed project occurs inland,
29 approximately five miles from the nearest coastline, and does not cross any navigable waters, it
30 was determined that the proposed project would have *No Involvement* with Coastal Zone
31 Consistency.

32 **7. Coastal Barrier Resources**

33 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 15 - Coastal
34 Barrier Resources (dated June 14, 2017). This project was reviewed for involvement with coastal

1 barrier resources. During the ETDM process the National Marine Fisheries Service (NMFS)
2 assigned a degree of effect of “none” to coastal and marine resources as a result of this project.
3 The project occurs inland, approximately five miles from the coast, and no coastal barrier
4 resources occur in the project area; therefore, a determination of *No Involvement* was made for
5 Coastal Barrier Resources.

6 **8. Wildlife and Habitat**

7 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 16 –
8 Protected Species and Habitat (dated June 14, 2017). A NRE Report that describes habitats and
9 potential impacts to wildlife was prepared as part of this PD&E study. Two federally listed species,
10 Audubon’s crested caracara (*Polyborus plancus audubonii*)(caracara) and wood stork (*Mycteria*
11 *americana*) were observed in the project area. The state-listed Florida sandhill crane (*Grus*
12 *canadensis pratensis*) and gopher tortoise (*Gopherus polyphemus*)(also a candidate for Federal
13 listing) were observed during field surveys of the project area. Florida scrub-jay (*Aphelocoma*
14 *coerulescens*) and gopher tortoise were previously documented to inhabit the Wabasso Scrub
15 Conservation Area, at the eastern terminus of the project.

16 Nest surveys for Audubon’s crested caracara were conducted by FDOT in part of the project area
17 in 2016. As part of this PD&E study, nest surveys following US Fish and Wildlife Service (USFWS)
18 protocols were conducted in 2017 covering potential caracara nesting habitat throughout the
19 project area. During 2016 and 2017, adult and juvenile caracaras were observed in Segments 1
20 and 2 and sightings clustered around the Publix shopping center (in the southeast corner of the
21 intersection of C.R. 510 and C.R. 512) as well as around the northwest corner of Sebastian River
22 High School. No caracara nests were located during surveys. Because no caracara nests were
23 detected in two years of surveys, because direct impacts to the most likely potential core nesting
24 territory are not anticipated, and because impacts to the potential breeding territory would be
25 in previously disturbed areas and would be to such a small proportion of the potential available
26 habitat, a determination of *may affect, not likely to adversely affect* is made for caracara.

27 In addition to caracara, Federally listed species that may be affected but would not be adversely
28 affected by the proposed project include eastern diamondback rattlesnake (*Drymarchon corais*
29 *couperi*)(candidate for Federal listing), eastern indigo snake (*Crotalus adamanteus*), and wood
30 stork. State listed species that may be affected but would not be adversely affected by the
31 proposed project are burrowing owl (*Athene cunicularia*), Florida pine snake (*Pituophis*
32 *melanoleucus mugitus*), Florida sandhill crane, gopher tortoise (also a candidate for Federal
33 listing), little blue heron (*Egretta caerulea*), roseate spoonbill (*Platalea ajaja*), Sherman’s fox
34 squirrel (*Sciurus niger shermani*), Southeastern American kestrel (*Falco sparverius paulus*), and
35 tricolored heron (*Egretta tricolor*). The *Eastern Indigo Snake Programmatic Effect Determination*

1 Key (USFWS 2017) and the *USFWS Wood Stork Effect Determination Key for South Florida* were
2 followed in evaluating impacts to those species.

3 The Wabasso Scrub Conservation Area is known to contain Florida scrub-jays and part of it was
4 previously used for mitigation for unavoidable impacts to Florida scrub-jay habitat from a
5 previous project. According to data from Indian River County, one Florida scrub-jay territory
6 borders C.R. 510 and Florida scrub-jays occasionally cross C.R. 510 to forage. The recommended
7 alternative would avoid direct impacts to scrub habitat on the Wabasso Scrub Conservation Area.
8 The recommended alternative is anticipated to indirectly impact up to three Florida scrub-jays
9 per year from an increased chance of vehicle collisions on C.R. 510; therefore, a determination
10 of likely to adversely affect Florida scrub-jays was made. Formal Section 7 Consultation occurred
11 with USFWS and the resulting Biological Opinion is included as **Appendix 6**.

12 Potential loss of wildlife habitat was minimized by locating the project on an existing corridor and
13 avoiding impacts to canals, wetlands, and scrub habitat to the maximum extent practicable.
14 Proposed stormwater pond sites were evaluated to minimize impacts to environmental
15 resources to the maximum extent practicable, and all unavoidable impacts from pond sites will
16 be mitigated. Water quality degradation as a result of stormwater runoff will be minimized by
17 following standard BMPs for roadway design.

18 The “No-Build” and Transportation Systems Management and Operations alternatives would
19 have no impacts on listed species, wetlands, or Essential Fish Habitat (EFH). However, the “No-
20 Build” and TSM&O alternatives would not address the needs of the proposed project and would
21 not improve existing conditions at the south prong of the Saint Sebastian River because there
22 would be no replacement of the culvert underneath C.R. 510 with a bridge. The recommended
23 alternative is a build alternative and impacts were avoided and minimized by locating the project
24 on an existing transportation corridor. Under the recommended alternative 0.65 acres of direct
25 impacts to Mixed Wetland Hardwoods (FLUCCS 6170) are anticipated. These Mixed Wetland
26 Hardwoods are also considered to be EFH for white shrimp. Under the recommended alternative
27 2.983 acres of direct impacts to wood stork Suitable Foraging Habitat (SFH) are anticipated. The
28 replacement of a culvert under C.R. 510 at the south prong of the Saint Sebastian River with a
29 bridge will improve existing conditions by enhancing the flow of water and movement of wildlife.

30 Potential long-term indirect wetland impacts include reduced cover of vegetation due to shading
31 beneath the bridge at the south prong of the Saint Sebastian River and associated reduction of
32 wetland functions for water quality and wildlife at that location. Impacts to wildlife are partially
33 offset by the potential for improved movement of wildlife upstream of the culvert under C.R. 510
34 at the south prong of the Saint Sebastian River. Additionally, runoff from the roadway will be
35 treated before being discharged into canals or waterways and will receive 50 percent greater

1 treatment due to outfall into the Indian River Lagoon, an Outstanding Florida Water. No
2 significant cumulative impacts to wildlife, wetlands, or EFH are anticipated as a result of this
3 project.

4 **Table 5** presents effects determinations for listed species that have some potential to occur in
5 the project corridor. A USFWS Biological Opinion is provided in **Appendix 6**. A determination of
6 *Not Significant* is anticipated regarding impacts to wildlife and habitat; however, formal Section
7 7 consultation with USFWS is ongoing regarding potential impacts to Florida scrub-jay.

8 **9. Essential Fish Habitat**

9 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 17 –
10 Essential Fish Habitat (dated June 14, 2017). During the ETDM process, the NMFS provided
11 comments stating that EFH occurs within the project area. Specifically, NMFS identified the South
12 Prong Slough of the Saint Sebastian River as EFH because the South Atlantic Fishery Management
13 Council designated forested palustrine wetlands as EFH for juvenile white shrimp.

14
15 Habitat definitions and EFH information for white shrimp were adopted from the Fishery
16 Management Plan for the Shrimp Fishery of the South Atlantic Region (NMFS 1993), and
17 subsequent amendments. Analysis of existing data and field inspections revealed that EFH for
18 white shrimp is present along the south prong of the Saint Sebastian River as well as a connected
19 drainage. The SJRWMD maps both these areas as Mixed Wetland Hardwoods (FLUCCS 6170) and
20 the USFWS National Wetlands Inventory (2016) maps these areas as freshwater forested/shrub
21 wetlands-palustrine.

22
23 The “No-Build” and TSM&O Alternatives would have no significant impacts on EFH; however, the
24 “No-Build” and TSM&O alternatives would not address the needs of the proposed project.
25 Additionally, the “No-Build” and TSM&O Alternatives would not realize the potential benefits of
26 replacing the culvert at the south prong of the Saint Sebastian River, which is EFH for white
27 shrimp, with a bridge. Replacement of the culvert is anticipated to remove a barrier to migration
28 of invertebrates and other wildlife and restore the site to more natural conditions and flow
29 regimes.

30 The extent of potential impacts was assessed by mapping EFH in the project area and overlaying
31 the footprint of the recommended alternative and pond sites. Potential direct impacts to white
32 shrimp EFH would total 0.65 acres under the recommended alternative. Potential indirect
33 impacts could include displacement of white shrimp during removal of the culvert or bridge
34 construction as well as shading from the new bridge. The replacement of the culvert with a bridge
35

1

Table 5 Listed Species Effect Determinations

Common Name	Scientific Name	Effect Determination (Recommended Alternative)
Federally Listed Species		
Audubon’s crested caracara	<i>Polyborus plancus audubonii</i>	MANLAA
Eastern diamondback rattlesnake	<i>Crotalus adamanteus</i>	MANLAA
Eastern indigo snake	<i>Drymarchon corais couperi</i>	MANLAA
Florida scrub-Jay	<i>Aphelocoma coerulescens</i>	LAA
Gopher tortoise	<i>Gopherus polyphemus</i>	MANLAA
Wood stork	<i>Mycteria americana</i>	MANLAA
State Listed Species		
Burrowing owl	<i>Athene cunicularia</i>	MANLAA
Florida pine snake	<i>Pituophis melanoleucus mugitus</i>	MANLAA
Florida sandhill crane	<i>Grus canadensis pratensis</i>	MANLAA
Little blue heron	<i>Egretta caerulea</i>	MANLAA
Roseate spoonbill	<i>Platalea ajaja</i>	MANLAA
Sherman’s fox squirrel	<i>Sciurus niger shermani</i>	MANLAA
Southeastern American kestrel	<i>Falco sparverius paulus</i>	MANLAA
Tricolored heron	<i>Egretta tricolor</i>	MANLAA

2

MANLAA= May affect, not likely to adversely affect; LAA=Likely to Adversely Affect

3

is an improvement over existing conditions because it enhances the flow of water and removes a barrier to movement of wildlife, including white shrimp.

4

5

6

Impacts to EFH were sequentially avoided and then minimized by limiting the width of right-of-way along the south prong of the Saint Sebastian River. Minimization measures, which may include reductions in the typical section, use of retaining walls to minimize roadway embankments and similar measures will be considered during the project design phase. Because at least part of the project area drains into an OFW, the Indian River Lagoon, the stormwater

7

8

9

10

1 management system is being planned to achieve 50 percent greater treatment of water than
2 under standard specifications, reducing impacts to downstream EFH.

3
4 An EFH Assessment has been prepared and consultation has been completed in accordance with
5 the Magnuson-Stevens Fishery Conservation and Management Act. It has been determined that
6 this project will not have adverse effects to Essential Fish Habitat. A letter of concurrence from
7 NMFS is provided in **Appendix 7**. Should any changes occur during the design and permitting
8 process that affect the consultation, re-initiation of the consultation process will be coordinated
9 with NMFS. A determination of *Not Significant* is made regarding EFH.

10

11 **D. PHYSICAL:**

12 **1. Highway Traffic Noise**

13 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 18 –
14 Highway Traffic Noise (dated June 14, 2017). As part of this PD&E Study, a traffic noise study was
15 conducted and it was determined that noise levels under the recommended alternative at the
16 modeled residences are expected to range from approximately 46.0 to 69.7 dB(A) during the
17 project’s design year. Traffic noise levels are predicted to approach or exceed the FDOT Noise
18 Abatement Criteria (NAC) B [66 dB(A)] at six residences within the study area. These residences
19 are represented in the Noise Study Report by SFH16, SFH19, SFH34, SFH36, SFH60, and SFH68. In
20 accordance with FHWA requirements, noise abatement was considered for all noise sensitive
21 sites where design year traffic noise levels were predicted to approach or exceed the NAC.

22 Receptors SFH16, SFH19, SFH60 and SFH68 are discrete locations. No other residences are
23 predicted to be impacted in the area of the discrete receptors. Noise abatement was considered
24 for the receptors SFH34 and SFH36 and analyzed as a common noise environment. These two
25 impacted receptors are 275 feet apart and are separated by both 59 Avenue and a driveway for
26 SFH36. That driveway is the only access point for the property represented by the SFH36
27 receptor. Since 59 Avenue and the driveway cannot be closed, three noise barrier segments were
28 analyzed. Results from the barrier analysis show that none of the concepts meet FDOT
29 reasonableness and feasibility criteria. In accordance with FDOT policy requiring that at least two
30 (2) impacted receptors achieve a 5 dB(A) reduction or greater in order for a noise barrier to be
31 considered feasible, there are no apparent solutions available to mitigate the noise impacts along
32 this project corridor. A determination of *Not Significant* was made regarding impacts from noise.

33 **2. Air Quality**

34 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 19 – Air
35 Quality (dated June 14, 2017). The project’s No Build and recommended build alternative were

1 assessed for potential air quality impacts at the project level using the FDOT’s Carbon Monoxide
2 (CO) Florida 2012 screening model. The results of the CO screening analysis (**Appendix 5**) indicate
3 the proposed project is not expected to cause any exceedances of the one-hour or eight-hour
4 National Ambient Air Quality Standard (NAAQS) for CO. Thus, the project passes the CO screening
5 analysis, and air quality impacts resulting from the proposed project are not expected.

6 Construction activities for the proposed action may potentially have short-term air quality
7 impacts within the immediate vicinity of the project. Construction activities may generate
8 temporary increases in air pollutant emissions in the form of dust from earthwork and unpaved
9 roads and smoke from open burning. Such emissions and potential impacts will be minimized by
10 adherence to all applicable State and local regulations and to the FDOT *Standard Specifications*
11 *for Road and Bridge Construction*. Therefore, a determination of *Not Significant* was made
12 regarding impacts to air quality.

13 **3. Contamination**

14 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 20 -
15 Contamination (dated June 14, 2017). A Contamination Screening Evaluation Report (CSER) was
16 developed to evaluate the potential presence of contaminated sites. Based on Florida
17 Department of Environmental Protection (FDEP) database research, no National Priorities List
18 (NPL) Superfund Sites were documented within one mile of the project corridor. A total of ten
19 potentially contaminated sites (**Table 6, Figure 12**) were identified in the vicinity of the build
20 alternatives and five of those sites were assigned a risk rating of “Low”. Five sites, Sunoco #0613-
21 2641, Shark Mart Mobil, Ryall Groves Inc., the Bethel Service Station, and current or former
22 agricultural areas were assigned a risk rating of “Medium”. Proposed pond 2-2 is adjacent to Site
23 4, Sebastian River High School, which has a risk rating of Low. All of the pond sites occur on former
24 agricultural lands that are assigned a “Medium” risk rating. The sites with a “Medium” or “High”
25 risk ratings are recommended for additional assessment, such as possible soil and groundwater
26 testing, if right-of-way acquisition or subsurface work (including construction of any structures
27 or stormwater ponds) is proposed on or adjacent to those sites. A determination of *Not*
28 *Significant* was made regarding contamination.

29

1

Table 6 Contamination Site Summary

Site #	Facility Name	Segment	Address	Facility ID (FDEP/RCRA)	Databases	Concern	Distance of Contamination from Project Corridor	Risk Rating
1	Sunoco #0613-2641	1	9020 C.R. 512	8509326	FDEP OCULUS	Petroleum products	Adjacent	Medium
2	Shark Mart Mobil	1	9490 90 Ave.	9602448	FDEP OCULUS	Petroleum products	Adjacent	Medium
3	Publix Super Market #1035	1	1451 Sebastian Blvd #200	9810584	FDEP OCULUS	Fuel	Adjacent	Low
4	Sebastian River High School	1	9001 90 Ave.	110006393125	RCRA	Biomedical Waste	Adjacent	Low
5	Yukon Land Corporation	2	8790 85 St.	None	None	Above Ground Storage Tanks	Co-located	Low
6	Treasure Coast Elementary	2	8955 85 St.	110064754573	RCRA	Biomedical Waste	Adjacent	Low
7	Stough's Grove Service	3	7675 85 Street	8520277	FDEP OCULUS	Gasoline	Adjacent	Low
8	Ryall Groves Inc.	3	6815 85 St.	None	None	Above Ground Storage Tanks	Adjacent	Medium
9	Bethel Service Station	4	6375 85 Street	9100095	FDEP OCULUS	Petroleum products	Adjacent	Medium
10	Former or Current Agricultural Areas	All	No discreet address	None	None	Herbicide, Pesticide	Co-located and Adjacent	Medium

2

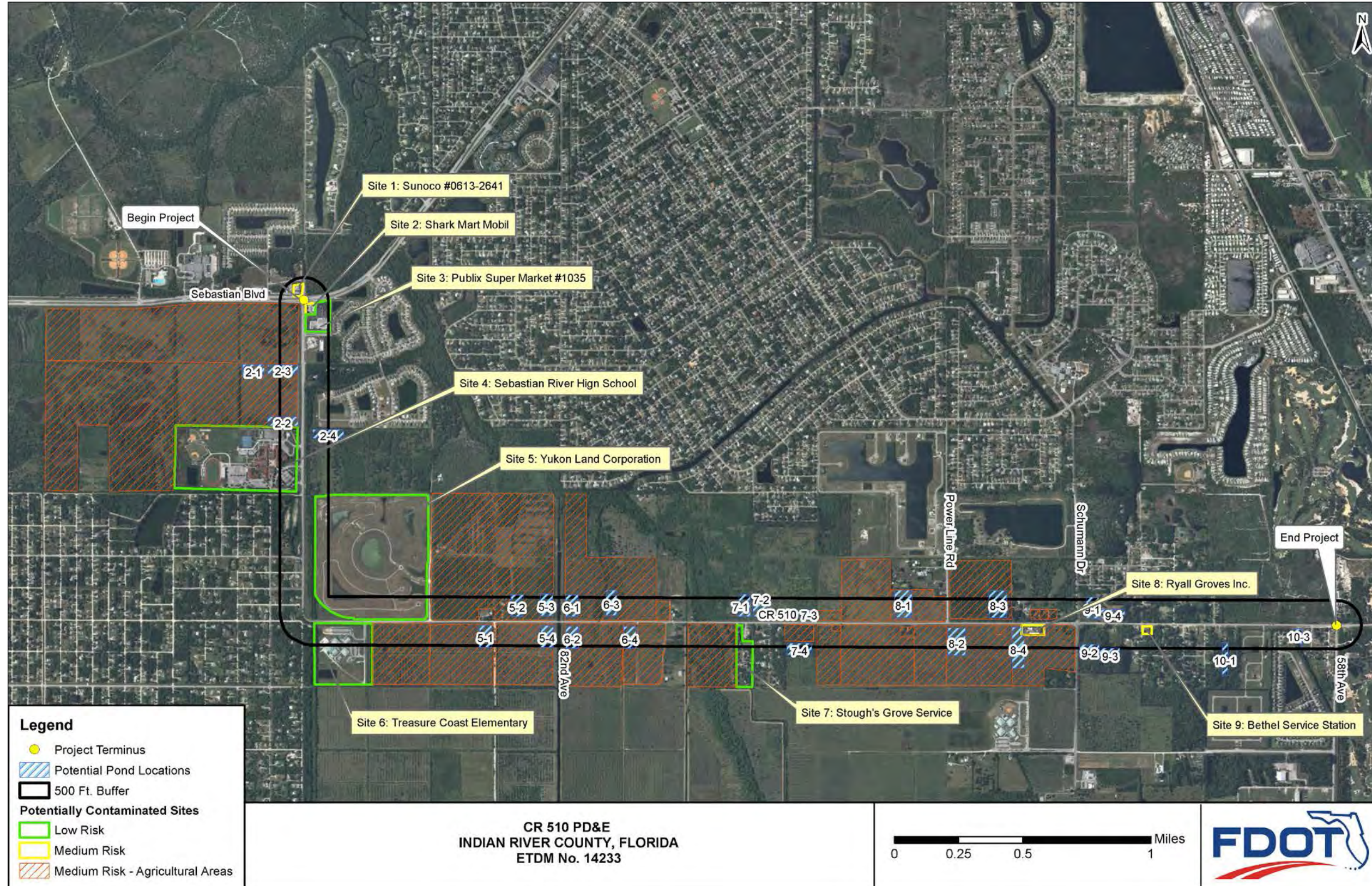


Figure 12 Potentially Contaminated Site Locations

1
 2

1 **4. Utilities and Railroads**

2 The project was evaluated in accordance with the FDOT PD&E Manual Part 2, Chapter 21 –
3 Utilities and Railroads (dated June 14, 2017). To determine the extent of utility adjustments from
4 project improvements, local utility companies with known facilities within the project limits were
5 contacted and requested to submit the location of their existing and planned facilities. Refer to
6 **Table 7** for a list of utilities present within the project limits. It should be noted that this
7 information is not to be used for construction activities. Please contact each utility company prior
8 to digging.

