

Federal Highway Administration
Florida Division

ADMINISTRATIVE ACTION

PROGRAMMATIC SECTION 4(f) EVALUATION

U.S. Department of Transportation

Federal Highway Administration
and

Florida Department of Transportation

I-75 (SR 93)

PROJECT DEVELOPMENT AND ENVIRONMENT STUDY

from north of SR 52 to south of CR 476B

Pasco, Hernando, and Sumter Counties; Florida

Work Program Item Segment Number: 411014 1

Federal Aid Program Number: 0751-120I

The Florida Department of Transportation (FDOT) has conducted a Project Development and Environment (PD&E) Study to evaluate capacity improvements along the segment of Interstate 75 (I-75) -State Road (SR) 93- that extends from just north of SR 52 in Pasco County to just south of County Road (CR) 476B in Sumter County, Florida. The length of this segment is approximately 20.8 miles. For approximately 6.0 miles, I-75 travels through Withlacoochee State Forest (WSF) which is a Section 4(f) resource. To accommodate stormwater runoff from the project along this segment, use of WSF land will be necessary. This document presents all the alternatives considered and the planning to minimize harm to the WSF from the intended use.

Submitted pursuant to 49 U.S.C. 303.

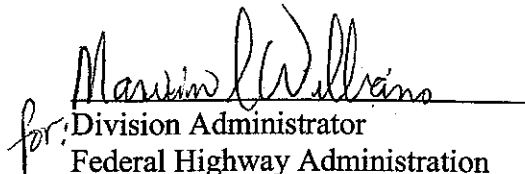
Based on considerations presented herein, it was determined that there is no feasible and prudent alternative to the use of land from the WSF and that the proposed action includes all possible planning to minimize harm to this Section 4(f) property resulting from such use.



Florida Department of
Transportation Representative

3 / 8 / 07

Date


for _____
Division Administrator
Federal Highway Administration

03 / 13 / 2007

Date

I-75 (SR 93)
PROJECT DEVELOPMENT AND ENVIRONMENT STUDY
from north of SR 52 to south of CR 476B
Pasco, Hernando, and Sumter Counties; Florida

Work Program Item Segment Number: 411014 1
Federal Aid Program Number: 0751-120I

PROGRAMMATIC SECTION 4(f) EVALUATION



Prepared for:
Florida Department of Transportation
District Seven
11201 North McKinley Drive
Tampa, Florida 33612-6476

H.W. Lochner, Inc.
13577 Feather Sound Drive, Suite 600
Clearwater, Florida 33762

(Prepared by)

Panos Kontses, PE, Project Engineer

(Name and Title of Engineer)

June 2007

TABLE OF CONTENTS

Section	Title	Page No.
1.0	INTRODUCTION.....	1
1.1	PURPOSE.....	1
1.2	PROJECT DESCRIPTION.....	3
1.2.1	Project Background.....	3
1.2.2	The Study Area.....	3
1.2.3	Need for the Project.....	5
1.3	STUDY ALTERNATIVES.....	5
1.3.1	The No-Build Alternative.....	6
1.3.2	Development/Widening of Other Corridors.....	7
1.3.3	Widen I-75 to an Eight-Lane Highway.....	8
1.3.4.1	The “Inside” Widening Alternative.....	8
1.3.4.2	The “Inside & Outside” Widening Alternative.....	11
1.3.4.3	The “Outside” Widening Alternative.....	11
2.0	SECTION 4(f) RESOURCES.....	16
2.1	WITHLACOOCHEE STATE FOREST – CROOM TRACT.....	16
2.1.1	Ownership.....	16
2.1.2	Property Type.....	19
2.1.3	Activities/Facilities.....	19
2.1.4	Access and Usage.....	19
2.1.5	Relationship to Similarly Used Lands.....	20
2.2	WITHLACOOCHEE RIVER CANOE TRAIL.....	20
2.2.1	Ownership.....	20
2.2.2	Property Type.....	20
2.2.3	Activities/Facilities.....	22
2.2.4	Access and Usage.....	22
2.2.5	Relationship to Similarly Used Lands.....	22
2.3	REFERENCES.....	22
3.0	PROPOSED USE OF SECTION 4(f) RESOURCES.....	23
3.1	WITHLACOOCHEE STATE FOREST – CROOM TRACT.....	23
3.1.1	Drainage Basin 19.....	24
3.1.2	Drainage Basin 31.....	27
3.1.3	Drainage Basin 32.....	31
3.1.4	Drainage Basin 33.....	33
3.1.5	Drainage Basin 34.....	38
3.1.6	Summary of Effects.....	41
3.2	WITHLACOOCHEE RIVER CANOE TRAIL.....	43
4.0	POTENTIAL MEASURES TO AVOID/MINIMIZE IMPACTS TO SECTION 4(f) RESOURCES.....	44
4.1	THE “AVOID EFFECTS” ALTERNATIVE.....	44
4.2	THE “MINIMIZE EFFECTS” ALTERNATIVES.....	44