9 There is an extensive amount of overhead utilities within the study area that may be impacted
10 by the proposed improvements. Most overhead utilities that run along the south of CR 510 from
11 the curve to 66 Avenue then shift north from 66 Avenue to 58 Avenue have a high likelihood that
12 these utility poles will require relocation.

13 It should be noted that the transmission lines that are located east of Powerline Road to 66
14 Avenue on the south of CR 510 will be impacted due to the alignment shift from north to center
15 caused by tying into the proposed roundabout intersection at 66 Avenue.

16 As previously stated, there is a gas line that runs along the west of CR 510 from CR 512 to the
17 curve then south after the curve to 62 Avenue, afterwards the gas line shifts to the north side of
18 CR 510 until 58 Avenue where it crosses and continues along the west side of 58 Avenue. This
19 gas line utility may be impacted by the recommended alternative and will require relocation.

20 There are various Indian River County utilities, including a 16-inch water main, 12" PVC line and
21 an inch reuse water main line, these utilities have possible conflicts caused by the recommended
22 alternative. There are also various telephone and fiber optic utilities that have a high likelihood
23 of impacted caused by the recommended alternative along CR 510 east of the curve to 58
24 Avenue.

25 Through continued coordination with utility companies and relocation of utilities as necessary to
26 preserve their function the project is anticipated to have No Significant impacts on utilities or
27 railroads.

28 **5. Construction**

29 Construction activities for the proposed project will have short-term air, noise, vibration, water
30 quality, traffic flow, and visual impacts for those residents and travelers within the immediate
31 vicinity of the project. The air quality effect will be temporary and will primarily be in the form

32

1

Table 7 Utilities

Utility Company	Facility Type	Remarks
Comcast Cable Mr. Tony Springsteel 1495 NW Britt Rd Stuart, FL 34944	CATV & Fiber	<u>Overhead Facilities</u> CR 510: ° Runs on the south east of 79 Terrace (STA 171 to STA 228) to 70 Avenue ° Runs on the north from 1400 feet west of 66 Avenue to end of project limit (STA 240 to STA 308) ° Crosses at STA 171, STA 268, STA 275, STA 277, STA 281, STA 303, STA 305, STA 308 <u>Underground Facilities</u> CR 510: ° Runs on the south from 70 Avenue to 700 feet west of 66 Avenue (STA 228 to STA 248) ° Runs on the north from 700 feet west of 66 Avenue to 66 Avenue (STA 248 to STA 255) ° Crosses at STA 248
City Gas Company of Florida Mr. Ron Muller 4180 S US Hwy 1 Rockledge, FL 32955	Gas 6" PE Gas	<u>Underground Facilities</u> CR 512: ° Runs on the south from 400' west of CR 510 to CR 510 ° Crosses at STA 272 CR 510: ° Runs on the west from CR 512 to 400' south of CR 512 (STA 30 to STA 34) ° Crosses at STA 31
	Gas 2" PE Gas	<u>Underground Facilities</u> CR 510: ° Runs on the west from 400' south of CR 512 to Stony Point Drive (STA 34 to STA 37) ° Crosses at STA 36
Florida Public Utilities Mr. Dale M Butcher 209 N Sapodilla Ave West Palm Beach, FL 33401	Gas	<u>Underground Facilities</u> CR 510: ° Runs on the west from CR 512 to Curve south of 87 Street ° Runs south from curve to 62 Avenue ° Runs on the north from 62 Avenue to 58 Avenue ° Crosses at 62 Avenue and 58 Avenue
Florida Power & Light Transmission Mr. George J Beck, P.E. 15430 Endeavor Drive Jupiter, FL 33408	Electric - Transmission Line/ 138K TX Line	<u>Overhead Facilities</u> CR 510: ° Runs south from 70 Avenue to 66 Avenue (STA 228 to STA 255)

Table 6 cont.

<p>Florida Power & Light Mr. Rob Morris 4406 SW Cargo Way Palm City FL 34990</p>	<p>Electric</p>	<p><u>Overhead Facilities</u> CR 510: ° Runs on the west from CR 512 to Curve south of 87 Street ° Runs south from Curve to 66 Avenue ° Runs along the north from 66 Avenue to end of project limits ° Crosses at CR 512, Stony Point Drive, 89 Street, 86 Avenue, 84 Avenue, 500' east of 79 Terrace, 800' east of 66 Avenue, 64 Avenue 63 Court, 63 Avenue, 62 Avenue, Paladin Square, 59 Avenue, 58 Court, and 58 Avenue ° Runs south along 88 Avenue ° Runs north and south along 84 Avenue ° Runs south along 79 Terrace ° Runs north and south along 64 Avenue</p> <p><u>Underground Facilities</u> CR 510: ° Runs north and south along 66 Avenue ° Runs along the south from 58 Avenue to end of project limit ° Crosses at Paladin Square and 58 Avenue ° Runs south on the west and east side of Paladin Square</p>
<p>Indian River County Water and Sewer Mr. Kevin Osthus 1801 27 Street Vero Beach, FL 32960</p>	<p>Water</p>	<p><u>Underground Facilities</u> CR 510: ° Runs along the east/north from CR 510 to east of 75 Court ° Runs along the south from east of 75 Ct to end of project limit ° Crosses south of Hammerhead Way, 87 St, 86 St, 85 St, Treasure Coast Elementary School, 70 Ave, 66 Ave, 64 Ave, 63 Ave, 61 Drive, and 58 Ave</p>
<p>Indian River County Public Works Traffic Engineering Mr. Marc Webb 1801 27 Street Vero Beach, FL 32960</p>	<p>Traffic Signalization - Fiber optic/2" conduit with fiber optic cable</p>	<p><u>Underground Facilities</u> CR 510: ° Runs along the west from CR 512 to Shark Blvd ° Runs along the east from Mako Way to Curve south of 87 Street to east of Treasure Coast Elementary ° Runs along the north and south from 66 Avenue to end of project limits ° Crosses at Mako Way, east of curve south of 87 Street, 66 Avenue CR 512: ° Runs along the south of CR 512</p>
<p>Johns Island Water Management Mr. Sam Nelson 1 Turtle Beach Road, Vero Beach, FL 32963</p>	<p>Water</p>	<p>No facilities located within the project area</p>
<p>AT&T/Distribution Mr. Mark Gutierrez 330 Okeechobee Road Fort Pierce, FL 34947</p>	<p>Telephone/ Fiber Cable</p>	<p><u>Overhead Facilities</u> CR 510: ° Runs along the west/south from CR 512 to approximately 100' west of 70 Avenue (STA 30 to STA 227) ° Runs along the north from 66 Avenue to end of project (STA 259 to STA 315) ° Crosses at Stony Point Dr, STA 47, STA 48, 84 Avenue, 70 Avenue, approximately 500' east of 66 Avenue (STA 259)</p> <p><u>Underground Facilities</u> CR 510: ° Runs along the south from approximately 100' east of 70 Avenue to approximately 500' east of 66 Avenue (STA 227 to STA 259) ° Crosses at 70 Avenue</p>

1 of emissions from diesel-powered construction equipment and dust from embankment and haul
2 road areas. Air pollution associated with the creation of airborne particles will be effectively
3 controlled through the use of watering or the application of other controlled materials in
4 accordance with the FDOT's latest edition of *Standard Specifications for Road and Bridge*
5 *Construction*.

6 During construction of the project, there is the potential for noise impacts to be substantially
7 greater than those resulting from normal traffic operations because heavy equipment is typically
8 used to build roadways. In addition, construction activities may result in vibration impacts.
9 Therefore, early identification of potential noise/vibration sensitive sites along the project
10 corridor is important in minimizing noise and vibration impacts. The project corridor does include
11 residential, institutional, and commercial areas that may be affected by noise and vibration
12 associated with construction activities. Construction noise and vibration impacts to these sites
13 will be minimized by adherence to the controls listed in the latest edition of the FDOT's *Standard*
14 *Specifications for Road and Bridge Construction*. Adherence to local construction noise and/or
15 construction vibration ordinances by the contractor will also be required, where applicable.

16 Water quality effects resulting from erosion and sedimentation will be controlled in accordance
17 with the FDOT's latest edition of *Standard Specifications for Road and Bridge Construction* and
18 through the use of BMPs. Maintenance of traffic and sequence of construction will be planned
19 and scheduled to minimize traffic delays throughout the project. Signs will be used to provide
20 notice of access to local businesses and other pertinent information to the traveling public. All
21 provisions of the FDOT's latest edition of *Standard Specifications for Road and Bridge*
22 *Construction* will be followed, so a determination was made that *No Significant* impacts from
23 construction will occur as a result of this project.

24 **6. Bicycles and Pedestrians**

25 There are no existing bicycle facilities present along C.R. 510 within the study limits. However,
26 since there are three schools (e.g. – Sebastian River High School, Treasure Coast Elementary
27 School and Redlands Christian Migrant Association Children's House) abutting the facility, the
28 likelihood of bicyclists use is high especially during school arrival and dismissal periods. The only
29 existing continuous sidewalk facility within the project area is generally located along the west
30 right-of-way line and extends from the C.R. 512 intersection (at the beginning of the project) to
31 the Sebastian River High School southern property limits near Hammerhead Way for a total
32 distance of approximately 0.7 mile. There are also some discontinuous sidewalk segments along
33 the east right-of-way line extending from just south of the C.R. 512 intersection to just south of
34 Stony Point Drive. In addition, with the expected increase in future population growth, additional
35 conflicts between vehicles and pedestrian and/or bicyclists sharing the roadway facilities are

1 likely. In this context, the proposed improvements along C.R. 510 must comply with the
2 “Complete Streets” concept. Complete Streets is a transportation policy and design approach
3 that requires streets to be planned, designed, operated, and maintained to enable safe,
4 convenient and comfortable travel and access for users of all ages and abilities regardless of their
5 mode of transportation. Complete Streets allow for safe travel by those walking, bicycling, driving
6 automobiles, riding public transportation, or delivering goods.

7 Under the recommended alternative, bicycle lanes and pavement markings have been designed
8 along both the southbound/eastbound and westbound/northbound lanes for the entire length
9 of the project corridor. Continuous sidewalks are also being provided along both sides of C.R.
10 510. Additionally, proper pedestrian crossings will be provided across all cross streets. The
11 proposed design of the CR 510 bridge over the Lateral Canal L provides for the accommodation
12 of a multi-use recreational trail below the east bridge approach.

13 GoLine is the Indian River County public transportation system with bus service on 14 fixed routes
14 throughout the County. Bus service operates weekdays from 6:00 a.m. through 7:00 p.m. and
15 Saturdays from 9:00 a.m. until 3:00 p.m. Route 9 generally traverses most of the C.R. 510 project
16 corridor providing one hour headways and bus stops at the C.R. 512 intersection, Sebastian River
17 High School, Vero Lake Estates (87 Street), 64 Avenue, 62 Avenue and 59 Avenue. Route 10
18 traverses the northern part of the project area from the C.R. 512 intersection to Sebastian River
19 High School and 87 Street before turning west towards Fellsmere. A determination of *Not*
20 *Significant* was made regarding bicycles and pedestrians.

21 **7. Navigation**

22 Through the ETDM process, the USACE and the U.S. Coast Guard determined that there is no
23 project involvement with navigation. No U.S. Coast Guard navigation permit is required and no
24 further coordination with the U.S. Coast Guard is necessary. Therefore, a determination of *No*
25 *Involvement* was made regarding impacts to navigation.

26

27 **E. ANTICIPATED PERMITS:**

28 Permits that are anticipated to be necessary during subsequent project phases are described
29 below. **Appendix 8** provides a project commitment tracker.

30

31 St. Johns River Water Management District

32 Under the recommended alternative 0.65 acres of direct impacts to Mixed Wetland Hardwoods
33 (FLUCCS 6170) are anticipated. A SJRWMD Environmental Resource Permit (ERP) will be

1 necessary and a SJRWMD Dewatering Permit is anticipated for any dewatering operations during
2 construction. A SJRWMD right-of-way occupancy permit is required for work in canals

3

4 US Army Corps of Engineers

5 A USACE Dredge and Fill Permit is anticipated for unavoidable impacts to wetlands. A USACE
6 standard permit will be required for impacts totaling more than one-half acre. A USACE
7 Nationwide Permit 14 (Linear Transportation Permit) would be required if impacts to
8 jurisdictional wetlands totaling less than one half acre were anticipated.

9 Environmental Protection Agency (EPA)

10 The EPA requires permits for stormwater discharge to Waters of the United States in association
11 with the National Pollutant Discharge Elimination System (NPDES) and the Clean Water Act. The
12 application requirements include a Stormwater Pollution Prevention Plan indicating both
13 structural and non-structural controls to be implemented. Because the project area drains into
14 an OFW, the Indian River Lagoon, the stormwater management system in applicable areas will
15 be designed to achieve 50 percent greater treatment of water than under standard
16 specifications, reducing impacts to downstream habitats.

17 Indian River Farm Water Control District (IRFWCD)

18 An environmental and right-of-way occupancy permit will be required from the IRFWCD for
19 discharges and work in canals.

20 Sebastian River Improvement District

21 An environmental and right-of-way occupancy permit will be required from the Sebastian River
22 Improvement District for discharges and work in canals.

23

1

APPENDIX 1- PLANNING CONSISTENCY

2

2017

PRIORITY PROJECTS REPORT

INDIAN RIVER COUNTY METROPOLITAN PLANNING ORGANIZATION



*This document was produced in cooperation with
the Florida Department of Transportation and
the Federal Highway Administration*

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**INDIAN RIVER COUNTY
METROPOLITAN PLANNING ORGANIZATION
2017 PRIORITY PROJECTS REPORT**

INTRODUCTION

In September of each year, MPOs in Florida are required to submit priority projects lists to the Florida Department of Transportation (FDOT). The September priority projects submittal date allows FDOT time to incorporate MPO priorities in a new draft tentative Five Year Work Program, transmit the draft tentative work program to MPOs in November, present the work program to MPOs in early December, and hold public hearings in mid-December. The Five Year Work Program is then submitted to the Legislature in January, sixty days prior to the start of the legislative session.

This report contains the Indian River County MPO's 2017 priority projects lists. Those priority lists are used by FDOT as the basis for developing its annual five year work program. The projects included in this report will be considered for funding by FDOT, primarily in the fifth year (FY 2022/23) of its FY 2018/19-2022/23 Five Year Work Program.

As it did in 2016, the MPO has developed lists for priority highway, congestion management process, transportation alternatives (formerly enhancement), transit, and aviation projects. With respect to highway projects, the MPO divided the highway priorities list into three categories, roughly mirroring three major available funding sources: Strategic Intermodal System (SIS) projects; Regional Highway projects; and Other Highway projects.

PRIORITY HIGHWAY PROJECTS

This section explains the specific methodology utilized to prepare the MPO's 2017 Priority Highway Projects List. In this section, the inputs and data used to develop and rank the projects are explained, and a brief explanation of each project and its rank is also provided.

The primary input used in developing the 2017 list of priority highway projects was the MPO's adopted 2040 Long Range Transportation Plan (LRTP). Besides the 2040 LRTP, routine system monitoring and discussions with staff from other MPOs, local governments, and FDOT were also used as inputs in developing the list.

As in past years, the LRTP (Table A-9 of the Appendix) was used as the primary basis in developing the 2017 priority highway projects list. The reasons for this include:

- federal and state regulations require projects funded through FDOT to be consistent with the MPO's adopted LRTP;

- the LRTP's recommended roadway improvement projects are consistent with adopted local government comprehensive plans, including the Transportation Element of the County's adopted 2030 Comprehensive Plan;
- the improvements listed in the MPO's adopted LRTP were analyzed for need using sound transportation planning and engineering practices; and
- the MPO's LRTP was adopted after considerable involvement of citizens, technical experts, and elected officials.

In addition to using the LRTP, MPO staff reviewed the status of the projects listed in the MPO's 2016 priority highway projects list and compared those projects to FDOT's current (FY 2018/19 - 2021/22) adopted Five Year Work Program. Finally, meetings and discussions with municipal, County, and FDOT staff provided additional information utilized in preparing the 2017 list. In those meetings, local government staff familiar with localized capacity and safety problems provided additional information regarding needed projects, while FDOT staff provided input regarding potential projects based on the results and recommendations of numerous FDOT corridor studies undertaken within the County.

In order to adopt a priority list that more closely approximates the major classifications of the roadway network, the MPO has divided its highway priority list into three categories: SIS Highways, Regional Highways and Other Highways.

SIS Highways

In Indian River County, the Strategic Intermodal System consists of I-95, the Florida Turnpike, and SR 60 West of I-95 to Osceola County. Generally, projects on the SIS serve an interstate and inter-regional function and carry high volumes of traffic and goods across long distances. Through its five year work program, FDOT allocates funding specifically for Strategic Intermodal System (SIS) projects based on various factors, including local input into the SIS funding prioritization process. This year's top SIS project in Indian River County remains the Oslo Road Interchange at I-95.

Regional Highways

Regional roadways serve a function of connecting major population or activity concentrations that are separated by some distance. With the Growth Management Legislation that was signed into law in July of 2006, regional roadways became more important, because that legislation established a new grant program, known as the Transportation Regional Incentive Program (TRIP), for use on roadways determined to be regional in nature.

In order to qualify for TRIP funding, the MPO engaged in a number of actions. Those included establishing a new regional entity, the Treasure Coast Transportation Council (TCTC), with Martin and St. Lucie Counties; developing a regional roadway network map; and developing a set of interim criteria for prioritizing TRIP project candidates on a regional basis. In 2008, the interim prioritization criteria were applied to the list of regional projects identified in the Long Range Plans of the individual counties. The results of that prioritization,

which were subsequently adopted by the TCTC and all three MPOs, are contained in Table A-10 of this report.

According to state regulations, a TRIP funded project phase may not begin until the TRIP funds have been allocated by FDOT. In addition, the project must be at least 50% funded with local money. Unlike every other priority list in this document, the Regional priorities list is not adopted solely by the MPO. After approval of Indian River County's regional priority candidates by the MPO, the candidate projects from all three counties were ranked and approved by the TCTC. According to FDOT, funds will be awarded to eligible priority projects that are construction ready. The MPO is once again requesting funding for last year's top Regional Highway priority, the 66th Avenue widening project.

Other Highways

Non-SIS roadways for which the MPO is seeking federal and state funding are included on the Other Highways priority list. This year's top priority is the widening of County Road 510 (CR 512 to 58th Avenue).