TABLE OF CONTENTS (continued)

Section	Title	Page No.
5.0	APPLICABILITY OF PROGRAMMATIC SECTION 4(f) EVALUATION.....	47
6.0	COORDINATION	48
6.1	ADVANCE NOTIFICATION	48
6.2	PRE-APPLICATION MEETING WITH THE SWFWMD.....	49
6.3	COORDINATION WITH THE DOF	50
6.3.1	Meeting with the DOF on November 29, 2005	50
6.3.2	DOF Letter Dated May 5, 2006	50
6.3.3	FDOT Letter Dated August 7, 2006	51
6.3.4	Meeting with the DOF on August 8, 2006.....	51
6.3.5	DOF Letter Dated December 18, 2006.....	52
7.0	SECTION 4(f) EVALUATION CONCLUSIONS.....	53

LIST OF EXHIBITS

Exhibit No.	Title	Page No.
Exhibit 1-1	Project Location Map.....	2
Exhibit 1-2	I-75 Mainline – Existing Typical Section.....	4
Exhibit 1-3	I-75 Mainline Typical Section - “Inside” Widening Alternative	9
Exhibit 1-4	I-75 Bridge Typical Section - “Inside” Widening Alternative.....	10
Exhibit 1-5	I-75 Mainline Typical Section - “Inside & Outside” Widening Alternative	12
Exhibit 1-6	I-75 Bridge Typical Section - “Inside & Outside” Widening Alternative	13
Exhibit 1-7	I-75 Mainline Typical Section - “Outside” Widening Alternative	14
Exhibit 1-8	I-75 Bridge Typical Section - “Outside” Widening Alternative	15
Exhibit 2-1	Section 4(f) Resources within the I-75 PD&E Study Area.....	17
Exhibit 2-2	Withlacoochee State Forest Tracts.....	18
Exhibit 2-4	Views of Withlacoochee River near I-75.....	21
Exhibit 3-1	Alternative Stormwater Management Solutions in Drainage Basin 19.....	25
Exhibit 3-2A	Alternative Stormwater Management Solutions in Drainage Basin 31.....	28
Exhibit 3-2B	Alternative Stormwater Management Solutions in Drainage Basin 31.....	29
Exhibit 3-2C	Alternative Stormwater Management Solutions in Drainage Basin 31.....	30
Exhibit 3-3	Alternative Stormwater Management Solutions in Drainage Basin 32.....	32

LIST OF EXHIBITS (continued)

<u>Exhibit No.</u>	<u>Title</u>	<u>Page No.</u>
Exhibit 3-4A	Alternative Stormwater Management Solutions in Drainage Basin 33.....	34
Exhibit 3-4B	Alternative Stormwater Management Solutions in Drainage Basin 33.....	35
Exhibit 3-4C	Alternative Stormwater Management Solutions in Drainage Basin 33.....	36
Exhibit 3-5A	Alternative Stormwater Management Solutions in Drainage Basin 34.....	39
Exhibit 3-5B	Alternative Stormwater Management Solutions in Drainage Basin 34.....	40

LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	<u>Page No.</u>
Table 3-1	Summary of Effects on WSF Land Due to Stormwater Management	42
Table 3-2	Summary of Effects within the Natural Depression Areas of the WSF	43
Table 4-1	Effects of Avoidance and Minimization Alternatives on the WSF.....	45

APPENDICES

APPENDIX A – Withlacoochee State Forest Five-Year Management Plan; 2003-2008

APPENDIX B – Division of Forestry Letter Dated December 18, 2006

1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) has conducted a Project Development and Environment (PD&E) Study that evaluated capacity improvements along the segment of Interstate 75 (I-75) -State Road (SR) 93- that extends from just north of SR 52 in Pasco County to just south of County Road (CR) 476B in Sumter County, Florida. The length of this segment is approximately 20.8 miles. The design year for the improvements is Year 2030. **Exhibit 1-1** illustrates the location and limits of this project.