The complete list of highway priorities is included as Tables A-1 through A-3 in the Appendix. That list is consistent with the 2040 LRTP interim year project sets, as well as local comprehensive plans, MPO plans, and FDOT's work program. A summary description and ranking of each project is presented below.

2017 List of Priority Highway Projects – SIS

Oslo Road Interchange at Interstate 95 – The project was included in the MPO's 2040 LRTP – Cost Feasible Plan based on anticipated future travel demand in the Oslo Road corridor. Not only will the project help meet demand, but the project will also assist in generating commercial/industrial activity. Finally, this interchange will enhance hurricane evacuation capabilities in the county. Right-of-way and Construction funding is requested for this project.

2017 List of Candidate TRIP Grant Priority Highway Projects – Regional

66th Avenue from 49th Street to CR 510 - This project is the second phase of a project that involves four laning 66th Avenue from CR 510 to SR 60. This roadway serves as the primary connector between Sebastian and the SR 60 commercial area near the Indian River Mall, one of the County's largest employment locations. Construction funding is requested for the unbuilt portions of the project.

2017 List of Priority Highway Projects – Other

- 1. CR 510, four laning from CR 512 to 58th Avenue** - This project is included as one of the highest priority projects in the MPO's 2040 LRTP. The CR 510 corridor is rapidly approaching capacity and will experience LOS problems in the near future. The Project

Development and Environmental (PD&E) phase is underway and right-of-way/P.E./construction funds are programmed in 2019/2022.

2. **CR 510, four laning from 58th Avenue to US 1** - This project is included as one of the highest priority projects in the MPO's 2040 LRTP. The CR 510 corridor is rapidly approaching capacity and will experience LOS problems in the near future.
3. **Oslo Road, four laning from 58th Avenue to I-95** - This project is a continuation of two recently completed widening projects (the four-laning of Oslo Road from 27th Avenue to 43rd Avenue and the four-laning of Oslo Road from 43rd Avenue to 58th Avenue). The widening of Oslo Road from 58th Avenue to I-95, in conjunction with a proposed I-95 interchange at Oslo Road, will alleviate anticipated congestion and capacity issues on Oslo Road. Right-of-way/construction funds are programmed in 2018/21
4. **US 1, six laning from 53rd Street to CR 510** - The widening of US 1 from 53rd Street to CR 510 addresses a future capacity deficiency. Right-of-way funds are programmed in 2022.
5. **82nd Avenue, two laning from 69th Street to CR 510** - The MPO's 2040 LRTP includes a project to construct 82nd Avenue as a two lane facility from 69th Street to CR 510. Asphalt millings have been installed on the section of the project between 26th Street and 69th Street, which may forestall the need for paving this section. Right-of-way funds are programmed in 2019/20.
6. **82nd Avenue, two laning from 26th Street to 69th Street** - The MPO's 2040 LRTP includes a project to construct 82nd Avenue as a two lane facility from 26th Street to 69th Street. Asphalt millings have been installed on the section of the project between 26th Street and 69th Street, which may forestall the need for paving that section. P.E. funds are programmed in 2018.
7. **Aviation Boulevard at US 1, Intersection Improvement** – The intersection of Aviation Boulevard and US 1 is identified as a project to be implemented in 2026-2030 on the MPO's Adopted 2040 Long Range Transportation plan – Cost Feasible Plan. The intersection is currently failing or nearly failing during peak periods and in peak directions. PD&E funds are requested for the project.

Conclusion

As structured, the MPO's 2017 List of Priority Highway Projects identifies only those projects for which state and/or federal funding is requested. As indicated in the MPO's 2040 LRTP, many of the plan's cost-feasible roadway improvements will be funded with local revenues and constructed by the County or local municipalities. Therefore, the priority highway projects list includes only those roadway projects which require state or federal funds and which are multi-million dollar, multi-year projects.

PRIORITY CONGESTION MANAGEMENT PROCESS (CMP) PROJECTS

Beginning with the 1998 Priority Projects Report, MPO staff utilized the MPO’s Congestion Management System (CMS) plan to identify and prioritize improvement strategies for the county’s most congested corridors. In 2004, the MPO prepared a CMS Plan Major Update. With the 2006 passage of SAFETEA-LU, the new federal highway authorization bill, the Congestion Management System was renamed the “Congestion Management Process,” or CMP.

In 2017, staff performed a CMP analysis in order to identify candidate CMP projects. Through that process, staff identified the most congested corridors in the county based on existing and vested trips. Next, staff eliminated those corridors which are programmed in the short term for widening. Finally, staff eliminated those corridors which had already been evaluated through the CMP process.

Once the initial screening process was complete, MPO staff evaluated the most congested corridors and subjected them to a second screening process to identify appropriate CMP strategies. As a result, the top CMP priority corridors for 2017 are:

Corridor	Strategy
1.90% of the most congested corridors in County	Traffic monitoring system technology update
2.US Highway 1 at 8 th Street	Construct southbound right-hand turn lane extension on US 1 at 8 th Street
3.Highway A1A from the S. City of Vero Beach Limit to Fred Turk Drive	Lengthen right-hand turn lanes on south bound Highway A1A at SR 60 (Barber Bridge) and 17 th Street

Although there is no specific allocation of FDOT funding reserved exclusively for CMP projects, MPOs have the option to program CMP projects for funding with federal highway money. Since MPO formula highway funding has been significantly curtailed in recent years, the MPO will not request the allocation of funds that would otherwise be used for MPO highway priorities, but will instead seek alternative funding sources (such as County Incentive Grant, Intermodal, and ITS funding) for the construction of CMP projects.

PRIORITY TRANSPORTATION ALTERNATIVES

Funded with ten percent of Surface Transportation Program allocations, the Transportation Alternatives program focuses on improvements that complement the transportation system. In Florida, TA funds are allocated to each FDOT district, which then determines how these funds will be distributed among the MPOs in its jurisdiction. For the 2017 TA funding cycle, FDOT District Four will allocate approximately \$464,034.92 to the Indian River County MPO. These funds will likely become available in FY 20/21.

The 2017 Transportation Alternatives project prioritization process began in January 2017. At that time, the MPO notified eligible TA project sponsors and other interested groups of the opportunity to apply for TA funds. For the 2017 project cycle, one TA project application was submitted to MPO staff for the construction of a sidewalk on the east side of South Broadway Street between CR 512 and Massachusetts Avenue in the City of Fellsmere. At this time, the subject project’s eligibility for funding is under review by FDOT staff.

PRIORITY TRANSIT PROJECTS

Because of the way that transit projects are funded, transit priorities were not included in the MPO's priority projects list until the year 2000. Prior to that time, the MPO had not considered it necessary to develop transit priority lists, because transit capital and transit operations are funded by FTA and because a separate grant application is submitted directly to FTA. In the last several years, however, the MPO has obtained funds from a variety of sources, including discretionary state grants. In order to apply for many federal and state grant programs, proposed projects must be included on an adopted MPO priority list. In addition, fixed route transit travel has gained in popularity in recent years, which has made it necessary to prioritize available resources in order to meet demand. For those reasons, FDOT encouraged the MPO to develop a transit priority list as a mechanism to implement the MPO’s transit plans.

For 2017, the primary source of projects in the transit priority list was the MPO’s Transit Development Plan (TDP) - Major Update. Since a major update of the TDP in 2013, the county has been implementing a number of TDP strategies, including new service, new facilities, and adjustments to existing routes. In fact, the county has implemented several of the MPO’s top priorities in recent years. Those priorities include expanding service hours on weekdays, providing hourly service to the IRSC Main Campus in Ft. Pierce, and establishing an employee shuttle on the barrier island. Below are the MPO’s 2017 Priority Transit Projects:

PRIORITY TRANSIT PROJECTS

Ranking	Project	Funding Source
1	Construct North County Transit Hub	County
2	Expand M–F Operating Hours (6am - 8pm)	State/Federal
3	Expand Saturday Operating Hours (8am – 6pm)	State/Federal
4	Construct Shelters and Benches	Federal

The expansion of operating hours will require additional state and/or federal funding including a local match, while the construction of shelters and benches is an ongoing effort requiring no new funding source.

PRIORITY AIRPORT PROJECTS

In Indian River County, there are two publicly owned general aviation airports, each of which qualifies for state and federal funding. Separate priority project lists have been established for each airport. This report includes a Vero Beach Airport priority projects list and a Sebastian Airport priority projects list.

To develop the airport priority projects list, MPO staff reviewed the current JACIPs (Joint Automated Capital Improvement Programs) for each of the two public airports in the county, identified which projects in the JACIPs were unfunded, and coordinated with respective airport staffs. The following airport priority projects were identified for 2017.

Vero Beach Airport Priority Projects

1. Rehabilitate North Apron (2018)
2. Rehabilitate T-Hangars (2018)
3. Construct Hangar (2018)
4. Fleet Vehicle Purchase (2018)
5. Terminal Building Expansion (2019)
6. Firefighting Vehicle Purchase (2019)
7. Rehabilitate Center Apron (2019)
8. Rehabilitate Southwest Apron (2020)
9. Construct Vehicle Parking Lot (2021)
10. Rehabilitate Taxiway B (2021)
11. Rehabilitate Runway 12R/30L (2022)
12. Construct North Apron Extension (2022)

Sebastian Airport Priority Projects

1. Install new Automated Weather Observation System (AWOS)
2. Construct Shade Hangars
3. Taxiway expansion (2018/2019)
4. Construct Hangar “D” (2019/2020)

Conclusion

The five components of the Indian River County MPO’s 2017 Priority Projects Report—the priority highway projects list, the priority CMP projects list, the priority Transportation Alternatives project list, the priority transit projects list, and the priority airport projects list—will be reviewed by the MPO Technical Advisory Committee (TAC), the MPO Citizens Advisory Committee (CAC), and by the MPO Board. Opportunities for public comment are available at the TAC, CAC, and MPO meetings. Before making decisions regarding the five priority projects lists, the MPO and its advisory committees will consider public input.

APPENDIX Summary Tables and Reference Material

Table A-1 Priority Highway Projects, SIS Highways

Project Rank				Roadway	Location		Length (miles)	Improvement Type	Jurisdiction	FDOT FY 2017/18 – 2021/22 Five Year Work Program		Funding Source Requested
2017	2016	2015	2014		From	To				FI/FM #	Programmed Improvements (\$000s)	
1	1	1	1	Oslo Road Interchange at Interstate 95	-	-	n/a	Add interchange	Federal	4130482	Construction funded in 2024	State/Federal

Table A-2 Priority Highway Projects, Other Highways

Project Rank				Roadway	Location		Length (miles)	Improvement Type	Jurisdiction	FDOT FY 2017/18 – 2021/22 Five Year Work Program		Funding Source Requested
2017	2016	2015	2014		From	To				FI/FM #	Programmed Improvements (\$000s)	
1	1	1	1	CR 510	58 th Avenue	CR 512	4.2	Widen to 4 lanes	County	N/A	ROW/P.E./Const. \$17,318 (2019/22)	State/Federal
2	n/a	n/a	n/a	CR 510	US 1	58 th Avenue	.6	Widen to 4 lanes	County	N/A	N/A	State/Federal
3	3	3	3	Oslo Road	I-95	58 th Avenue	3.0	Widening to four lane divided	County	N/A	ROW/Const. \$7,285 (2018/21)	State/Federal
4	4	4	4	US 1	53 rd Street	CR 510	4.0	Widen to 6 lane divided highway	County	N/A	ROW \$20,000 2022	State/Federal
5	2	2	2	82 nd Avenue	69 th Street	CR 510	2.0	New two lanes	County	N/A	ROW 1,589 (2019/20)	State/Federal
6	5	5	5	82 nd Avenue	26 th Street	69 th Street	3.0	New 2 lanes	County	N/A	P.E. \$760 2018	State/Federal
7	n/a	n/a	n/a	US 1	Intersection at Aviation Boulevard		n/a	Intersection Improvement	City	N/A	N/A	State/Federal

Table A-3 Priority Regional Highways

Project Rank				Project	Location		Length (miles)	Improvement Type	Jurisdiction	FDOT FY 2017/18 – 2021/22 Five Year Work Program		Funding Source Requested
2017	2016	2015	2014		From	To				FI/FM #	Programmed Improvements (\$000s)	
1	1	1	1	66th Avenue	CR 510	49 th Street	4.5	Widen from two to four lanes	County	4258831	Construction \$1,100 (2019/2020)	State only (TRIPS)

**Table A-4
CMP Priority Projects**

Corridor	Strategy
1.90% of the most congested corridors in County	Traffic monitoring system technology update
2.US Highway 1 at 8 th Street	Construct southbound right-hand turn lane extension on US 1 at 8 th Street
3.Highway A1A from the S. City of Vero Beach Limit to Fred Turk Drive	Lengthen right-hand turn lanes on south bound Highway A1A at SR 60 (Barber Bridge) and 17 th Street

**Table A-5
Priority Transportation Alternatives Projects**

1. Sidewalk construction on South Broadway Street between CR 512 and Massachusetts Avenue.

**Table A-6
Priority Transit Projects**

Ranking	Project	Funding Source
1	Construct North County Transit Hub	County
2	Expand M-F Operating Hours (6am - 8pm)	State/Federal
3	Expand Saturday Operating Hours (8am – 6pm)	State/Federal
4	Construct Shelters and Benches	Federal

**Table A-7
Priority Aviation Projects for Vero Beach Airport**

1. Rehabilitate North Apron (2018)
2. Rehabilitate T-Hangars (2018)
3. Construct Hangar (2018)
4. Fleet Vehicle Purchase (2018)
5. Terminal Building Expansion (2019)
6. Firefighting Vehicle Purchase (2019)

7. Rehabilitate Center Apron (2019)
8. Rehabilitate Southwest Apron (2020)
9. Construct Vehicle Parking Lot (2021)
10. Rehabilitate Taxiway B (2021)
11. Rehabilitate Runway 12R/30L (2022)
12. Construct North Apron Extension (2022)

**Table A-8
Priority Aviation Projects for Sebastian Airport**

1. Install new Automated Weather Observation System (AWOS)
2. Construct Shade Hangars
3. Taxiway Expansion (2018/2019)
4. Construct Hangar “D” (2019/2020)

**Table A-9
2040 Long Range Transportation Plan, Cost Affordable Plan**

PROJECT	LIMITS FROM	LIMITS TO	DESCRIPTION	PHASE 1 2015 - 2020			PHASE 2 2021 - 2025			PHASE 3 2026 - 2030			PHASE 4 2031 - 2040			COST (YOE) (in millions)
				Pre-Eng	ROW	CST	Pre-Eng	ROW	CST	Pre-Eng	ROW	CST	Pre-Eng	ROW	CST	
I-95 at Oslo Road			New Interchange	✓			✓	✓								\$37.8
US 1 ¹	53rd Street	CR 510	Widen from 4L to 6L												✓	\$145.3
CR 510	CR 512	66th Avenue	Widen from 2L to 4L	✓			✓	✓								\$38.0
CR 510	66th Avenue	55th Avenue	Widen from 2L to 4L				✓	✓	✓							\$22.1
CR 510	55th Avenue	Intracoastal Waterway	Widen from 2L to 4L		✓		✓	✓	✓							\$22.6
CR 512	Willow Street	I-95	Widen from 2L to 4L										✓	✓	✓	\$39.5
CR 512	I-95	CR 510	Widen from 4L to 6L										✓	✓	✓	\$42.9
12th Street ¹	58th Avenue	74th Avenue	New 2L Facility										✓			\$30.8
26th Street/Aviation Blvd ²	66th Avenue	US 1	Widen from 2L to 4L							✓	✓					\$39.1
43rd Avenue	26th Street	16th Street	Widen from 2L to 4L							✓	✓					\$18.9
43rd Avenue	16th Street	Oslo Road	Widen from 2L to 4L										✓	✓	✓	\$48.2
53rd Street	58th Avenue	66th Avenue	New 2L Facility							✓	✓	✓				\$11.1
53rd Street	66th Avenue	82nd Avenue	New 2L Facility										✓	✓	✓	\$27.0
66th Avenue	49th Street	81st Street	Widen from 2L to 4L		✓		✓	✓	✓							\$42.9
66th Avenue	81st Street	Barber Street	Widen from 2L to 4L							✓	✓	✓				\$17.3
74th Avenue	12th Street	Oslo Road	New 2L Facility										✓	✓	✓	\$35.2
82nd Avenue ²	26th Street	69th Street	New 2L Facility											✓	✓	\$61.8
82nd Avenue ²	69th Street	Laconia Street	New 2L Facility		✓						✓	✓				\$24.6
Oslo Road	58th Avenue	I-95	Widen from 2L to 4L	✓			✓	✓					✓	✓	✓	\$48.9

1. Partially funded
 • US 1 – Funded \$23.3 M, Unfunded \$122 M
 • 12th Street – Funded \$1.5 M, Unfunded \$29.3 M

2. Design phase is complete

Pre-Eng = Preliminary Engineering (Design and Project Development and Environment)
 ROW = Right-of-Way
 CST = Construction

Table A-10

Regionally Ranked 2030 Needs Projects

Regional Project Prioritization

Indian River, St. Lucie and Martin MPOs

Table 3 (Summary Table)