1.1 PURPOSE

The objective of this PD&E Study was to document the engineering and environmental analyses that were performed for this project so that the FDOT and the Federal Highway Administration (FHWA) could reach a decision on the type, location, and conceptual design of the necessary improvements of I-75 to accommodate future traffic demand in a safe and efficient manner. This study documented the need for the improvements as well as the procedures utilized to develop and evaluate various improvement alternatives. Information related to the engineering and environmental characteristics, which are essential for the alternatives analysis, was collected. Design criteria were established and preliminary alternatives were developed. The comparison of alternatives was based on a variety of parameters utilizing a matrix format. This process identified the alternative that would have minimal effects, while providing the necessary improvements.

The PD&E Study also satisfies all applicable requirements, including the National Environmental Policy Act (NEPA), in order for this project to qualify for federal-aid funding of subsequent development phases (design, right-of-way acquisition, and construction).

This Programmatic Section 4(f) Evaluation is part of the PD&E Study. This report addresses the potential effects of project alternatives on publicly-owned land subject to FHWA Section 4(f) requirements.

1.2 PROJECT DESCRIPTION

1.2.1 Project Background

I-75 is an interstate, limited access freeway. It is included in the State Highway System (SHS), designated as SR 93, the Florida Intrastate Highway System (FIHS), the Strategic Intermodal System (SIS), and the Federal Aid Interstate System. I-75 also serves as a major evacuation route throughout the state. According to FIHS standards, all of the I-75 components (mainline, ramps, merge/diverge areas) should provide adequate capacity to operate at level of service (LOS) “C” or better.

1.2.2 The Study Area

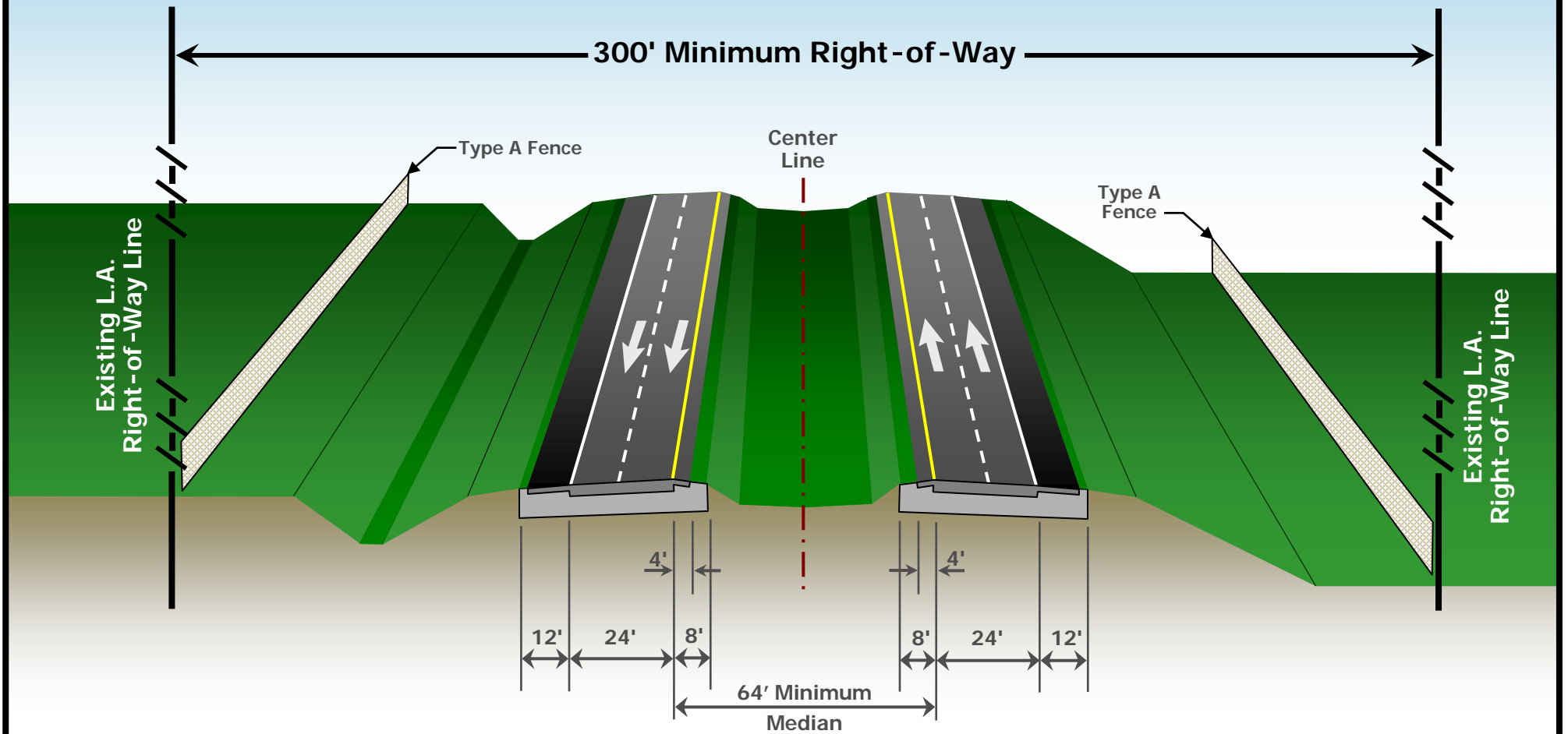
As noted before, the study area for this project extends from just north of SR 52 in Pasco County to just south of County Road (CR) 476B in Sumter County, Florida; a distance of approximately 20.8 miles.

Presently, within the project limits, I-75 is a four-lane, divided, limited access, rural highway that generally occupies 300 feet of right of way. **Exhibit 1-2** displays the existing typical section of I-75. No major improvements have been made to this segment of I-75 since its original construction in the 1960s.

The study area includes two interchanges and two rest areas (one in each direction). More specifically, a partial cloverleaf interchange is currently provided at Blanton Road (CR 41) approximately 6.3 miles north of SR 52 in Pasco County and a diamond interchange is present at Cortez Road (SR 50/US 98), approximately 9.3 miles north of CR 41 in Hernando County. The rest areas are located approximately 4.9 miles north of SR 50, in Sumter County.

From north of SR 50 to the northern terminus of the project, the Withlacoochee State Forest abuts the entire western border of I-75 and most of its eastern border. At the Hernando/Sumter county line, approximately 1.5 miles from the northern project terminus, I-75 crosses the Withlacoochee River.

Roadway Typical Section



I-75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 1201

I-75 Mainline Existing Typical Section

To facilitate development and evaluation of the improvement alternatives, the project was divided into three segments:

- Segment 1: from north of SR 52 to the Pasco/ Hernando county line; 7.8 miles
- Segment 2: from the Pasco/Hernando county line to SR 50; 7.0 miles
- Segment 3: from SR 50 to just south of CR 476B; 6.0 miles.

1.2.3 Need for the Project

The need for improving I-75 within the project limits was established after consideration of the following factors:

- Evaluation of the existing and future level of service for traffic operations along the I-75 corridor based on the assumption that the current geometric characteristics of the roadway network (I-75 and connecting roadways) will be maintained through the design year (No-Build Alternative).
- Analyses of the traffic safety statistics.
- Evaluation of the current and future contribution of I-75 in accommodating regional travel and its importance in providing system-wide linkage within the overall roadway network.
- Review of the federal and state policies regarding I-75 and, where applicable, study of the comprehensive plans and the long-range transportation plans of the local governments involved in this project.
- Assessment of current and future social and economic demands.
- Study of the interrelationships of I-75 with other modes of transportation.
- Evacuation and emergency response needs.