Project	From	To	Improvement	Total Lanes	Cost Feasible	Technical Score
Tri-Rail Extension	Stuart	Palm Beach County	New Commuter Rail	-	N	36
U.S. 1	Roseland Rd	N. County Line	Add 2 Lanes	6	Y	27
Indian Street Bridge Prj	FL Turnpike	Willoughby Rd	Add 2-4 Lanes/New Bridge	6	Y	26
Stuart-WPB Express	Stuart	Palm Beach County	New Express Route	-	N	25
FixedRoute to IRC	Fl. Pierce	Indian River County	New Fixed Route	-	N	25
Jenkins Rd.	Midway	Edwards Rd	Add 2-4 Lanes/Bridge	4	Y	24
U.S. 1	Aviation Blvd	Old Dixie Hwy (N)	Add 2 Lanes	6	Y	24
Indian River Blvd	Royal Palm	37th St	Add 2 Lanes	6	Y	24
Crosstown Parkway	Floresta Dr	US 1	New 6 Lane Bridge	6	N	23
FL Turnpike	Okeechobee County Line	Martin County Line	Add 2 Lanes	6	N	23
S.R. 60	I-95	82nd Ave	Add 2 Lanes	6	Y	23
US 1	Edwards Rd	Midway Rd	Add 2 Lanes	6	Y	22
Jenkins Rd.	Okeechobee Rd	Edwards Rd	Add 2 Lanes	4	Y	21
I-95	FL Turnpike (In Martin Co)	Palm Beach County Line	Add 2 Lanes	8	N	21
Martin Downs Blvd	High Meadows Ave	Kanner Hwy	Add 2 Lanes	6	N	21
US 1	Jensen Beach Blvd	North of Roosevelt Bridge	Add 2 Lanes	8	N	21
Midway Rd	I-95	Selvitz Rd	Add 2 Lanes	6	Y	20
Rangeline Rd	Glades Cut Off	Martin County Line	Add 2 Lanes	4	N	20
US 1	Indian River County Line	Juanita Ave.	Add 2 Lanes	6	N	20
FL Turnpike	St. Lucie County Line	Palm Beach County Line	Add 2 Lanes	6	N	20
S.R. 60	98th Ave	I-95	Add 2 Lanes	6	Y	20
U.S. 1	S. County Line	Oslo Rd	Add 2 Lanes	6	Y	20
66th Ave	SR 60	C.R. 510	Add 2 Lanes	4	Y	20
25th Street	Virginia Ave	Edwards Rd.	Add 2 Lanes	6	N	19
Kings Hwy (South)	Angle Rd	Okeechobee Rd	Add 2 Lanes	4	Y	19
Midway Rd	25th Street	US 1	Add 2 Lanes	4	Y	19
C.R. 512	Fellsmere City Limits	I-95	Add 2 Lanes	4	Y	19
C.R. 512	I-95	C.R. 510	Add 2 Lanes	6	Y	19
Orange Ave	Kings Highway	Jenkins Road	Add 4 Lanes	6	N	18
SR 714	Western Palm City Corridor	Martin Downs Blvd	Add 2 Lanes	4	N	18
I-95	S. County Line	N. County Line	Add 2 Lanes	6	Y	18
C.R. 510	C.R. 512	U.S. 1	Add 2 Lanes	4	Y	18
C.R. 510	U.S. 1	ICWW	Add 2 Lanes	4	Y	18
Okeechobee Rd	FL Turnpike	McNeil Rd	Add 4 Lanes	6	N	17
Orange Ave	Jenkins Road	25th Street	Add 2 Lanes	6	N	17
Indrio Rd	Emerson Avenue	Kings Highway	Add 2 Lanes	4	N	16
Kings Hwy (Middle)	Indrio Rd	Angle Rd	Add 2 Lanes	4	Y	16
Okeechobee Rd	McNeil Rd	Virginia Ave	Add 2 Lanes	6	N	16
SR 710	Okeechobee County Line	Allapattah Rd / CR 609	Add 2 Lanes	4	N	16
25th Street	US 1	Orange Ave	Add 2 Lanes	6	N	15
Jenkins Rd.	Angle Rd	Okeechobee Rd	Add 2-4 Lanes	4	Y	15
Midway Rd	Selvitz Rd	25th Street	Add 2 Lanes	4	Y	15
Port St Lucie Blvd	Gallin Rd	Becker Rd	Add 2 Lanes	4	Y	15
Walton Rd	Lennard Rd	Green River Pkwy	Add 2 Lanes	4	Y	15
SR 76	US 441	SR 710	Add 2 Lanes	4	N	15
SR 76	SR 710	CR 711	Add 2 Lanes	4	N	15
58th Ave	S County Line/Koblegard Rd	Oslo Rd	New 4 Lane	4	Y	15
Keen Rd	Angle Road	St. Lucie Blvd	Add 4 Lanes/New Bridge	4	N	14
Bridge Rd	CR 711	CR A1A	Add 2 Lanes	4	N	14
SR 76	CR 711	Monterey Rd	Add 2 Lanes	6	Y	14
US 1	Bridge Rd	Palm Beach County Line	Add 2 Lanes	6	N	14
27th Ave	Oslo Rd	S.R. 60	Add 2 Lanes	4	Y	14
Edwards Rd	Jenkins Rd	25th Street	Add 2 Lanes/Bridge	4	N	13
Glades Cut-Off Rd	Reserve Blvd	Selvitz Road	Add 2 Lanes	4	N	13
Cove Rd	SR 76	US 1	Add 2 Lanes	4	Y	13
27th Ave	S. County Line	Oslo Rd	Add 2 Lanes	4	Y	13
43rd Ave	Oslo Rd	8th St	Add 2 Lanes	4	Y	13
25th Street South	Midway Rd	Edwards Rd	Add 2 Lanes	6	N	12
Midway Rd	Okeechobee Rd	I-95	Add 2 Lanes	4	N	12
Okeechobee Rd	Brooksmith Rd	Florida's Turnpike	Add 2 Lanes	6	N	12
US 1	Midway Rd	Walton Rd	Add 2 Lanes	8	N	12
High Meadow Ave	Martin Hwy	I-95	Add 2 Lanes	4	N	12
SR 710	Kanner Hwy / CR 726	Palm Beach County Line	Add 2 Lanes	4	N	12
43rd Ave	S County Line	Oslo Rd	Add 2 Lanes	4	Y	12
Shinn Rd	Orange Ave	Glades Cut Off	New 2 Lane	2	N	11
St Lucie Blvd/Immokolee	Emerson Ave	25th Street	Add 2 Lanes	4	N	11
CR 609	St Lucie Co Line	SR 714	Add 2 Lanes	4	N	11
US 1	Osprey St	Bridge Rd	Add 2 Lanes	6	N	11
S.R. 60	6th Ave	Indian River Blvd	Add 2 Lanes	6	Y	11
82nd Ave	S County Line	Oslo Rd	New 2 Lane	2	Y	11

Table A-11

Definitions Used in the 2017 Priority Projects Report

Project Phases

CST	Construction
DES	Design
PD&E	Project Development and Environmental Study
PE	Preliminary Engineering
ROW	Right of Way

Other Terms

FDOT	Florida Department of Transportation
LOS	Level of Service (measure of roadway traffic congestion)
L RTP	Long Range Transportation Plan
PLEMO	Planning and Environmental Management Office (FDOT planning study)

Table 4: 2040 Cost Feasible Roadway Projects

Facility	From	To	Improvement*	Implementation Timeframe
SIS Funds				
I-95	At Oslo Road		New interchange	2021-25
Other Arterials (non-SIS) Funds				
CR 510	CR 512	66 th Avenue	Widen from 2L to 4L	2021-30
Oslo Road	I-95	58 th Avenue	Widen from 2L to 4L	2031-40
US 1 (Partially Funded)	53 rd Street	CR 510	Widen from 4L to 6L	2026-40
Local Funds				
CR 510	66 th Avenue	55 th Avenue	Widen from 2L to 4L	2021-25
CR 510	55 th Avenue	Intracoastal Waterway	Widen from 2L to 4L	2021-25
CR 512	Willow Street	I-95	Widen from 2L to 4L	2031-40
CR 512	I-95	CR 510	Widen from 4L to 6L	2031-40
43 rd Avenue	26 th Street	16 th Street	Widen from 2L to 4L	2026-30
43 rd Avenue	16 th Street	Oslo Road	Widen from 2L to 4L	2031-40
66 th Avenue	49 th Street	81 st Street	Widen from 2L to 4L	2021-25
66 th Avenue	81 st Street	Barber Street	Widen from 2L to 4L	2026-30
12 th Street (Partially Funded)	58 th Avenue	74 th Avenue	New 2L Facility	2031-40
26 th Street/Aviation Blvd	66 th Avenue	US 1	Widen from 2L to 4L	2026-30
53 rd Street	58 th Avenue	66 th Avenue	New 2L Facility	2026-30
53 rd Street	66 th Avenue	82 nd Avenue	New 2L Facility	2031-40
74 th Avenue	12 th Street	Oslo Road	New 2L Facility	2031-40
82 nd Avenue	26 th Street	69 th Street	New 2L Facility	2031-40
82 nd Avenue	69 th Street	Laconia Street	New 2L Facility	2026-30

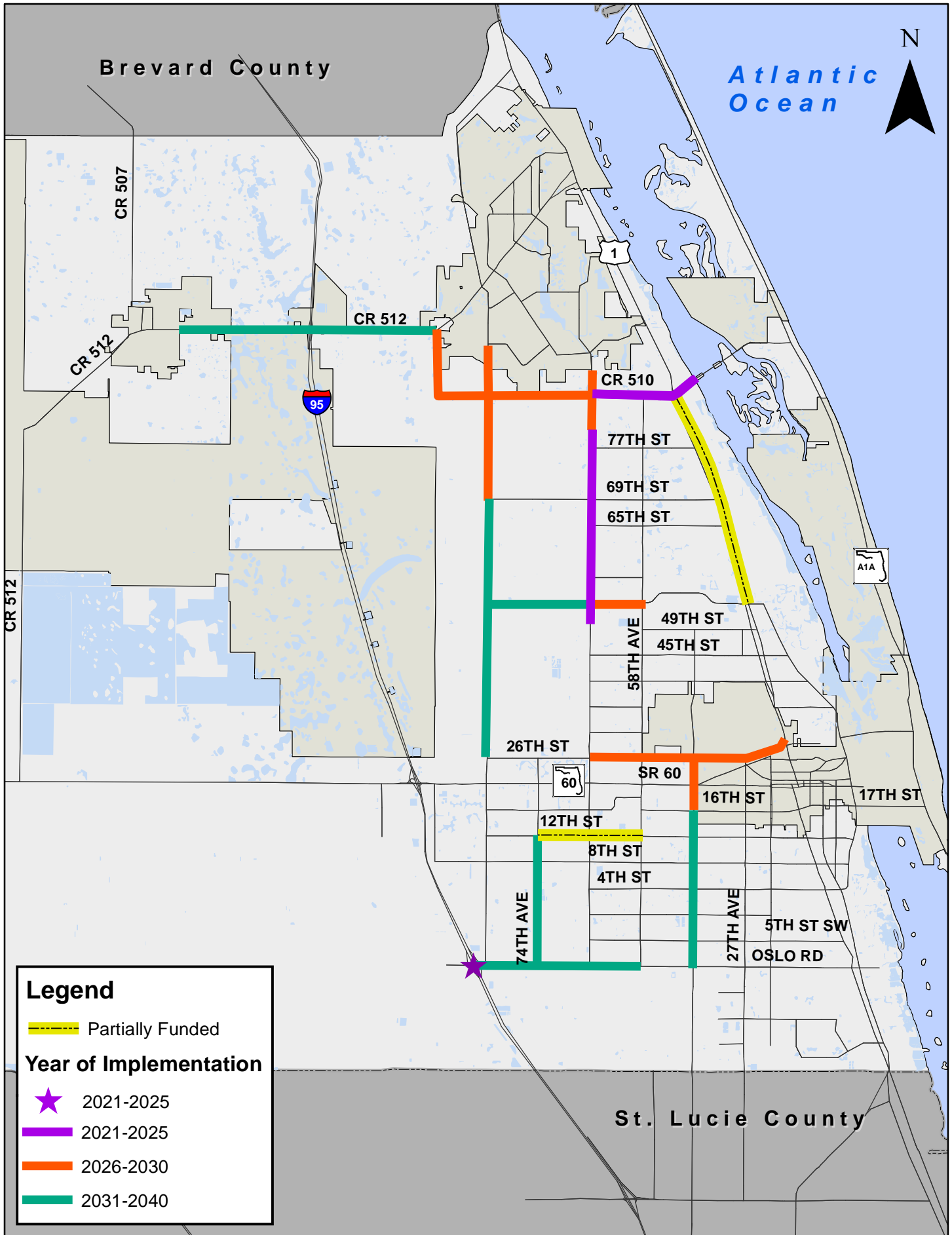
* When the projects advance to the PD&E or design phase, determine if alternative strategies such as two-way left-turn lanes, intersection improvements, operational enhancements, or multimodal solutions would effectively address level of service and mobility needs in lieu of the recommended road widening.

Table 5: Summary of Cost Feasible Plan (in Present Day Cost)

Funding Source	Funded (in millions)	Unfunded (in millions)	Total (in millions)
Strategic Intermodal System	\$32	\$0	\$32
Other Arterials (non-SIS) ¹	\$68	\$62	\$130
County	\$278	\$133	\$411
Total	\$378	\$195	\$573

Note 1: Includes local roads funded through the Other Arterial Roads fund

Figure 3: Cost Feasible Projects



Legend

- Partially Funded

Year of Implementation

- ★ 2021-2025
- 2021-2025
- 2026-2030
- 2031-2040

Indian River County 2040 LRTP Update - Cost of Roadway Projects

Project	From	To	Improvement	Length (mile)	Construction	Scope Contingency/ Project Unkown	ROW Cost	Total Construction Cost	PE Design (15%)	CEI (15%)	Present Day Total Project Cost	Adjusted Project Cost in 2021-2025	Adjusted Project Cost in 2026-2030	Adjusted Project Cost in 2031-2040
SIS Funds														
I-95/SR 9	At Oslo Road		New Interchange								\$32,251,969	\$40,960,000	\$48,377,953	\$61,601,260
State/Other Arterials (non-SIS) Funds														
US 1/SR 5 ⁽¹⁾	CR 510	53rd Street	Widen to 6L from 4L	4.3	\$23,600,000	\$2,360,000	\$47,700,000	\$73,660,000		\$2,400,000	\$76,060,000	\$96,596,200	\$114,090,000	\$145,274,600
Oslo Road	I-95/SR 9	58th Avenue	Widen to 4L from 2L	3.20	\$14,907,800	\$1,490,780	\$5,863,100	\$22,261,680		\$3,339,252	\$25,600,932	\$32,513,184	\$38,401,398	\$48,897,780
CR 510	CR 512	66th Avenue	Widen to 4L from 2L	4.26	\$19,509,212	\$1,950,921	\$3,405,539	\$24,865,672		\$3,729,851	\$28,595,523	\$36,316,314	\$42,893,285	\$54,617,449
Local Funds														
CR 510	66th Avenue	55th Avenue	Widen to 4L from 2L	1.25	\$11,000,000	\$1,100,000	\$1,279,076	\$13,379,076	\$2,006,861	\$2,006,861	\$17,392,798	\$22,088,854	\$26,089,198	\$33,220,245
CR 510	55th Avenue	Indian River Lagoon	Widen to 4L from 2L	0.85	\$10,000,000	\$1,000,000	\$2,700,000	\$13,700,000	\$2,055,000	\$2,055,000	\$17,810,000	\$22,618,700	\$26,715,000	\$34,017,100
CR 512	Willow Street	I-95/SR 9	Widen to 4L from 2L	2.50	\$11,449,068	\$1,144,907	\$3,302,261	\$15,896,236	\$2,384,435	\$2,384,435	\$20,665,107	\$26,244,686	\$30,997,660	\$39,470,354
CR 512	I-95/SR 9	CR 510	Widen to 6L from 4L	2.6	\$12,000,000	\$1,200,000	\$4,094,804	\$17,294,804	\$2,594,221	\$2,594,221	\$22,483,245	\$28,553,721	\$33,724,868	\$42,942,998
43rd Avenue	26th Street	16th Street	Widen to 4L from 2L	1.00	\$7,000,000	\$700,000	\$2,000,000	\$9,700,000	\$1,455,000	\$1,455,000	\$12,610,000	\$16,014,700	\$18,915,000	\$24,085,100
43rd Avenue	16th Street	Oslo Road	Widen to 4L from 2L	3.00	\$13,738,882	\$1,373,888	\$4,309,906	\$19,422,676	\$2,913,401	\$2,913,401	\$25,249,478	\$32,066,837	\$37,874,217	\$48,226,503
66th Avenue	49th Street	81st Street	Widen to 4L from 2L	4.04	\$20,000,000	\$2,000,000	\$4,000,000	\$26,000,000	\$3,900,000	\$3,900,000	\$33,800,000	\$42,926,000	\$50,700,000	\$64,558,000
66th Avenue	81st Street	Barber Street	Widen to 4L from 2L	1.37	\$6,274,089	\$627,409	\$2,000,000	\$8,901,498	\$1,335,225	\$1,335,225	\$11,571,948	\$14,696,374	\$17,357,922	\$22,102,420
12th Street ⁽¹⁾	58th Avenue	74th Avenue	New 2L	2.00	\$8,532,211	\$853,221	\$3,000,000	\$12,385,432	\$1,857,815	\$1,857,815	\$16,101,061	\$20,448,348	\$24,151,592	\$30,753,027
26th Street/Aviation Boulevard	66th Avenue	US 1/SR 5	Widen to 4L from 2L	\$4	\$17,860,546	\$1,786,055	\$3,050,269	\$22,696,870		\$3,404,530	\$26,101,400	\$33,148,779	\$39,152,101	\$49,853,675
53rd Street	58th Avenue	66th Avenue	New 2L	1.00	\$4,266,105	\$426,611	\$1,000,000	\$5,692,716	\$853,907	\$853,907	\$7,400,531	\$9,398,674	\$11,100,796	\$14,135,014
53rd Street	66th Avenue	82nd Avenue	New 2L	2.00	\$8,532,211	\$853,221	\$1,500,000	\$10,885,432	\$1,632,815	\$1,632,815	\$14,151,061	\$17,971,848	\$21,226,592	\$27,028,527
74th Avenue	12th Street	Oslo Road	New 2L	2.60	\$11,410,999	\$1,141,100	\$1,141,100	\$13,693,199	\$2,053,980	\$2,053,980	\$18,436,072	\$23,413,812	\$27,654,108	\$35,212,898
27th Avenue	Oslo Road	St. Lucie County Line	Widen to 4L from 2L	2.00	\$9,159,255	\$915,925	\$2,873,270	\$12,948,450	\$1,942,268	\$1,942,268	\$16,832,985	\$21,377,892	\$25,249,478	\$32,151,002
82nd Avenue	69th Street	26th Street	New 2L	5.11	\$21,799,799	\$2,179,980	\$4,194,975	\$28,174,753		\$4,226,213	\$32,400,966	\$41,149,227	\$48,601,449	\$61,885,846
82nd Avenue	69th Street	Laconia Street	New 2L	2.51	\$10,690,860	\$1,069,086	\$2,486,433	\$14,246,379		\$2,136,957	\$16,383,336	\$20,806,837	\$24,575,004	\$31,292,172
Total of all Indian River County Projects											\$471,898,413.99	\$599,310,985.77	\$707,847,620.99	\$901,325,970.73

⁽¹⁾ Partially funded projects. The funded portion for US 1/SR 5 is \$13,521,814 (PDC) and for 12th Street \$1,308,900 (PDC)

Table 7- 1. Roadway Cost Feasible Plan

Facility	From	To	Improvement ⁽¹⁾	Implementation Timeframe
SIS Funds				
I-95	At Oslo Road		New interchange	2021-25
Other Arterials (non-SIS) Funds				
CR 510 ⁽²⁾	CR 512	66 th Avenue	Widen from 2L to 4L	2021-30
43 rd Avenue ⁽²⁾	26 th Street	16 th Street	Widen from 2L to 4L	2026-30
Oslo Road ⁽²⁾	I-95	58 th Avenue	Widen from 2L to 4L	2031-40
US 1 (Partially Funded)	53 rd Street	CR 510	Widen from 4L to 6L	2031-40
Local Funds				
CR 510 ⁽²⁾	CR 512	66 th Avenue	Widen from 2L to 4L	2026-30
CR 510	66 th Avenue	55 th Avenue	Widen from 2L to 4L	2021-25
CR 510	55 th Avenue	Intracoastal Waterway	Widen from 2L to 4L	2021-25
CR 512	Willow Street	I-95	Widen from 2L to 4L	2031-40
CR 512	I-95	CR 510	Widen from 4L to 6L	2031-40
43 rd Avenue ⁽²⁾	26 th Street	16 th Street	Widen from 2L to 4L	2026-30
43 rd Avenue	16 th Street	Oslo Road	Widen from 2L to 4L	2031-40
66 th Avenue	49 th Street	81 st Street	Widen from 2L to 4L	2021-25
66 th Avenue	81 st Street	Barber Street	Widen from 2L to 4L	2026-30
12 th Street (Partially Funded)	58 th Avenue	74 th Avenue	New 2L Facility	2031-40
26 th Street/Aviation Blvd	66 th Avenue	US 1	Widen from 2L to 4L	2026-30
53 rd Street	58 th Avenue	66 th Avenue	New 2L Facility	2026-30
53 rd Street	66 th Avenue	82 nd Avenue	New 2L Facility	2031-40
74 th Avenue	12 th Street	Oslo Road	New 2L Facility	2031-40
82 nd Avenue	26 th Street	69 th Street	New 2L Facility	2031-40
82 nd Avenue	69 th Street	Laconia Street	New 2L Facility	2026-30
Oslo Road ⁽²⁾	I-95	58 th Avenue	Widen from 2L to 4L	2031-40

⁽¹⁾When the projects advance to the PD&E or design phase, determine if alternative strategies such as two-way left-turn lanes, intersection improvements, operational enhancements, or multimodal solutions would effectively address level of service and mobility needs in lieu of the recommended road widening.