1.3 STUDY ALTERNATIVES

According to the Traffic Technical Memorandum –prepared for this study under separate cover– the annual average daily traffic (AADT) volumes along I-75 during the design year 2030 should be expected to range from 90,000 to 107,000 vehicles per day (vpd). To accommodate this projected transportation demand at the SIS standard for this facility of LOS “C”, I-75 will need to be widened to an eight-lane highway with four travel lanes

in each direction. Also, improvements will be needed at the interchanges of I-75 with CR 41 and SR 50. These improvements are considered the Build Alternative. In addition to the Build Alternative, a No Build Alternative will remain a viable alternative under consideration during this PD&E Study. One other alternative has been evaluated which includes widening another existing facility or developing a new corridor that parallels I-75.

A presentation of these alternatives follows below.

1.3.1 The No-Build Alternative

Under the No-Build Alternative no action will be taken with respect to widening I-75 within the limits of this study. The advantages of the No-Build alternative include:

- No right-of-way acquisition,
- No relocations,
- No construction costs,
- No inconveniences to the motoring public due to construction,
- No inconveniences to the owners of properties adjacent to the existing interchanges due to construction, and
- No degradation or disruption of natural and other environmental resources.

The disadvantages of the No-Build alternative include:

- The LOS “C” standard for I-75 will not be met and therefore, this facility will not be consistent with the SIS specifications. I-75 will become increasingly congested resulting in increased road user costs and air pollution.
- This alternative is inconsistent with the 2025 Long Range Transportation Plans (LRTPs) of Pasco and Hernando Counties Metropolitan Planning Organizations (MPOs) and the comprehensive plans of Pasco, Hernando, and Sumter counties. All of these documents call for widening improvements of I-75 within the project limits.

1.3.2 Development/Widening of Other Corridors

Potential alternative corridors to improving the I-75 corridor could be: a) the development of a new parallel corridor east or west of I-75 and b) the improvement of one or more existing parallel facilities.

The alternative to develop a new north/south limited access highway that parallels I-75 either east or west of I-75 was abandoned early on in this study due to the magnitude of the natural environment, economic, social, cultural, and physical effects such an alternative poses. Such a corridor is not identified in any MPO's LRTP nor is discussed in any comprehensive plan of any county.

There are two other FIHS facilities several miles west of I-75 that partially accommodate regional north/south travel and, therefore, were considered as alternative routes for improvement. Neither of them, however, directly connects with I-75 and therefore, they do not provide system continuity. For this reason and the reasons presented below, the alternative to widen another existing facility instead of I-75 was also eliminated from further consideration.

Suncoast Parkway (SR 589) –a four-lane, limited access, toll facility– runs in a generally north/south direction approximately 15 miles west of I-75 and connects the Veterans Expressway in Hillsborough County with US 98 in Hernando County. Florida's Turnpike Enterprise is currently studying the potential extension of Suncoast Parkway to connect it with US 19 in northern Citrus County. The current levels of service along Suncoast Parkway in Hernando and Pasco Counties are satisfactory. According to traffic forecasts being developed for the Suncoast Parkway study, this facility is not expected to result to an appreciable diversion of the traffic volumes from I-75.

US 19 is located west of I-75. US 19, which begins at SR 45 in Manatee County and crosses the Florida/Georgia Stateline in Jefferson County, is a controlled access, multi-lane facility with numerous signalized intersections and driveway connections along its path. US 19 provides access to high-intensity commercial and office space land uses and is highly congested in Pinellas and Pasco Counties and moderately congested in Hernando and Citrus Counties. Major improvements are either already being constructed

or planned for US 19 within these counties according to the Year 2025 LRTPs of Pinellas, Pasco, and Hernando Counties. These improvements, which include addition of new through and turn lanes, grade separations at major intersections, and construction of frontage roads, are planned in addition to the widening of I-75. After consideration of factors such as right of way costs, social and economic effects, frequency of traffic flow interruptions (due to signalization), and distance from I-75, widening of US 19 –beyond the already planned improvements– to accommodate I-75 traffic was not considered a viable alternative.

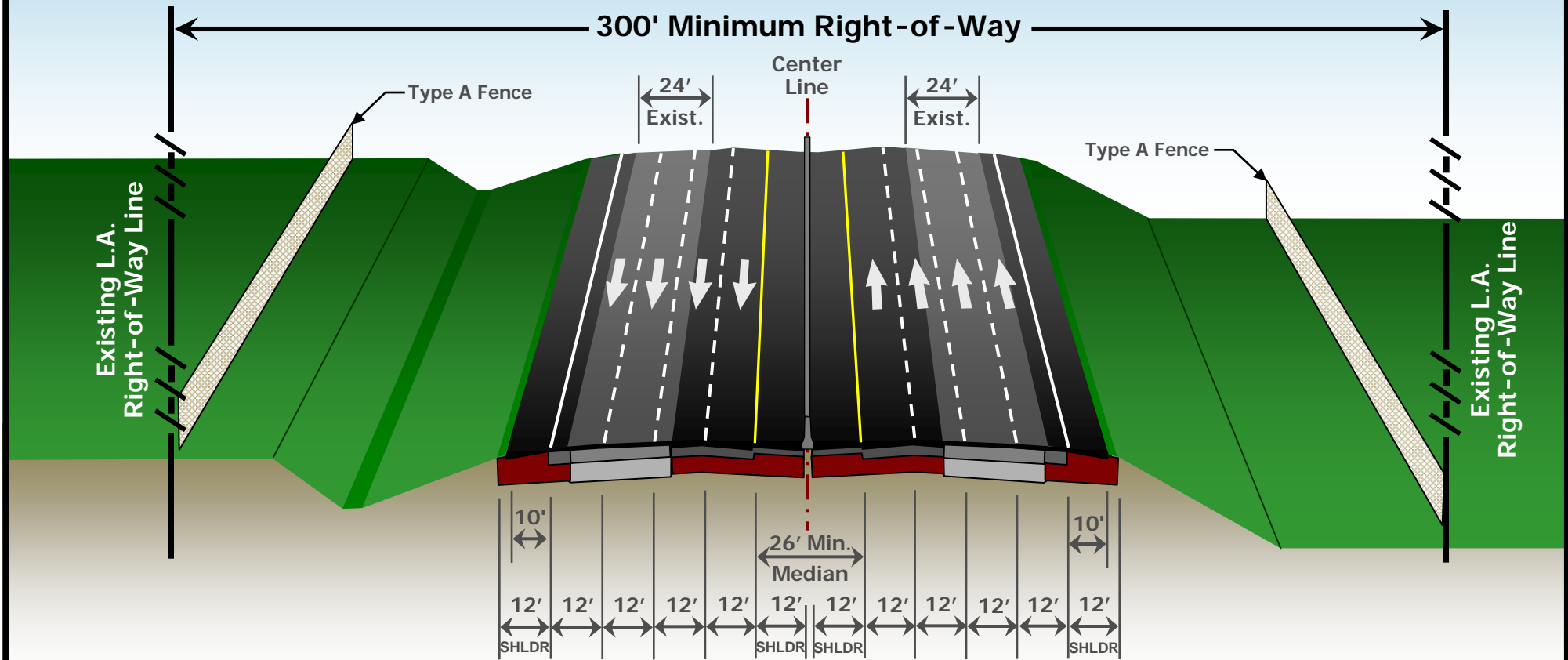
1.3.3 Widen I-75 to an Eight-Lane Highway

Based on the current FDOT design criteria, the widening of I-75 to provide eight through lanes –four in each direction– can be accommodated within its existing 300-foot-wide right-of-way. Additional right-of-way, however, is required for interchange improvements and for stormwater management facilities (SMFs). Depending on where the additional through lanes will be placed in relation to the existing lanes, three typical section alternatives were developed. To minimize costs and effects to natural resources, the final recommendation for widening I-75 may consist of a combination of the alternatives described below.

1.3.4.1 The “Inside” Widening Alternative

As shown in **Exhibit 1-3**, the “Inside” Widening Alternative proposes construction of the additional four lanes into the existing median. The existing 64.0-foot-wide median is not wide enough to accommodate the two additional lanes and standard shoulder widths. An additional narrow 5.0-foot widening will also be necessary on the outside of the existing lanes. The resulting median width will be 26.0 feet wide, 38.0 feet less than the standard minimum median width for this type of facility. Therefore, concrete median barrier will need to be placed along the center of the roadway and a design variation will be required. The border width will also be reduced from 94.0 feet to 89.0 feet which will require an additional design variation. **Exhibit 1-4** depicts the typical section for widening the existing bridge structures under this alternative.