⁽²⁾Funded through Other Arterials and Local Funds.

FLORIDA DEPARTMENT OF TRANSPORTATION
 OFFICE OF WORK PROGRAM
 STIP REPORT
 =====
 HIGHWAYS
 =====

 ITEM NUMBER:230879 3 PROJECT DESCRIPTION:82ND AVE FROM 26TH STREET TO 69TH STREET *NON-SIS*
 DISTRICT:04 COUNTY:INDIAN RIVER TYPE OF WORK:NEW ROAD CONSTRUCTION
 PROJECT LENGTH: 5.000MI

FUND CODE	LESS THAN 2018	2018	2019	2020	2021	GREATER THAN 2021	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT							
SA	0	666,315	0	0	0	0	666,315
SL	0	93,685	0	0	0	0	93,685
TOTAL <N/A>	0	760,000	0	0	0	0	760,000
TOTAL 230879 3	0	760,000	0	0	0	0	760,000
TOTAL Project:	4,071,394	914,193	1,025,054	374,947	0	14,033,741	20,419,329

 ITEM NUMBER:405606 2 PROJECT DESCRIPTION:CR-510/85TH STREET FROM CR-512 TO 58TH AVE *NON-SIS*
 DISTRICT:04 COUNTY:INDIAN RIVER TYPE OF WORK:PD&E/EMO STUDY
 PROJECT LENGTH: 5.270MI

FUND CODE	LESS THAN 2018	2018	2019	2020	2021	GREATER THAN 2021	ALL YEARS
FEDERAL PROJECT NUMBER: 4984 004 S							
PHASE: P D & E / RESPONSIBLE AGENCY: MANAGED BY FDOT							
ACSA	5,571	0	0	0	0	0	5,571
ACSL	145,915	0	0	0	0	0	145,915
SA	92,976	0	0	0	0	0	92,976
SL	1,166,636	2,396	0	0	0	0	1,169,032
SN	1,034,873	0	0	0	0	0	1,034,873
TOTAL 4984 004 S	2,445,971	2,396	0	0	0	0	2,448,367
TOTAL 405606 2	2,445,971	2,396	0	0	0	0	2,448,367

FLORIDA DEPARTMENT OF TRANSPORTATION
 OFFICE OF WORK PROGRAM
 STIP REPORT
 =====
 HIGHWAYS
 =====

 ITEM NUMBER:405606 3 PROJECT DESCRIPTION:CR-510/85TH ST FROM 82ND AVE TO 58TH AVE *NON-SIS*
 DISTRICT:04 COUNTY:INDIAN RIVER TYPE OF WORK:PD&E/EMO STUDY
 PROJECT LENGTH: 3.070MI

FUND CODE	LESS THAN 2018	2018	2019	2020	2021	GREATER THAN 2021	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT							
ACSA	0	1,900,000	0	0	0	0	1,900,000
ACSL	0	250,000	0	0	0	0	250,000
SL	0	1,786,968	0	0	0	0	1,786,968
SN	0	118,032	0	0	0	0	118,032
PHASE: RIGHT OF WAY / RESPONSIBLE AGENCY: MANAGED BY FDOT							
SL	0	0	0	2,205,652	813,278	0	3,018,930
SN	0	0	0	897,230	245,798	0	1,143,028
TOTAL <N/A>	0	4,055,000	0	3,102,882	1,059,076	0	8,216,958
TOTAL 405606 3	0	4,055,000	0	3,102,882	1,059,076	0	8,216,958

 ITEM NUMBER:405606 4 PROJECT DESCRIPTION:CR-510/85TH ST FROM CR-512 TO 82ND AVE *NON-SIS*
 DISTRICT:04 COUNTY:INDIAN RIVER TYPE OF WORK:PD&E/EMO STUDY
 PROJECT LENGTH: 2.200MI

FUND CODE	LESS THAN 2018	2018	2019	2020	2021	GREATER THAN 2021	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT							
SA	0	0	2,111,647	0	0	0	2,111,647
SL	0	0	2,117,403	0	0	0	2,117,403
PHASE: RIGHT OF WAY / RESPONSIBLE AGENCY: MANAGED BY FDOT							
SL	0	0	0	0	1,393,236	873,665	2,266,901
TOTAL <N/A>	0	0	4,229,050	0	1,393,236	873,665	6,495,951
TOTAL 405606 4	0	0	4,229,050	0	1,393,236	873,665	6,495,951

ROADWAY PROJECTS INDEX

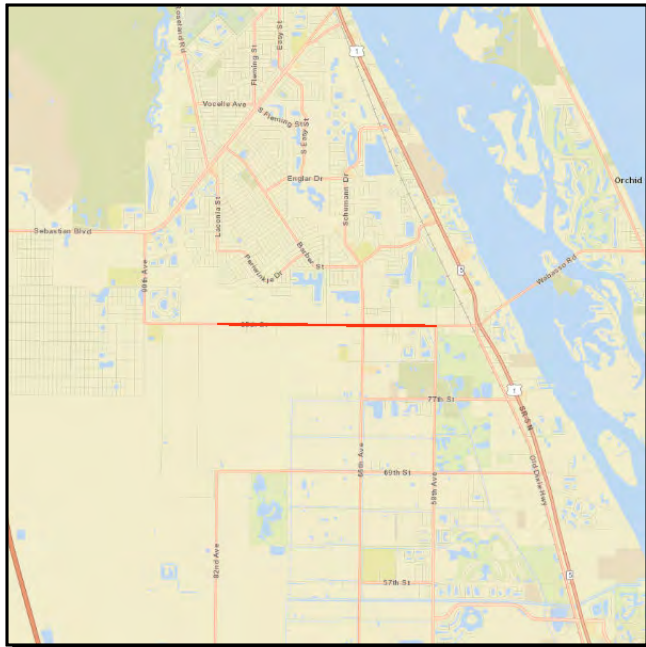
The following index contains project listings for major roadways within Indian River County. Listed projects include roadway, transportation alternatives, and maintenance projects. Project listings include segment limits, work description, funding amount, FM number, 2040 LRTP page number, and TIP page number.

Roadway	Project Limits		Work Description	Phase(s)	FY	Funding Amt. (5 Year Total)	FM #	LRTP Page/Table #	TIP Page #
	From	To							
6th Ave	US 1	18th St	Resurface	CST	20/21 – 21/22	\$877,296	4380741	2-1	B-4
8th St	@ 74th Ave (Lateral C Canal)		Replace Bridge	CST	20/21	\$3,102,137	4377171	2-1	B-5
43rd Ave	@ SR 60 (Intersection)		Widen/Resurface	ROW CST	17/18 - 21/22 17/18	\$9,195,906 \$5,599,250	4317591 4317592	7-1	A-13 A-12
	Airport Drive West	41st St.	Sidewalk	CST	19/20	\$719,936	4400191	50	D-2
45th St	58th Ave	US 1	Resurface	CST	19/20 – 20/21	\$1,710,079	4368481	7-6	B-2
49th St	58th Ave	31st Ave	Resurface	CST	18/19 – 19/20	\$739,721	4368501	2-1	B-2
58th Ave	26th St	57th St	Resurface	CST	17/18	\$1,233,000	4348401	2-1	B-3
	57th St	CR 510	Resurface	CST	17/18 - 18/19	\$2,528,824	4364161	2-1	B-3
66th Ave	49th St	81st St	Widen to 4 Lanes	CST	18/19	\$43,648,000	4363791	7-1	A-2
69th St	66th Ave	US 1	Resurface	CST	20/21 – 21/22	\$1,637,530	4380731	2-1	B-4
82nd Ave	26th St	69th St	Pave 2-Lane Road	PE	17/18	\$760,000	2308793	7-1	A-3
	69th St	CR 510	Construct 2-Lane Road	ROW	18/19	\$1,589,055	2308792	7-1	A-4
CR 510	82nd Ave	58th Ave	Widen to 4 Lanes	PE ROW	17/18 19/20 – 20/21	\$8,216,958	4056063	7-1	A-5
	CR 512	82nd Ave	Widen to 4 Lanes	PE ROW	18/19 20/21 – 21/22	\$6,495,951	4056064	7-1	A-7
	CR 512	58th Ave	Widen to 4 Lanes	CST (Rsv.)	21/22	\$2,605,523	4382781	7-1	A-6
CR 512	Myrtle St.	125th Ave.	Resurface	CST	17/18 – 18/19	\$969,931	4330681	2-1	B-7
I-95	@ Oslo Rd (9th Street SW)		New Interchange	ROW	17/18	\$10,264,566	4130482	7-1	A-8
Indian River Blvd	37th St	53rd St	Sidewalk	CST	17/18	\$586,476	4368601	50	D-2
Massachusetts Ave.	Myrtle St	Willow St	Sidewalk	CST	17/18	\$449,261	4381321	50	D-3
Oslo Rd	58th Ave	I-95	Widen to 4 Lanes	ROW CST (Rsv.)	17/18 20/21	\$6,248,237 \$1,026,876	4315211 4382791	7-1	A-10 A-11
	SR 60	SR 510	Resurface	CST	18/19	\$6,273,512	4380421	2-1	B-11
SR A1A	@ SR 60 & SR 656 (17th St.)		Add Turn Lanes	PE	21/22	\$360,000	4408221	2-1	B-12
SR 60	38th Ave	21st Ave	Resurface	CST	17/18	\$1,865,119	4360951	2-1	B-10
US 1	53rd St	CR 510	Widen to 6 Lanes	ROW (Rsv.)	21/22	\$20,000,000	4408201	7-1	A-14

CR 510 Widening

4056063

Non-SIS



Work Summary: ADD LANES & RECONSTRUCT
From: 82nd Avenue
To: 58th Avenue
Lead Agency: FDOT
Length: 3.070 miles
County: Indian River
LRTP #: Table 7-1

Phase	Fund Source	2017/18	2018/19	2019/20	2020/21	2021/22	Total
PE	ACSL	250,000	0	0	0	0	250,000
PE	SN	118,032	0	0	0	0	118,032
PE	ACSA	1,900,000	0	0	0	0	1,900,000
PE	SL	1,786,968	0	0	0	0	1,786,968
ROW	SN	0	0	897,230	245,798	0	1,143,028
ROW	SL	0	0	2,205,652	813,278	0	3,018,930
Total		4,055,000	0	3,102,882	1,059,076	0	8,216,958

Prior Cost < 2017/18: 0

Future Cost > 2021/22: 0

Total Project Cost: 8,216,958

Project Description: Widen CR 510 from 2 lanes to 4 lanes between 82nd Avenue and 58th Avenue. Preliminary engineering programmed for FY 2017/18 and ROW acquisition programmed for FY 2019/20 through 2020/21. Project length is 3.07 miles. See FM# 4382781 for partial reservation of construction funds.

CR 510 Widening

4382781

Non-SIS



Work Summary: ADD LANES & RECONSTRUCT
From: CR 512
To: 58th Avenue
Lead Agency: FDOT
Length: 5.27 miles
County: Indian River
LRTP #: Table 7-1

Phase	Fund Source	2017/18	2018/19	2019/20	2020/21	2021/22	Total
CST	SL	0	0	0	0	1,332,849	1,332,849
CST	SN	0	0	0	0	1,272,674	1,272,674
Total		0	0	0	0	2,605,523	2,605,523

Prior Cost < 2017/18: 0

Future Cost > 2021/22: 0

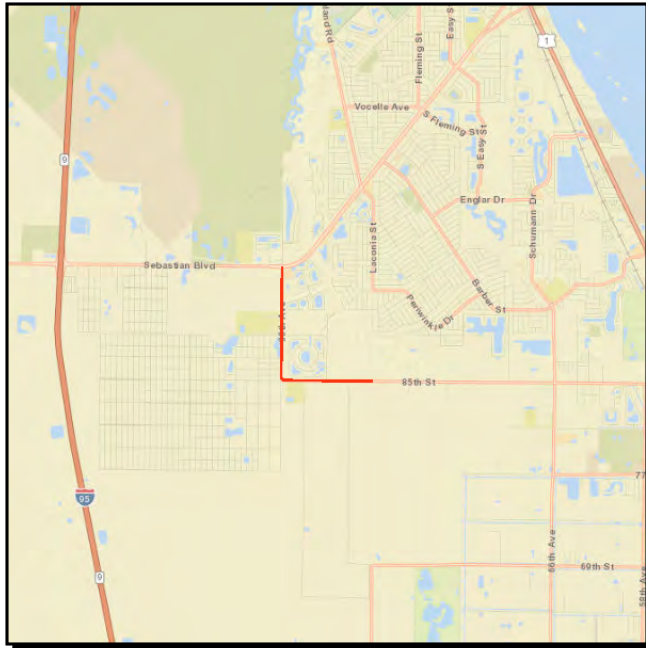
Total Project Cost: 2,605,523

Project Description: Reservation of construction funds for widening of CR 510. See also FM# 4056063 and 4056064.

CR 510 Widening

4056064

Non-SIS



Work Summary: ADD LANES & RECONSTRUCT
From: CR 512
To: 82nd Avenue
Lead Agency: FDOT
Length: 2.200 miles
County: Indian River
LRTP #: Table 7-1

Phase	Fund Source	2017/18	2018/19	2019/20	2020/21	2021/22	Total
PE	SA	0	2,111,647	0	0	0	2,111,647
PE	SL	0	2,117,403	0	0	0	2,117,403
ROW	SL	0	0	0	1,393,236	873,665	2,266,901
Total		0	4,229,050	0	1,393,236	873,665	6,495,951

Prior Cost < 2017/18: 0

Future Cost > 2021/22: 0

Total Project Cost: 6,495,951

Project Description: Widen CR 510 from 2 lanes to 4 lanes between CR 512 and 82nd Avenue. Preliminary engineering programmed for FY 2018/19 and ROW acquisition programmed for FY 2020/21 through 2021/22. Project length is 2.2 miles. See FM# 4382781 for partial reservation of construction funds.

1

APPENDIX 2- PUBLIC HEARING TRANSCRIPT

2

1 The public hearing transcript will be inserted here when available

2

1

APPENDIX 3- NRCS FORM

2

**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

PART I (To be completed by Federal Agency)	3. Date of Land Evaluation Request	4. Sheet 1 of _____
---	------------------------------------	---------------------

1. Name of Project	5. Federal Agency Involved
--------------------	----------------------------

2. Type of Project	6. County and State
--------------------	---------------------

PART II (To be completed by NRCS)	1. Date Request Received by NRCS	2. Person Completing Form
--	----------------------------------	---------------------------

3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated Average Farm Size
---	--

5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: _____ %	7. Amount of Farmland As Defined in FPPA Acres: _____ %
------------------	---	--

8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS
--	---	---

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D

A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor				

PART IV (To be completed by NRCS) Land Evaluation Information				
--	--	--	--	--

A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				

PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)				
--	--	--	--	--

PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))	Maximum Points			
1. Area in Nonurban Use	15			
2. Perimeter in Nonurban Use	10			
3. Percent Of Corridor Being Farmed	20			
4. Protection Provided By State And Local Government	20			
5. Size of Present Farm Unit Compared To Average	10			
6. Creation Of Nonfarmable Farmland	25			
7. Availability Of Farm Support Services	5			
8. On-Farm Investments	20			
9. Effects Of Conversion On Farm Support Services	25			
10. Compatibility With Existing Agricultural Use	10			
TOTAL CORRIDOR ASSESSMENT POINTS	160			

PART VII (To be completed by Federal Agency)				
---	--	--	--	--

Relative Value Of Farmland (From Part V)	100			
Total Corridor Assessment (From Part VI above or a local site assessment)	160			
TOTAL POINTS (Total of above 2 lines)	260			

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>
-----------------------	---	-----------------------	--

5. Reason For Selection:

Signature of Person Completing this Part:	DATE
---	------

NOTE: Complete a form for each segment with more than one Alternate Corridor

1

APPENDIX 4- DOCUMENTATION OF COORDINATION

2

3



Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Blvd.
Fort Lauderdale, FL 33309

JIM BOXOLD
SECRETARY

March 14, 2017

Dr. Timothy Parsons, Director and
State Historic Preservation Officer
Division of Historical Resources
500 South Bronough Street
Tallahassee, Florida 32301

Subject: **Request for Review**
Cultural Resource Assessment Survey
County Road (CR) 510/85 Street from County Road 512 to 58 Avenue
Project Development and Environment (PD&E) Study
Financial Management #: 405606-2-22-01
Indian River County, Florida

Attention: Ginny Jones

Dear Ms. Jones;

FDOT, District Four is conducting a Project Development and Environment (PD&E) Study to evaluate alternatives for widening a segment of CR 510 from two to four lanes, extending from C.R. 512 (Sebastian Boulevard) to 58th Avenue for 5.3 miles. C.R. 510 links the local community of Wabasso to C.R. 512 (Sebastian Boulevard), the main east-west arterial serving Sebastian. The project corridor is generally rural in nature and includes a mixture of agricultural, educational, commercial, industrial and residential facilities. The project corridor is within the boundaries of the *Cultural Resource Assessment of the County Road 510 (Wabasso Road) PD&E Study from County Road 512 (Fellsmere Road) to Indian River Bridge #880052, Indian River County, Florida* prepared by Panamerican Consultants, Inc (PCI) for FDOT in 2005 (Florida Master Site File [FMSF] Manuscript No. 12566). The objective of this CRAS update, therefore, is to identify and evaluate resources that have become historic since the 2005 survey, reevaluate previously identified resources within the project area of potential effect (APE) as needed, and to assess eligibility for inclusion in the *National Register of Historic Places* (National Register) according to criteria set forth in 36 CFR Section 60.4. In accordance with the Section 106 Programmatic Agreement which was executed on March 15, 2016, this report is not being reviewed by FHWA.

Extensive subsurface testing was conducted during the previous survey and resulted in the identification of two archaeological sites, 8IR1142 and 8IR1143. 8IR1142 represents a small late 19th century to early 20th century historic artifacts scatter and site 8IR1143 consists of a sparse precolumbian and late 19th to mid-20th century artifacts scatter. Although not evaluated by the SHPO, PCI determined that these sites

2017 MAR 17 PM 12:35

Cultural Resources Assessment Surveys
CR 510 CRAS update
FM 405606.2

lack the potential to yield important information in history and are National Register-ineligible. Site 8IR1164, an early to mid-20th century artifacts scatter was identified during the *Phase I Cultural Resource Survey of the Suaya 11-Acre Property, Indian River County, Florida* (Southeast Archaeological Research, Inc 2006; FMSF Manuscript No. 13104). SHPO determined this site to be National Register-ineligible in 2006.

Subsurface testing of two areas of the APE not included within previous surveys identified no new archaeological sites. Based on the results of the previous and current surveys, no National Register-eligible archaeological sites are located within the archaeological APE.

The historic resources survey resulted in the identification of 37 historic resources including four historic canals (8IR1050, 8IR1728–8IR1730), three bridges (8IR1726–8IR1727, 8IR1733), one vault (8IR1117), one cattle pen (8IR1157), and 28 structures (8IR309, 8IR313, 8IR314, 8IR809, 8IR1099, 8IR1100–8IR1103, 8IR1114–8IR1116, 8IR1118–8IR1119, 8IR1731, 8IR1742–8IR1754). None of these resources are considered eligible for listing in the National Register.

If there are any questions, please feel free to contact me at (954) 777-4324 or Lynn Kelley at (954) 777-4334.