Roadway Typical Section 9



I-75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 1201

I -75 Mainline Typical Section
 "Inside" Widening Alternative

Exhibit 1-3

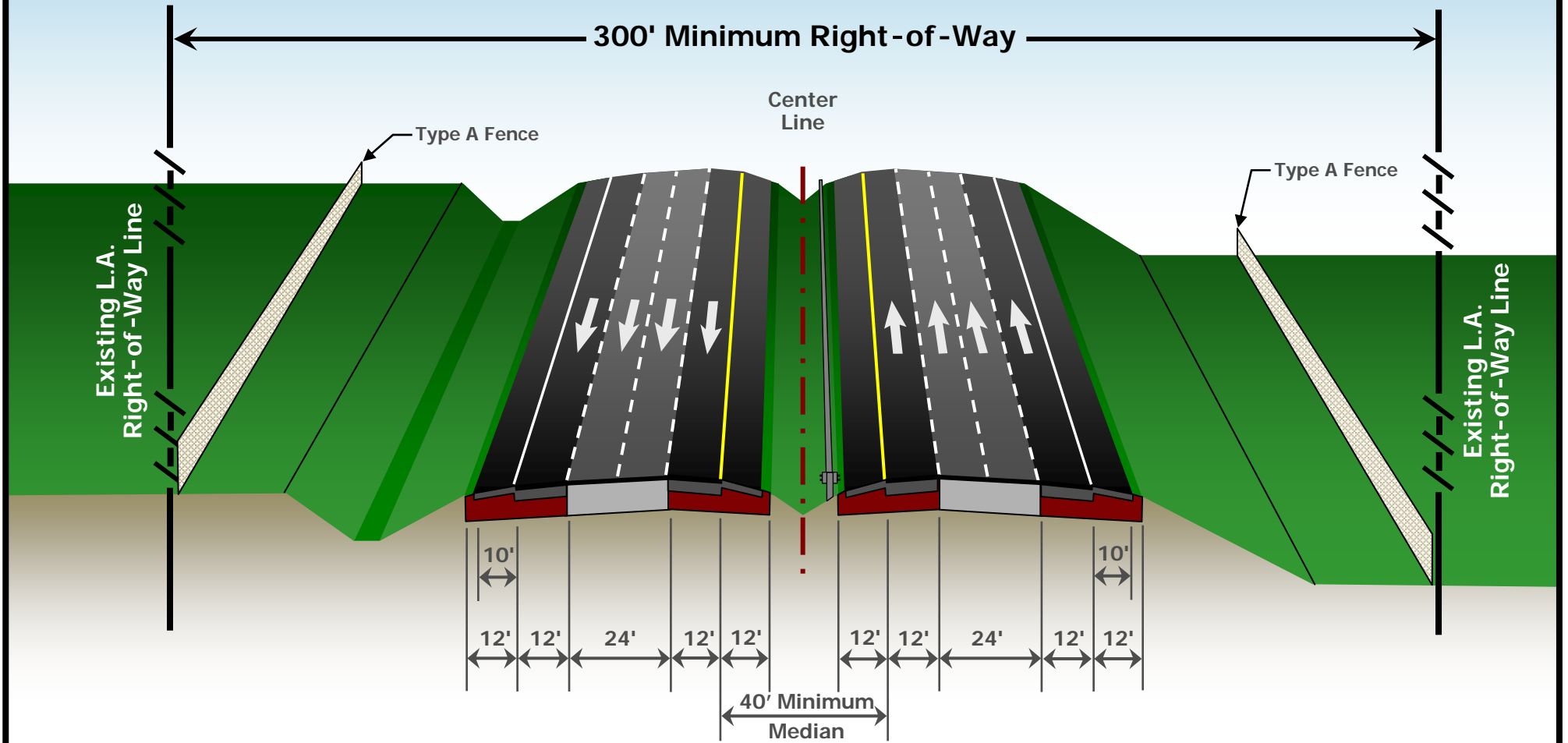
1.3.4.2 The “Inside & Outside” Widening Alternative

As shown in **Exhibit 1-5**, the “Inside & Outside” Widening Alternative proposes, for each direction, the construction of one additional lane within the median and one additional lane to the outside where the existing outside shoulder is presently located. Since the remaining median after the construction of the four new lanes will be 40.0 feet wide, 24.0 feet less than the standard minimum median width for this type of facility, guardrail will need to be placed along the median and a design variation will be required. The border width will also be reduced from 94.0 feet to 82.0 feet which will require an additional design variation. **Exhibit 1-6** depicts the typical section for widening the existing bridge structures under this alternative.