Sincerely,



Ann Broadwell
Environmental Administrator
FDOT - District 4

Enclosures
cc. file

The Florida State Historic Preservation Officer finds the attached Cultural Resources Assessment Reports complete and sufficient and concurs with the recommendations and findings provided in this cover letter for SHPO/DHR Project File Number 2017-1411.

SHPO Comments:

For Timothy A. Parsons Deputy SHPO
Timothy A. Parsons
State Historic Preservation Officer
Florida Division of Historical Resources

3/31/2017
Date

Rob Myers

From: Rob Myers
Sent: Monday, June 26, 2017 12:51 PM
To: 'Roland Deblois'
Cc: 'ann.broadwell@dot.state.fl.us'; 'rszpyrka@ircgov.com'; 'jennis@ircgov.com'; 'Formoso, Maria'; Carlos Rodriguez; Gabriela Garcia
Subject: RE: CR 510 Section 4f Deminimis Impacts Notification
Attachments: 510 De minimis OWJ Notification.pdf

All,

Please see attached a PDF version of the CR 510 Section 4(f) notification letter. Please use this version instead of the MS Word version I sent a moment ago. Thanks.

ROB MYERS
North Florida Environmental Manager



2616 Jenks Avenue, Panama City, FL 32405
Office: (850) 872-8044
Cell: (512) 517-5121
rob.myers@metriceng.com
www.metriceng.com

From: Rob Myers
Sent: Monday, June 26, 2017 12:42 PM
To: Roland Deblois <rdeblois@ircgov.com>
Cc: ann.broadwell@dot.state.fl.us; 'rszpyrka@ircgov.com' <rszpyrka@ircgov.com>; 'jennis@ircgov.com' <jennis@ircgov.com>; Formoso, Maria <Maria.Formoso@dot.state.fl.us>; Carlos Rodriguez <Carlos.Rodriguez@metriceng.com>; Gabriela Garcia <Gabriela.Garcia@metriceng.com>
Subject: CR 510 Section 4f Deminimis Impacts Notification

Roland,

Please find attached a letter from the FDOT PM, Maria Formoso, regarding the CR 510 PD&E study. Its intent is to notify you that FDOT plans to pursue a *de minimis* finding regarding Section 4(f) impacts to the South Prong Preserve. Please let me know if you have any questions.

Regards,

ROB MYERS
North Florida Environmental Manager



2616 Jenks Avenue, Panama City, FL 32405
Office: (850) 872-8044
Cell: (512) 517-5121

rob.myers@metriceng.com
www.metriceng.com



Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

MIKE DEW
SECRETARY

June 26, 2017

Roland M. Deblois, AICP
Chief, Environmental Planning & Code Enforcement Section
Indian River County
1801 27th Street, Bldg. A
Vero Beach, FL 32960-3388

RE: Florida Department of Transportation PD&E Study
County Road 510/85th Street
Financial Management Number: 405606-2-22-02
Federal Aid Project No.: 4984-004-S
Indian River County, Florida

Dear Mr. Deblois,

As part of the ongoing Project Development and Environment (PD&E) Study on County Road 510 in Indian River County, the Florida Department of Transportation (FDOT) identified you as the Official with jurisdiction over the South Prong Preserve. The South Prong Preserve qualifies for protection as a Section 4(f) resource and FDOT wishes to notify you of its intent to pursue a *de minimis* finding.

Through coordination with your office, field surveys, and desktop investigations, FDOT has identified the activities, features, and attributes that qualify the South Prong Preserve for protection as well as measures to minimize harm and enhance existing conditions. Impacts to these qualities, along with proposed enhancements form the basis for the *de minimis* impact determination. We will make the project plans available for public comment and provide you any comments relating to Section 4(f) impacts or the South Prong Preserve. After reviewing all comments and project plans, we will respectfully request from you a letter of concurrence with the *de minimis* impact determination.

Should you have any questions or comments concerning the proposed project or consultation process, please call me at (954) 777-4677 or email me at Maria.Formoso@dot.state.fl.us.

Sincerely,

A handwritten signature in blue ink, appearing to read "Maria Formoso". The signature is fluid and cursive, with a large initial "M" and a distinct "F" at the end.

Maria Formoso, P.E., P.M.P., Project Manager
Florida Department of Transportation - District 4 Design

cc:

Ann Broadwell, FDOT
Mariano Berrios, FDOT OEM
Carlos Rodriguez, Metric Engineering
Richard Szyrka, Indian River County
James Ennis, Indian River County
Project File

Rob Myers

From: Gabriela Garcia
Sent: Thursday, May 18, 2017 12:34 PM
To: Rob Myers
Cc: Carlos Rodriguez
Subject: FW: 405606 South Prong Preserve

More good news! At least good news on one project!

Thanks, Gabi
Office: (305) 235-5098 ext. 110
ggarcia@metriceng.com

From: Yee Fong, Shereen [<mailto:Shereen.YeeFong@dot.state.fl.us>]
Sent: Thursday, May 18, 2017 1:32 PM
To: Gabriela Garcia <GGarcia@metriceng.com>
Cc: Bianco, Brittany <Brittany.Bianco@dot.state.fl.us>; Jackson, Roy <Roy.Jackson@dot.state.fl.us>; Carlos Rodriguez <CRodriguez@metriceng.com>; Formoso, Maria <Maria.Formoso@dot.state.fl.us>; Broadwell, Ann L <Ann.Broadwell@dot.state.fl.us>; mradzikhovsky@bma-ce.com; Rob Myers <Rob.Myers@metriceng.com>
Subject: RE: 405606 South Prong Preserve

Hi Gabriela,

We have. OEM is fine with the de minimis on the South Prong Preserve property, however Roy requested some clarification on how this needs to be justified. Mariano should be responding to you soon with this information.

Thanks,

Shereen

From: Gabriela Garcia [<mailto:GGarcia@metriceng.com>]
Sent: Thursday, May 18, 2017 1:25 PM
To: Yee Fong, Shereen
Cc: Bianco, Brittany; Jackson, Roy; Carlos Rodriguez; Formoso, Maria; Broadwell, Ann L; mradzikhovsky@bma-ce.com; Rob Myers
Subject: RE: 405606 South Prong Preserve

Hello Shereen

We have received good news from our coordination with DEP regarding the South Prong Preserve FCT Project 07-039-FF7. Please see attached email from Rita Ventry at Florida Communities Trust, FDEP. Please include this in your review and consideration of the Section 4(f).

Please let me know if you have any questions, thank you!

Thanks, Gabi

Office: (305) 235-5098 ext. 110

ggarcia@metriceng.com

From: Yee Fong, Shereen [<mailto:Shereen.YeeFong@dot.state.fl.us>]

Sent: Monday, May 15, 2017 8:59 AM

To: Gabriela Garcia <GGarcia@metriceng.com>

Cc: Bianco, Brittany <Brittany.Bianco@dot.state.fl.us>; Jackson, Roy <Roy.Jackson@dot.state.fl.us>

Subject: RE: 405606 South Prong Preserve

Thank you Gabriela,

We will review the packet and get back to you.

Shereen Yee Fong
Project Delivery Coordinator
Florida Department of Transportation
Office of Environmental Management
605 Suwannee Street, MS-37
Tallahassee, FL 32399
Ph: (850) 414-5259

From: Gabriela Garcia [<mailto:GGarcia@metriceng.com>]

Sent: Friday, May 12, 2017 2:47 PM

To: Yee Fong, Shereen

Cc: Carlos Rodriguez; Formoso, Maria; Bianco, Brittany; Broadwell, Ann L; Milagros Radzikhovsky (mradzikhovsky@bma-ce.com); Rob Myers

Subject: 405606 South Prong Preserve

Hello Shereen

-
As requested, attached is an informational packet we prepared regarding the South Prong Preserve. Now that we have narrowed down the alternative in this area, we were able to provide more specific information regarding the impacts that was not provided in the DOA. All of this information and more will be included in the Section 4(f) document. As mentioned on the phone, we are looking for your consensus to move forward with preparation of a de minimis for the following reasons:

- The County was preparing final design plans prior to the purchase of this property as a recreational resource and preserve. They prepared up to 90% final design plans prior to cancelling the job due to funding constraints. They have since requested federal funding for the project and for FDOT to execute the job on behalf of the County.
- This project has been (and continues to be) a top priority project since before these properties were purchased by the county and became section 4(f) resources
- The CR 510 improvements are mentioned in the management plan (see appendix of the attached document), however it does not specify that R/W will be required for the purpose of these improvements. Coordination with DEP is on-going.
- The project proposes improvements to the sites as follows:
 - Bicycle lanes and sidewalks along both sides of the road provides pedestrian access currently not available
 - Propose replacement of the existing culvert with a bridge to improve flow and potentially provide a wildlife/pedestrian crossing under the bridge
- CR 510 is an existing facility that bisects the preserve and was in existence prior to commissioning of the South Prong Preserve

-
This information is outlined in further detail in the attached document. Please feel free to reach out to us with any further questions or comments. We would like to obtain from you a consensus on which document type we can move forward for the impacts to the Section 4(f) resource. We thank you in advance for your time and help.

-
Thanks!

-
GABRIELA GARCIA, P.E.
Project Manager



13940 SW 136th St, Miami, FL 33186
Office: (305) 235-5098 ext. 110
Fax: (305) 235-5271
ggarcia@metriceng.com
www.metriceng.com

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Rob Myers

From: Gabriela Garcia
Sent: Thursday, May 18, 2017 11:35 AM
To: Rob Myers
Cc: Carlos Rodriguez
Subject: FW: South Prong Preserve FCT Project 07-039-FF7 - PD&E Study for CR 510 improvements

FYI great news!

Thanks, Gabi
Office: (305) 235-5098 ext. 110
ggarcia@metriceng.com

From: Ventry, Rita [mailto:Rita.Ventry@dep.state.fl.us]
Sent: Thursday, May 18, 2017 11:15 AM
To: Formoso, Maria <Maria.Formoso@dot.state.fl.us>
Cc: Carlos Rodriguez <CRodriguez@metriceng.com>; Gabriela Garcia <GGarcia@metriceng.com>; Beth Powell <bpowell@ircgov.com>; Szpyrka, Richard <rszpyrka@ircgov.com>; Phil Matson <pmatson@ircgov.com>; Roland Deblois <rdeblois@ircgov.com>; Broadwell, Ann L <Ann.Broadwell@dot.state.fl.us>; mradzikhovsky@bma-ce.com
Subject: RE: South Prong Preserve FCT Project 07-039-FF7 - PD&E Study for CR 510 improvements

Maria – I have good news, I discussed with our attorney the project this morning. A few things we have taken into account are below:

- 1) First and foremost, the Management Plan already mentions the planned road widening and the construction of the sidewalk to connect neighborhoods along the highway from Vero Lake Estates and Liberty Magnet School to the west of the project. The project received points for this connection.
- 2) The Road project is consistent with the management Plan and DRC.
- 3) The project has a minimal impact on the site and will not be taking away from any planned development the project received points for.
- 4) The project will also enhance the site by creating a bridge which will allow the trail to connect the two sites without having to cross the County Road, which creates a safer facility when built.

Once the project is approved and the County starts moving forward with the design, before construction begins, the only thing required by FCT will be the following:

- 1) Submit a request to modify the Management Plan
- 2) Provide the modified plan with modified text (please provide plan with red strike throughs if possible)
- 3) A modified Master Site Plan showing the changes

Hopefully this answers any concerns or questions. If not I will be available this afternoon between 2-4 for a conference call or anytime Monday after 9 am. Just let me know so I can put on my calendar.

If the County moves forward with this, when the documents are sent to me, if you could attach this email to the submittal. Thanks!

Rita Ventry



Rita Ventry, FCCM

Planner, Office of Operations
Florida Communities Trust
Florida Department of Environmental Protection
3800 Commonwealth Boulevard, MS 585
Tallahassee, Florida 32399-3000
Rita.Ventry@dep.state.fl.us
Office: 850.245.2683

Please take our Customer Survey to provide feedback on our services! Select "Grants" for my Section. [DEP Customer Survey](#)

From: Formoso, Maria [mailto:Maria.Formoso@dot.state.fl.us]
Sent: Wednesday, May 17, 2017 2:21 PM
To: Ventry, Rita <Rita.Ventry@dep.state.fl.us>
Cc: 'CRodriguez@metriceng.com' <CRodriguez@metriceng.com>; Gabriela Garcia <GGarcia@metriceng.com>; Beth Powell <bpowell@ircgov.com>; Szpyrka, Richard <rszpyrka@ircgov.com>; Phil Matson <pmatson@ircgov.com>; Roland Deblois <rdeblois@ircgov.com>; Broadwell, Ann L <Ann.Broadwell@dot.state.fl.us>; mradzikhovskiy@bma-ce.com
Subject: RE: South Prong Preserve FCT Project 07-039-FF7 - PD&E Study for CR 510 improvements

Hi Rita:

I hope you are doing well. Just wanted to follow-up with this e-mail to inquire about the pending teleconference. If there is anything I can do to assist you in scheduling the teleconference, please feel free to call me. Thank you.

Regards,

A handwritten signature in blue ink that reads "Maria Formoso".

Maria Formoso, P.E., P.M.P., Project Manager
Florida Department of Transportation - District 4 Design
3400 Commercial Blvd.
Ft. Lauderdale, FL., 33309
(954) 777-4677 Office (561) 452-8026 Cell
Email: Maria.Formoso@dot.state.fl.us

From: Formoso, Maria
Sent: Friday, May 12, 2017 3:35 PM
To: 'Ventry, Rita'
Cc: 'CRodriguez@metriceng.com'; Gabriela Garcia; Beth Powell; Szpyrka, Richard; Phil Matson; Roland Deblois; Broadwell, Ann L; 'mradzikhovskiy@bma-ce.com'
Subject: RE: South Prong Preserve FCT Project 07-039-FF7 - PD&E Study for CR 510 improvements
Importance: High

As per your request, attached is the information package we prepared for the South Prong Preserve. You requested five (5) items be address. These are itemized below with the corresponding response.

- 1) First, what has been developed as required in the DRC and Management plan?
Indian River County has provided the 2015 and 2016 FCT Annual Stewardship Reports which are included in Appendix A in the document attached to this email.
- 2) How much square acreage is needed of the FCT site?
Please see Page 5 and 6 of the attached document.
- 3) What will be impacted on the site as far as existing facilities, vegetation, etc?
Please see Page 9 of the attached document.
- 4) What is the easement going to be used for? (The actual road, side walk, ditches, etc)
Please see Page 5 and 6 of the attached document.
- 5) Submit a site plan showing the layout of the parcel, existing facilities, and show how much acreage of the site will be needed.
Please see 6 of the attached document, also, the site master plan is included in the management plan included in Appendix A.

As discussed during our recent telephone conversation, upon your review of this information, you will be available for a teleconference with FDOT and IRC staff. I look forward to hearing back from you. I will be more than happy to facilitate the teleconference for all. Thank you.

Regards,



Maria Formoso, P.E., P.M.P., Project Manager
Florida Department of Transportation - District 4 Design
3400 Commercial Blvd.
Ft. Lauderdale, FL., 33309
(954) 777-4677 Office (561) 452-8026 Cell
Email: Maria.Formoso@dot.state.fl.us

From: Ventry, Rita [<mailto:Rita.Ventry@dep.state.fl.us>]

Sent: Wednesday, May 03, 2017 3:39 PM

To: Formoso, Maria

Cc: 'CRodriguez@metriceng.com'; Gabriela Garcia; Beth Powell; Szyrka, Richard; Phil Matson; Roland Deblois

Subject: RE: South Prong Preserve FCT Project 07-039-FF7 - PD&E Study for CR 510 improvements

Maria – Some of the questions we will need answered concerning this project are listed below. If possible please send me as much of this information prior to our conference call.

- 1) First, what has been developed as required in the DRC and Management plan?
- 2) How much square acreage is needed of the FCT site?
- 3) What will be impacted on the site as far as existing facilities, vegetation, etc?
- 4) What is the easement going to be used for? (The actual road, side walk, ditches, etc)

- 5) Submit a site plan showing the layout of the parcel, existing facilities, and show how much acreage of the site will be needed.

I will need to get back with you on a date to have our conference call. Still need to get up with our attorney and look at her schedule. Thanks!

Rita Ventry



Rita Ventry, FCCM

Planner, Office of Operations
Florida Communities Trust
Florida Department of Environmental Protection
3800 Commonwealth Boulevard, MS 585
Tallahassee, Florida 32399-3000
Rita.Ventry@dep.state.fl.us
Office: 850.245.2683

Please take our Customer Survey to provide feedback on our services! Select "Grants" for my Section. [DEP Customer Survey](#)

From: Formoso, Maria [<mailto:Maria.Formoso@dot.state.fl.us>]

Sent: Wednesday, May 3, 2017 9:41 AM

To: Ventry, Rita <Rita.Ventry@dep.state.fl.us>

Cc: 'CRodriguez@metriceng.com' <CRodriguez@metriceng.com>; Gabriela Garcia <GGarcia@metriceng.com>; Beth Powell <bpowell@ircgov.com>; Szpyrka, Richard <rszpyrka@ircgov.com>; Phil Matson <pmatson@ircgov.com>; Roland Deblois <rdeblois@ircgov.com>; Wood, Rebecca <Rebecca.Wood@dep.state.fl.us>; Reeves, Linda <Linda.Reeves@dep.state.fl.us>; Browne, Samantha <Samantha.Browne@dep.state.fl.us>

Subject: RE: South Prong Preserve FCT Project 07-039-FF7 - PD&E Study for CR 510 improvements

Importance: High

Good morning Rita:

This email is in regards to the South Prong Preserve. The FDOT is currently working on the Project Development and Environmental Study (PD&E Study) for the four-laning of CR 510, from CR 512 to 58th Ave. The purchase of the South Prong Preserve was done with DEP Florida Forever Funds. Contrary to what was previously thought, the South Prong Preserve management plan (attached) does not clearly specify that the future four-laning of CR 510 will directly impact the preserve and require R/W acquisition from the preserve properties. (see excerpt below, page 26 of the management plan)

This trail will connect to a short "Cypress Loop" boardwalk, depending upon regulatory permitting. A public sidewalk will be constructed along the south side of the CR 510 right-of-way. This sidewalk will be part of the County's planned widening of CR 510, and will serve to connect neighborhoods along the highway from Vero Lake Estates and Liberty Magnet School to the west of the project site, to the 66th Avenue corridor.

FDOT is requesting a meeting (possibly a teleconference) with you and other FDEP staff concerning the South Prong Preserve and possible right-of-way requirements. The team is concerned that FDEP did not understand that the future CR 510 improvements would result in direct right-of-way impacts. Toward that end, the team is concerned there could be additional steps FDEP will require from us. The team needs to clarify now to avoid later delays. Please let me know the best time for us to discuss this issue. I look forward to hearing back from you.

Regards,



Maria Formoso, P.E., P.M.P., Project Manager
Florida Department of Transportation - District 4 Design
3400 Commercial Blvd.
Ft. Lauderdale, FL., 33309
(954) 777-4677 Office (561) 452-8026 Cell
Email: Maria.Formoso@dot.state.fl.us

From: Roland DeBlois [<mailto:rdeblois@ircgov.com>]
Sent: Thursday, April 27, 2017 3:13 PM
To: Formoso, Maria
Cc: 'CRodriguez@metriceng.com'; Gabriela Garcia; Beth Powell; Szpyrka, Richard; Phil Matson
Subject: RE: South Prong Preserve FCT Project 07-039-FF7 - PD&E Study for CR 510 improvements

Maria – I believe the FCT best point of contact is Rita Ventry, who was copied on my email.

Rita Ventry, FCCM

Planner, Office of Operations
Florida Communities Trust
Florida Department of Environmental Protection
3800 Commonwealth Boulevard, MS 585
Tallahassee, Florida 32399-3000
Rita.Ventry@dep.state.fl.us
Office: 850.245.2683

Roland M. DeBlois, AICP
Chief, Environmental Planning
& Code Enforcement Section
Indian River County
1801 27th Street, Bldg. A
Vero Beach, FL 32960-3388
Phone: (772) 226-1258
Fax: (772) 978-1806
rdeblois@ircgov.com

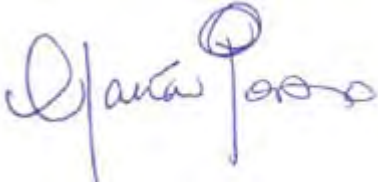
From: Formoso, Maria [<mailto:Maria.Formoso@dot.state.fl.us>]
Sent: Thursday, April 27, 2017 2:49 PM
To: Roland DeBlois <rdeblois@ircgov.com>
Cc: Rich Szpyrka <rszpyrka@ircgov.com>; Phil Matson <pmatson@ircgov.com>; rebecca.wood@dep.state.fl.us;

Linda.Reeves@dep.state.fl.us; Browne, Samantha <samantha.browne@dep.state.fl.us>; 'Carlos Rodriguez (CRodriguez@metriceng.com)' <CRodriguez@metriceng.com>; Gabriela Garcia <GGarcia@metriceng.com>; 'Ventry, Rita' <Rita.Ventry@dep.state.fl.us>; Beth Powell <bpowell@ircgov.com>

Subject: RE: South Prong Preserve FCT Project 07-039-FF7 - PD&E Study for CR 510 improvements

Who is the best point of contact in FTC? I would love to assist you in coordinating this effort in any way I can. Do you have a name to contact? Thank you for your prompt response.

Regards,



Maria Formoso, P.E., P.M.P., Project Manager
Florida Department of Transportation - District 4 Design
3400 Commercial Blvd.
Ft. Lauderdale, FL., 33309
(954) 777-4677 Office (561) 452-8026 Cell
Email: Maria.Formoso@dot.state.fl.us

From: Roland DeBlois [<mailto:rdeblois@ircgov.com>]

Sent: Thursday, April 27, 2017 2:35 PM

To: Formoso, Maria

Cc: Szyrka, Richard; Phil Matson; rebecca.wood@dep.state.fl.us; Linda.Reeves@dep.state.fl.us; Browne, Samantha; 'Carlos Rodriguez (CRodriguez@metriceng.com)'; Gabriela Garcia; 'Ventry, Rita'; Beth Powell

Subject: RE: South Prong Preserve FCT Project 07-039-FF7 - PD&E Study for CR 510 improvements

Maria – thank you copying FDEP staff on your email.

As you indicate, widening / improvement to CR 510 was anticipated and referenced in the 2007/2008 Florida Communities Trust (FCT) grant application and approved management plan for the South Prong Preserve project (FCT #07-039-FF7). Although a preliminary design of the CR 510 improvements was in the works at that time, the design was not finalized but is now moving forward under FDOT.

In assisting FDOT with the CR 510 project, particularly as it relates to the South Prong Preserve, Indian River County staff requests direction from FCT staff as to the process to address the right-of-way improvements.

Roland DeBlois

Roland M. DeBlois, AICP
Chief, Environmental Planning
& Code Enforcement Section
Indian River County
1801 27th Street, Bldg. A
Vero Beach, FL 32960-3388
Phone: (772) 226-1258
Fax: (772) 978-1806
rdeblois@ircgov.com

From: Formoso, Maria [<mailto:Maria.Formoso@dot.state.fl.us>]

Sent: Thursday, April 27, 2017 11:54 AM

To: Roland Deblois <rdeblois@ircgov.com>; Beth Powell <bpowell@ircgov.com>
Cc: Rich Szpyrka <rszpyrka@ircgov.com>; Phil Matson <pmatson@ircgov.com>; rebecca.wood@dep.state.fl.us;
Linda.Reeves@dep.state.fl.us; Browne, Samantha <samantha.browne@dep.state.fl.us>; 'Carlos Rodriguez
(CRodriguez@metriceng.com)' <CRodriguez@metriceng.com>; Gabriela Garcia <GGarcia@metriceng.com>
Subject: FM#405606-2.....PD&E Study for CR 510, from CR 512 to 58th Ave.

Hello Beth and Roland,

I would like to thank you in advance for your participation in tomorrow's scrub jay formal consultation progress meeting. Your input will be very important for this project.

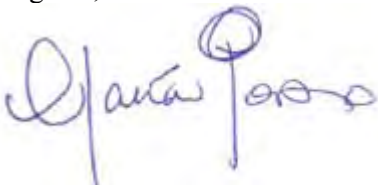
There is one other item that concerns the team and that is the impacts to the South Prong Preserve. The widening of CR 510 has been in the works since prior to the purchase of the South Prong Preserve properties with DEP Florida Forever Funds. Contrary to what was previously thought, the South Prong Preserve management plan (attached) does not clearly specify that the future widening of CR 510 will directly impact the preserve and require R/W acquisition from the preserve properties. (see excerpt below, page 26 of the management plan)

This trail will connect to a short "Cypress Loop" boardwalk, depending upon regulatory permitting. A public sidewalk will be constructed along the south side of the CR 510 right-of-way. This sidewalk will be part of the County's planned widening of CR 510, and will serve to connect neighborhoods along the highway from Vero Lake Estates and Liberty Magnet School to the west of the project site, to the 66th Avenue corridor.

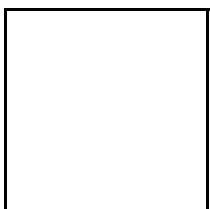
We are in need of further coordination with FDEP. This is paramount to get a better understanding of the process that will be required for taking R/W from the preserve. The team is concerned that FDEP did not understand that the future CR 510 improvements would result in direct right-of-way impacts. Toward that end, the team is concerned there could be additional steps FDEP will require from us. The team needs to clarify now to avoid later delays.

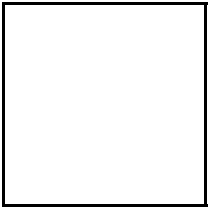
I took the liberty to copy FDEP on this email since they are a stakeholder and the team wishes to reach out to them. It would be my pleasure to schedule a coordination meeting on your behalf. Please advise.

Regards,



Maria Formoso, P.E., P.M.P., Project Manager
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(954) 777-4677 Office (561) 452-8026 Cell
Email: Maria.Formoso@dot.state.fl.us





Rob Myers

From: Berrios, Mariano <Mariano.Berrios@dot.state.fl.us>
Sent: Monday, May 22, 2017 3:31 PM
To: Gabriela Garcia
Cc: Wallace, Ronald; mradzikhovsky@bma-ce.com; Broadwell, Ann L; Yee Fong, Shereen; Bianco, Brittany; Formoso, Maria; Carlos Rodriguez; Rob Myers; Jackson, Roy; Kirby, Marjorie
Subject: Re: 405606 South Prong Preserve

Thank you for the clarification.

Mariano

Sent from OWA on Android

From: Gabriela Garcia <GGarcia@metriceng.com>
Sent: Monday, May 22, 2017 2:41:47 PM
To: Berrios, Mariano
Cc: Wallace, Ronald; mradzikhovsky@bma-ce.com; Broadwell, Ann L; Yee Fong, Shereen; Bianco, Brittany; Formoso, Maria; Carlos Rodriguez; Rob Myers
Subject: RE: 405606 South Prong Preserve

Mariano ,

Thank you so much for the comments, they are very helpful. We will include all of the requested information and comments into the de minimis document. I would like to address a few of the concerns below. Also see your email below for more detailed responses.

The County is the owner of the property and purchased the lands with FDEP FCT funding. THE OWJ is the County Land Management Office, Mr. Roland Deblois. We have been coordinating with him and his office throughout the project and will continue to do so for the preparation of the de minimis. We will also be coordinating with the county the future trail under the proposed bridge.

As part of the PD&E Study, we will be holding a Public Hearing as well as placing all of the documents, including the Section 4(f) on public display prior to the meeting.

Thanks!

GABRIELA GARCIA, P.E.
Project Manager



13940 SW 136th St, Miami, FL 33186
Office: (305) 235-5098 ext. 110
Fax: (305) 235-5271
ggarcia@metriceng.com

From: Formoso, Maria [<mailto:Maria.Formoso@dot.state.fl.us>]
Sent: Friday, May 19, 2017 10:52 AM
To: Carlos Rodriguez <CRodriguez@metriceng.com>; Gabriela Garcia <GGarcia@metriceng.com>
Cc: Wallace, Ronald <Ronald.Wallace@dot.state.fl.us>
Subject: FW: 405606 South Prong Preserve

Regards,



Maria Formoso, P.E., P.M.P., Project Manager
Florida Department of Transportation - District 4 Design
3400 Commercial Blvd.
Ft. Lauderdale, FL., 33309
(954) 777-4677 Office (561) 452-8026 Cell
Email: Maria.Formoso@dot.state.fl.us

From: Berrios, Mariano
Sent: Friday, May 19, 2017 10:45 AM
To: Broadwell, Ann L; Rodriguez, Carlos; Formoso, Maria; Yee Fong, Shereen
Cc: Bianco, Brittany; mradzikhovsky@bma-ce.com
Subject: FW: 405606 South Prong Preserve

The OEM concurs with proceeding with a “de minimis” determination on the South Prong Reserve associated with the subject project. The following actions need to be taken to complete the “determination”:

- 1- Question/Comment: It is understood that the Florida Department of Environmental Protection (FDEP) acquired the preserve property through a Florida Communities Trust Grant but, as stated in one of the Annual Stewardship Reports, the Indian River County manages and maintains the South Prong Preserve Conservation Area. Who is the actual Official with Jurisdiction OWJ? What kind of coordination is on-going with FDEP (if any is required) as it relates to the project?

The official with jurisdiction is Roland M. DeBlois, AICP, Chief, Environmental Planning & Code Enforcement Section, Indian River County

Recent coordination with Rita Ventry at the Florida Communities Trust (FCT) section of FDEP indicated that the following coordination is requested:

“Once the project is approved and the County starts moving forward with the design, before construction begins, the only thing required by FCT will be the following:

- 1) *Submit a request to modify the Management Plan*
- 2) *Provide the modified plan with modified text (please provide plan with red strike throughs if possible)*
- 3) *A modified Master Site Plan showing the changes”*

- 2- The OWJ needs to be informed of the intent to pursue a “de minimis” determination.

Agreed, we will coordinate with the FDOT project manager to notify Mr. DeBlois of the intent to pursue a “de minimis” determination

3- Identify the Activities, Features and Attributes (AFAs) and ensure that the OWJ understands that they will be asked to concur with the determination that there will be no adverse effect to the AFAs.

We will be documenting the Activities, Features, and Attributes and ensure that Mr. Deblois is aware of the process and need for his concurrence.

4- An appropriate mitigation plan for the land being used/taken needs to be developed in consultation with the OWJ.

During coordination and with the involvement of FDOT we will initiate discussion with Mr. Deblois about mitigation

5- Opportunity for the public to comment on the effect of the project on the protected Activities, Features and Attributes (AFAs) will need to be planned.

As part of the PD&E Study, we will be holding a Public Hearing as well as placing all of the documents, including the Section 4(f) on public display prior to the meeting.

Once the above are complete the following need to be done:

- 1- Provide for public comments once the “de minimis” determination is complete.
- 2- Comments received should be shared with the OWJ and request their concurrence (in writing) that there will be no adverse effects on the AFAs of the property.
- 3- If the OWJ concurs, the District will pursue a “de minimis” approval option under Section 4(f) and provided to OEM for approval concurrently with the environmental document (Type 2 CE).

General comments:

- 1- Is it clear to the Officials with Jurisdiction (OWJ) that a sidewalk is proposed for both sides of the road not just one side? (Proposed improvements shown in the Master Site Plan Map in the Management Plan (Appendix A) include one public sidewalk along the south side of the CR 510 right-of-way.)
- 2- The “Management Plan” states that the county will construct an arched culvert over the river as part of the CR 510 widening project. The build alternative proposes to replace the culvert with a bridge with a proposed elevation of approximately 5.7 feet above the existing elevation in order for Indian River County to provide a trail/wildlife crossing connecting the 2 parcels. The proposed alignment of the bridge shows it connecting to what appears to be private property, not refuge property. How will the proposed trail connect to the bridge?

Mariano Berrios



Project Delivery Coordinator
Noise and Air Quality Coordinator
Florida Department of Transportation
Office of Environmental Management
605 Suwannee Street MS-37
Tallahassee, Florida 32399-0450

Telephone: (850)414-5250

Fax: (850)414-4443

E-mail: mariano.berrios@dot.state.fl.us

From: Yee Fong, Shereen
Sent: Tuesday, May 16, 2017 1:19 PM
To: Jackson, Roy; Berrios, Mariano
Cc: Bianco, Brittany
Subject: FW: 405606 South Prong Preserve

Hi Roy and Mariano,

Are you both okay with D4 proceeding as a de minimis on the South Prong Preserve? We need to get back with them.

Shereen

From: Gabriela Garcia [<mailto:GGarcia@metriceng.com>]
Sent: Friday, May 12, 2017 2:47 PM
To: Yee Fong, Shereen
Cc: Carlos Rodriguez; Formoso, Maria; Bianco, Brittany; Broadwell, Ann L; Milagros Radzikhovsky (mradzikhovsky@bma-ce.com); Rob Myers
Subject: 405606 South Prong Preserve

Hello Shereen

-
[As requested, attached is an informational packet we prepared regarding the South Prong Preserve. Now that we have narrowed down the alternative in this area, we were able to provide more specific information regarding the impacts that was not provided in the DOA. All of this information and more will be included in the Section 4\(f\) document. As mentioned on the phone, we are looking for your consensus to move forward with preparation of a de minimis for the following reasons:](#)

- [The County was preparing final design plans prior to the purchase of this property as a recreational resource and preserve. They prepared up to 90% final design plans prior to cancelling the job due to funding constraints. They have since requested federal funding for the project and for FDOT to execute the job on behalf of the County.](#)
- [This project has been \(and continues to be\) a top priority project since before these properties were purchased by the county and became section 4\(f\) resources](#)
- [The CR 510 improvements are mentioned in the management plan \(see appendix of the attached document\), however it does not specify that R/W will be required for the purpose of these improvements. Coordination with DEP is on-going.](#)
- [The project proposes improvements to the sites as follows:](#)
 - [Bicycle lanes and sidewalks along both sides of the road provides pedestrian access currently not available](#)
 - [Propose replacement of the existing culvert with a bridge to improve flow and potentially provide a wildlife/pedestrian crossing under the bridge](#)
- [CR 510 is an existing facility that bisects the preserve and was in existence prior to commissioning of the South Prong Preserve](#)

-
[This information is outlined in further detail in the attached document. Please feel free to reach out to us with any further questions or comments. We would like to obtain from you a consensus on which document type we can move forward for the impacts to the Section 4\(f\) resource. We thank you in advance for your time and help.](#)

-
[Thanks!](#)

GABRIELA GARCIA, P.E.
Project Manager



13940 SW 136th St, Miami, FL 33186
Office: (305) 235-5098 ext. 110
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ggarcia@metriceng.com
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Rob Myers

From: Rob Myers
Sent: Monday, June 26, 2017 12:51 PM
To: 'Roland Deblois'
Cc: 'ann.broadwell@dot.state.fl.us'; 'rszpyrka@ircgov.com'; 'jennis@ircgov.com'; 'Formoso, Maria'; Carlos Rodriguez; Gabriela Garcia
Subject: RE: CR 510 Section 4f Deminimis Impacts Notification
Attachments: 510 De minimis OWJ Notification.pdf

All,

Please see attached a PDF version of the CR 510 Section 4(f) notification letter. Please use this version instead of the MS Word version I sent a moment ago. Thanks.

ROB MYERS
North Florida Environmental Manager



2616 Jenks Avenue, Panama City, FL 32405
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Cell: (512) 517-5121
rob.myers@metriceng.com
www.metriceng.com

From: Rob Myers
Sent: Monday, June 26, 2017 12:42 PM
To: Roland Deblois <rdeblois@ircgov.com>
Cc: ann.broadwell@dot.state.fl.us; 'rszpyrka@ircgov.com' <rszpyrka@ircgov.com>; 'jennis@ircgov.com' <jennis@ircgov.com>; Formoso, Maria <Maria.Formoso@dot.state.fl.us>; Carlos Rodriguez <Carlos.Rodriguez@metriceng.com>; Gabriela Garcia <Gabriela.Garcia@metriceng.com>
Subject: CR 510 Section 4f Deminimis Impacts Notification

Roland,

Please find attached a letter from the FDOT PM, Maria Formoso, regarding the CR 510 PD&E study. Its intent is to notify you that FDOT plans to pursue a *de minimis* finding regarding Section 4(f) impacts to the South Prong Preserve. Please let me know if you have any questions.

Regards,

ROB MYERS
North Florida Environmental Manager



2616 Jenks Avenue, Panama City, FL 32405
Office: (850) 872-8044
Cell: (512) 517-5121

rob.myers@metriceng.com
www.metriceng.com

Project: CR 510 PD&E Study (FM#405606-2-22-02)

Subject: Coordination with Indian River County

Meeting Date: 2/23/2017

Location: Indian River County, 1801 27th Street, Bldg. A

The following table identifies the meeting participants.

Name	Company/Agency	Email
Maria Formoso	FDOT D4	Maria.formoso@dot.state.fl.us
Roland Deblois	Indian River County (IRC) Environmental Planning	rdeblois@ircgov.com
Beth Powell (phone)	IRC Conservation Lands Manager	bpowell@ircgov.com
Ann Broadwell (phone)	FDOT D4	Ann.broadwell@dot.state.fl.us
Wendy Swindell (phone)	IRC	
Rob Myers	Metric Engineering	Rob.Myers@metriceng.com
Carlos Rodriguez	Metric Engineering	crodriguez@metriceng.com
Gabriela Garcia	Metric Engineering	Ggarcia@metriceng.com

The purpose of this meeting was to initiate coordination with Indian River County (IRC) regarding the South Prong Preserve. The following provides a brief summary:

- Mr. Roland Deblois gave Metric a signed statement of significance for the South Prong Preserve for use in the Section 4(f) Determination of Applicability (DOA).
- Mr. Rodriguez explained the limits of the project and the proposed typical sections. He explained that R/W will be required from the South Prong Preserve parcels. Mr. Myers explained that the existing culvert at the slough will be replaced with a bridge. There is a potential to provide a pedestrian crossing underneath the bridge. The project will also add sidewalks along CR 510.
- Mr. Deblois explained that the formal trail in the Preserve is currently in design; construction will hopefully take place within the year. The two properties are currently open to the public and they are part of the St. Sebastian River Greenway. Funding was recently allocated for improvements to the Preserve. The County is currently contemplating demolition of the historic house on the southern parcel since it has fallen into disrepair. The County is looking for options to provide a safe crossing between the two parcels on either side of the road.
- Mr. Myers explained potential issues since the properties were purchased with Florida Forever Funding. He explained FDEP's linear use policy. He explained that we are unclear on the required coordination between FDEP, the County and FDOT. He requested the County's agreement with FDEP for the grant that was received.
- Ms. Powell will email the grant agreement to the team.
- Ms. Powell explained that the southern parcel may have been originally purchased for wetland mitigation for SJRWMD.
- Mr. Myers confirmed that the project will have no direct impacts to the Wabasso Scrub Conservation Area.

- Ms. Powell explained that the County wants to improve the appearance of the fence line. They eventually would like to build a parking lot off of CR 510 for better access to the property.
- Ms. Powell explained that the territory maps that they have drawn and provided are generic maps for management uses; they are not absence/presence maps. She explained that the birds are regularly seen crossing CR 510 either on territory disputes or to eat acorns from the oak trees.
- Ms. Powell explained that she is concerned about the following secondary impacts: longer lanes to cross, increased vehicle strikes due to increased traffic and increased speed. She explained potential minimization efforts could include: wildlife signage (preferably lit), and reduced speed signs. She stated that she is not in favor of planting shrubs along the southern fence line as it could encourage jays to occupy areas nearer the road. She also requested that cabbage palms not be planted along the road as the jays use the fibers for nesting material. She also would discourage planting oaks. Ms. Powell would like to be part of reviewing the landscaping plans. Ms. Formoso explained that the landscaping plan will be developed in the design phase. Mr. Myers stated that these could be included as commitments to the PD&E Study.
- Mr. Deblois stated that the county is considering a parking lot and trailhead access in the Ansin Tract on the northeast corner of the CR 512 intersection. Mr. Rodriguez stated that no direct impacts are anticipated to the Ansin Tract.
- Ms. Powell asked if the team is doing scrub jay surveys and offered her assistance if so. Mr. Myers says that they will be coordinating with USFWS on that matter; however, they are assuming presence.

Metric Engineering will rely on these notes as the approved record of matters discussed and conclusions reached during this meeting unless you send the author written notice to the contrary within seven calendar days of receipt date of this meeting record.

Submitted by: Carlos Rodriguez, PE
Consultant Project Manager
Metric Engineering, Inc.

CC: All attendees



**Florida Communities Trust Grant Award Project
Annual Stewardship Report**

Name of Project: South Prong Preserve Conservation Area
FCT Project Number: 07-039-FF7
Local Government: Indian River County
For Period: November 2015 – November 2016
Date Drafted: November 30, 2016

SUMMARY

- The County has hired a Conservation Lands Technician and a Maintenance Worker (dedicated 50% to Conservation) to further the goals and objectives of the County's conservation land management program.
- Indian River County continues to manage and maintain the South Prong Preserve Conservation Area which includes two parcels purchased with FCT funding. The Shadowbrook Estates parcel (south of CR 510) and the Ryall parcel (north of CR 510) together create the South Prong Preserve Conservation Area. Management of the conservation area has included wetland enhancement at the site for an off-site mitigation project for the St. Johns River Water Management District.
- Renovations to the Ryall house (on the north parcel) were completed in 2013. The house is occupied by a caretaker / sheriff's deputy, who provides on-site security, maintenance & monitoring.
- In 2013, the Florida Department of Environmental Protection (FDEP) issued a Site Rehabilitation Completion Order (SRCO) for limited soil and groundwater contamination that was documented on two portions of the Shadowbrook Estates (southern) parcel.
- Over the past several years, the County has solicited bids for roof and other repairs to the Stough house on the Shadowbrook (south) parcel, but those solicitations were unsuccessful in procuring a contractor willing to do the work. Consequently, the house, which was in dilapidated condition when the property was initially acquired, has deteriorated to an unsafe condition. This situation was further exacerbated as a result of Hurricane Matthew in October 2016.
- Renovation of the structure is no longer a viable option and the structure needs to be partially or fully demolished for health and safety reasons. This coming year, County staff will be requesting guidance with FCT with respect to the County's FCT grant obligations and management plan objectives relating to the structure. The Stough house is currently listed in the Florida Master Site File as a historic structure (IR01116, ineligible for NRHP).

FUTURE LAND USE

In March 2010, the future land use and zoning designations of the project were changed to C-1 and Con-1, Public Conservation.

FCT SIGN

FCT acknowledgment signs have been erected at the entrances of both parcels, on the north and south sides of CR 510.

ARCHAEOLOGICAL – HISTORICAL RESOURCE SURVEY (IF APPLICABLE):

An archaeological/historical survey of the property has not been completed. A survey will be completed as funding is available.

PHYSICAL IMPROVEMENTS

- The Ryall house on the north parcel has been renovated and is currently serving as an on-site caretaker/ sheriff's deputy residence.
- Materials for an educational kiosk, bike rack and benches have been purchased. The County is not encouraging public use of the site at this time due to the safety issues associated with the house, therefore, the public use improvements have not been installed.
- The Stough house on the south Shadowbrook parcel has deteriorated to an unsafe condition. The County is exploring alternatives to renovation of the structure, which is cost-prohibitive due the structure's deteriorated condition. Those alternatives include partial or complete demolition, reconstruction and/or replacement, with consideration of the County's FCT grant obligations and management plan objectives.

RESOURCE PROTECTION AND ENHANCEMENT

A complete plant and animal inventory will be completed prior to the physical improvements plan. Currently there is one mitigation project that has removed all of the exotics and the old grove on the Stough property. Re-planting native species may be conducted to enhance the progress of the restoration to a native plant community. In addition, future mitigation project may be used to enhance the remainder of the wetlands, especially on the Ryall parcel.

In July 2013, FDEP issued a "Site Rehabilitation Completion Order (SRCO)" with no further action required for limited soil and groundwater contamination that was documented on two portions of the Shadowbrook Estates parcel (FDEP WCU Site ID No. COM-291259).

MONITORING

Management of nuisance feral hogs has been addressed by having trappers and hog hunters on the property. Should any other nuisance animals become a problem, the Conservation Lands Manager will coordinate with the IRC Animal Control Division and work with them to assist in removing the animals.

EDUCATIONAL SIGNS

Materials for kiosk have been purchased, however, as stated above, the County is delaying their installation due to public safety concerns associated with the dilapidated house.

EDUCATIONAL PROGRAMS (IF APPLICABLE)

No formal education programs occurred on the property this year. The Friends of the Sebastian River group has contacted the Conservation Lands Manager and will be coordinating on doing education programs on the site in the future.

EASEMENTS, CONCESSIONS OR LEASES

The Ryall house has been leased under a caretaker's agreement to an Indian River County Sheriff's Deputy for on-site security and grounds maintenance.

REVENUES

No revenues have been collected to date.

SECURITY

Security has not been a problem this year. If security becomes a problem, the Conservation Lands Manager will work with the Indian River County Sheriff's Department and the Deputy on-site.

MANAGEMENT CHANGES

No management changes at this time.

ATTACHMENTS

FCT ACKNOWLEDGEMENT SIGNS (at north and south entrances)



STOUGH HOUSE ON THE (SOUTH) SHADOWBROOK PARCEL



1
2
3
4
5

**APPENDIX 5- WATER QUALITY IMPACT EVALUATION AND AIR QUALITY
TECHNICAL MEMORANDUM**

Date: November 14, 2017

To: CR 510/ 85 Street PD&E Project File

From: Metric Engineering, Inc.

Subject: FM No.: 405606-2-22-02
Air Quality Screening Test
CR 510/85 Street from CR 512 to 58 Avenue
Indian River County

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.

The proposed project is located in Indian River County, an area currently designated as being in attainment for all criteria air pollutants. The project area predominantly contains residential and agricultural land uses, along with the two public schools and several parks/preserves.

The project was reviewed for air quality impacts consistent with the *FHWA Discussion Paper: Appropriate Level of Highway Air Quality Analysis for a CE, EA/FONSI, and EIS*. The project alternatives were subjected to a carbon monoxide (CO) screening model that makes various conservative worst-case assumptions related to site conditions, meteorology and traffic. The Florida Department of Transportation's (FDOT's) screening model for CO uses the latest United States Environmental Protection Agency (EPA)-approved software to produce estimates of one-hour and eight-hour CO at default air quality receptor locations. The one-hour and eight-hour estimates can be directly compared to the current one-and eight-hour National Ambient Air Quality Standards (NAAQS) for CO.

The roadway intersections forecast to have the highest total approach traffic volumes are where CR 510 intersects 66 Avenue and CR 512. The Build and No-Build scenarios for both the opening year (2020) and the design year (2040) were evaluated. The traffic data input used in the evaluation is attached to this memorandum.

Estimates of CO were predicted for the default receptors which are located 10 feet to 150 feet from the edge of the roadway. Based on the results from the screening model, the highest project-related CO one- and eight-hour levels are not predicted to meet or exceed the one- or eight-hour NAAQS for this pollutant with either the No-Build or Build alternatives. As such, the project "passes" the screening model. The results of the screening model are attached to this memorandum.

The project is located in an area which is designated attainment for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, the Clean Air Act conformity requirements do not apply to the project.

The project is expected to improve traffic flow by adding lanes to relieve congestion, which should reduce operational greenhouse gas emissions.

CO Florida 2012 - Results
Tuesday, November 14, 2017

Project Description

Project Title CR 510 PD&E Study
Facility Name CR 510
User's Name Caitlin Hill
Run Name CR 510 and 66 Ave
FDOT District 4
Year 2020
Intersection Type 4 X 4
Speed Arterial 35 mph
Approach Traffic Arterial 861 vph

Environmental Data

Temperature 53.9 °F
Reid Vapor Pressure 13.3 psi
Land Use Rural
Stability Class E
Surface Roughness 10 cm
1 Hr. Background Concentration 1.7 ppm
8 Hr. Background Concentration 1.0 ppm

Results
(ppm, including background CO)

Receptor	Max 1-Hr	Max 8-Hr
1	2.8	1.7
2	3.1	1.9
3	3.2	1.9
4	2.8	1.7
5	2.8	1.7
6	2.8	1.7
7	3.1	1.9
8	3.2	1.9
9	2.8	1.7
10	2.8	1.7
11	2.8	1.7
12	3.1	1.9
13	3.3	2.0
14	2.8	1.7
15	2.8	1.7
16	2.9	1.7
17	3.1	1.9
18	3.2	1.9
19	2.8	1.7
20	2.8	1.7

*****PROJECT PASSES*****
NO EXCEEDANCES OF NAAQ STANDARDS ARE PREDICTED

CO Florida 2012 - Results
 Tuesday, November 14, 2017

Project Description

Project Title CR 510 PD&E Study
 Facility Name CR 510
 User's Name Caitlin Hill
 Run Name CR 510 and 66 Ave - Build
 FDOT District 4
 Year 2020
 Intersection Type 4 X 4
 Speed Arterial 35 mph
 Approach Traffic Arterial 926 vph

Environmental Data

Temperature 53.9 °F
 Reid Vapor Pressure 13.3 psi
 Land Use Rural
 Stability Class E
 Surface Roughness 10 cm
 1 Hr. Background Concentration 1.7 ppm
 8 Hr. Background Concentration 1.0 ppm

Results
 (ppm, including background CO)

Receptor	Max 1-Hr	Max 8-Hr
1	2.9	1.7
2	3.1	1.9
3	3.4	2.0
4	3.0	1.8
5	2.9	1.7
6	2.9	1.7
7	3.1	1.9
8	3.4	2.0
9	2.9	1.7
10	2.9	1.7
11	2.9	1.7
12	3.1	1.9
13	3.4	2.0
14	2.9	1.7
15	2.9	1.7
16	3.0	1.8
17	3.1	1.9
18	3.4	2.0
19	3.0	1.8
20	2.9	1.7

 *****PROJECT PASSES*****
 NO EXCEEDANCES OF NAAQ STANDARDS ARE PREDICTED

CO Florida 2012 - Results
 Tuesday, November 14, 2017

Project Description

Project Title CR 510 PD&E Study
 Facility Name CR 510
 User's Name Caitlin Hill
 Run Name CR 510 and 66 Ave
 FDOT District 4
 Year 2040
 Intersection Type 4 X 4
 Speed Arterial 35 mph
 Approach Traffic Arterial 1352 vph

Environmental Data

Temperature 53.9 °F
 Reid Vapor Pressure 13.3 psi
 Land Use Rural
 Stability Class E
 Surface Roughness 10 cm
 1 Hr. Background Concentration 1.7 ppm
 8 Hr. Background Concentration 1.0 ppm

Results

(ppm, including background CO)

Receptor	Max 1-Hr	Max 8-Hr
1	3.2	1.9
2	3.3	2.0
3	3.5	2.1
4	3.3	2.0
5	3.1	1.9
6	3.2	1.9
7	3.3	2.0
8	3.5	2.1
9	3.2	1.9
10	3.1	1.9
11	3.2	1.9
12	3.3	2.0
13	3.5	2.1
14	3.2	1.9
15	3.1	1.9
16	3.2	1.9
17	3.4	2.0
18	3.5	2.1
19	3.2	1.9
20	3.1	1.9

 *****PROJECT PASSES*****
 NO EXCEEDANCES OF NAAQ STANDARDS ARE PREDICTED

CO Florida 2012 - Results
 Tuesday, November 14, 2017

Project Description

Project Title CR 510 PD&E Study
 Facility Name CR 510
 User's Name Caitlin Hill
 Run Name CR 510 and 66 Ave - Build
 FDOT District 4
 Year 2040
 Intersection Type 4 X 4
 Speed Arterial 35 mph
 Approach Traffic Arterial 1532 vph

Environmental Data

Temperature 53.9 °F
 Reid Vapor Pressure 13.3 psi
 Land Use Rural
 Stability Class E
 Surface Roughness 10 cm
 1 Hr. Background Concentration 1.7 ppm
 8 Hr. Background Concentration 1.0 ppm

Results
 (ppm, including background CO)

Receptor	Max 1-Hr	Max 8-Hr
1	3.4	2.0
2	3.6	2.2
3	3.8	2.3
4	3.6	2.2
5	3.2	1.9
6	3.4	2.0
7	3.6	2.2
8	3.8	2.3
9	3.5	2.1
10	3.2	1.9
11	3.5	2.1
12	3.6	2.2
13	3.8	2.3
14	3.5	2.1
15	3.2	1.9
16	3.4	2.0
17	3.7	2.2
18	3.8	2.3
19	3.5	2.1
20	3.2	1.9

 *****PROJECT PASSES*****
 NO EXCEEDANCES OF NAAQ STANDARDS ARE PREDICTED

CO Florida 2012 - Results
 Tuesday, November 14, 2017

Project Description

Project Title CR 510 PD&E Study
 Facility Name CR 510
 User's Name Caitlin Hill
 Run Name CR 510 and CR 512
 FDOT District 4
 Year 2020
 Intersection Type 6 X 4
 Speed Arterial 30 mph
 Approach Traffic Arterial 999 vph

Environmental Data

Temperature 53.9 °F
 Reid Vapor Pressure 13.3 psi
 Land Use Rural
 Stability Class E
 Surface Roughness 10 cm
 1 Hr. Background Concentration 1.7 ppm
 8 Hr. Background Concentration 1.0 ppm

Results

(ppm, including background CO)

Receptor	Max 1-Hr	Max 8-Hr
1	2.8	1.7
2	3.1	1.9
3	3.4	2.0
4	2.9	1.7
5	2.7	1.6
6	2.6	1.6
7	2.9	1.7
8	3.1	1.9
9	3.1	1.9
10	2.9	1.7
11	2.8	1.7
12	3.1	1.9
13	3.4	2.0
14	2.9	1.7
15	2.7	1.6
16	2.6	1.6
17	2.9	1.7
18	3.1	1.9
19	3.1	1.9
20	2.9	1.7

 *****PROJECT PASSES*****
 NO EXCEEDANCES OF NAAQ STANDARDS ARE PREDICTED

CO Florida 2012 - Results
 Tuesday, November 14, 2017

Project Description

Project Title CR 510 PD&E Study
 Facility Name CR 510
 User's Name Caitlin Hill
 Run Name CR 510 and CR 512 - Build
 FDOT District 4
 Year 2020
 Intersection Type 6 X 4
 Speed Arterial 30 mph
 Approach Traffic Arterial 999 vph

Environmental Data

Temperature 53.9 °F
 Reid Vapor Pressure 13.3 psi
 Land Use Rural
 Stability Class E
 Surface Roughness 10 cm
 1 Hr. Background Concentration 1.7 ppm
 8 Hr. Background Concentration 1.0 ppm

Results

(ppm, including background CO)

Receptor	Max 1-Hr	Max 8-Hr
1	2.8	1.7
2	3.1	1.9
3	3.4	2.0
4	2.9	1.7
5	2.7	1.6
6	2.6	1.6
7	2.9	1.7
8	3.1	1.9
9	3.1	1.9
10	2.9	1.7
11	2.8	1.7
12	3.1	1.9
13	3.4	2.0
14	2.9	1.7
15	2.7	1.6
16	2.6	1.6
17	2.9	1.7
18	3.1	1.9
19	3.1	1.9
20	2.9	1.7

 *****PROJECT PASSES*****
 NO EXCEEDANCES OF NAAQ STANDARDS ARE PREDICTED

CO Florida 2012 - Results
 Tuesday, November 14, 2017

Project Description

Project Title CR 510 PD&E Study
 Facility Name CR 510
 User's Name Caitlin Hill
 Run Name CR 510 and CR 512
 FDOT District 4
 Year 2040
 Intersection Type 6 X 4
 Speed Arterial 30 mph
 Approach Traffic Arterial 1161 vph

Environmental Data

Temperature 53.9 °F
 Reid Vapor Pressure 13.3 psi
 Land Use Rural
 Stability Class E
 Surface Roughness 10 cm
 1 Hr. Background Concentration 1.7 ppm
 8 Hr. Background Concentration 1.0 ppm

Results
 (ppm, including background CO)

Receptor	Max 1-Hr	Max 8-Hr
1	2.8	1.7
2	3.0	1.8
3	3.2	1.9
4	2.8	1.7
5	2.5	1.5
6	2.6	1.6
7	2.7	1.6
8	3.1	1.9
9	2.8	1.7
10	2.8	1.7
11	2.8	1.7
12	3.0	1.8
13	3.2	1.9
14	2.8	1.7
15	2.5	1.5
16	2.6	1.6
17	2.7	1.6
18	3.1	1.9
19	2.8	1.7
20	2.8	1.7

 *****PROJECT PASSES*****
 NO EXCEEDANCES OF NAAQ STANDARDS ARE PREDICTED

CO Florida 2012 - Results
 Tuesday, November 14, 2017

Project Description

Project Title CR 510 PD&E Study
 Facility Name CR 510
 User's Name Caitlin Hill
 Run Name CR 510 and CR 512 - Build
 FDOT District 4
 Year 2040
 Intersection Type 6 X 4
 Speed Arterial 30 mph
 Approach Traffic Arterial 1199 vph

Environmental Data

Temperature 53.9 °F
 Reid Vapor Pressure 13.3 psi
 Land Use Rural
 Stability Class E
 Surface Roughness 10 cm
 1 Hr. Background Concentration 1.7 ppm
 8 Hr. Background Concentration 1.0 ppm

Results
 (ppm, including background CO)

Receptor	Max 1-Hr	Max 8-Hr
1	2.9	1.7
2	3.0	1.8
3	3.2	1.9
4	2.8	1.7
5	2.6	1.6
6	2.6	1.6
7	2.7	1.6
8	3.1	1.9
9	2.9	1.7
10	2.8	1.7
11	2.9	1.7
12	3.0	1.8
13	3.2	1.9
14	2.8	1.7
15	2.6	1.6
16	2.6	1.6
17	2.7	1.6
18	3.1	1.9
19	2.9	1.7
20	2.8	1.7

 *****PROJECT PASSES*****
 NO EXCEEDANCES OF NAAQ STANDARDS ARE PREDICTED

1 The Water Quality Impact Evaluation and Air Quality Technical Memorandum will
2 be inserted here when completed

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APPENDIX 6- USFWS BIOLOGICAL OPINION

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1 The Biological Opinion will be inserted here once Section 7 consultation is
2 completed

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Appendix 7- NMFS Concurrence Letter

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1 The concurrence letter from NMFS will be inserted here after receipt

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Appendix 8- Commitment Tracker