1.3.4.3 The “Outside” Widening Alternative

As shown in **Exhibit 1-7**, the “Outside” Widening Alternative proposes, for each direction, the placement of two additional lanes along the outside of the two existing lanes. The existing lanes will need to be overbuilt with additional asphalt to slope the inside lane into the median to alleviate having four travel lanes sloped in one direction. The remaining border after the construction of the two new lanes will be 70.0 feet wide, 24.0 feet less than the standard minimum border width for this type of facility. Therefore, a design variation and/or acquisition of additional right-of-way will be required. **Exhibit 1-8** depicts the typical section for widening the existing bridge structures under this alternative.

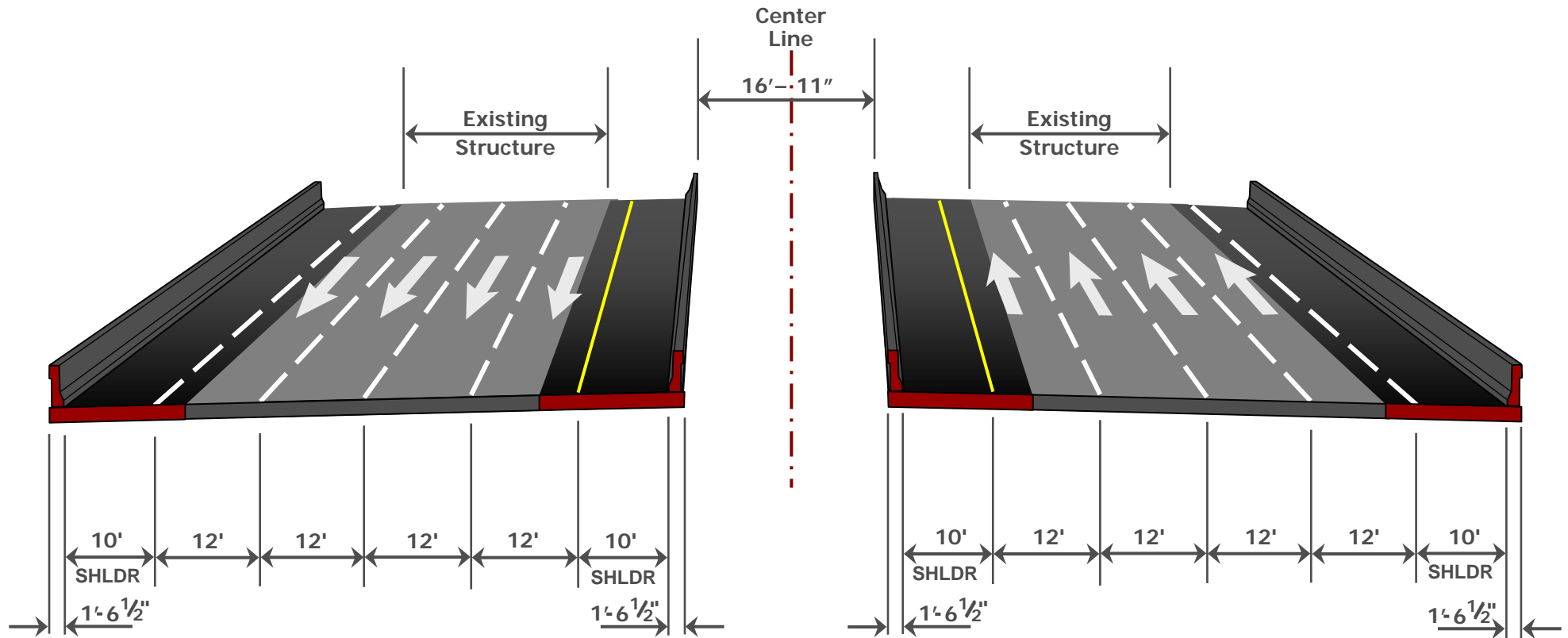
Roadway Typical Section



I-75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 1201

**I -75 Mainline Proposed Typical Section
 "Inside & Outside" Widening Alternative**

Exhibit 1-5

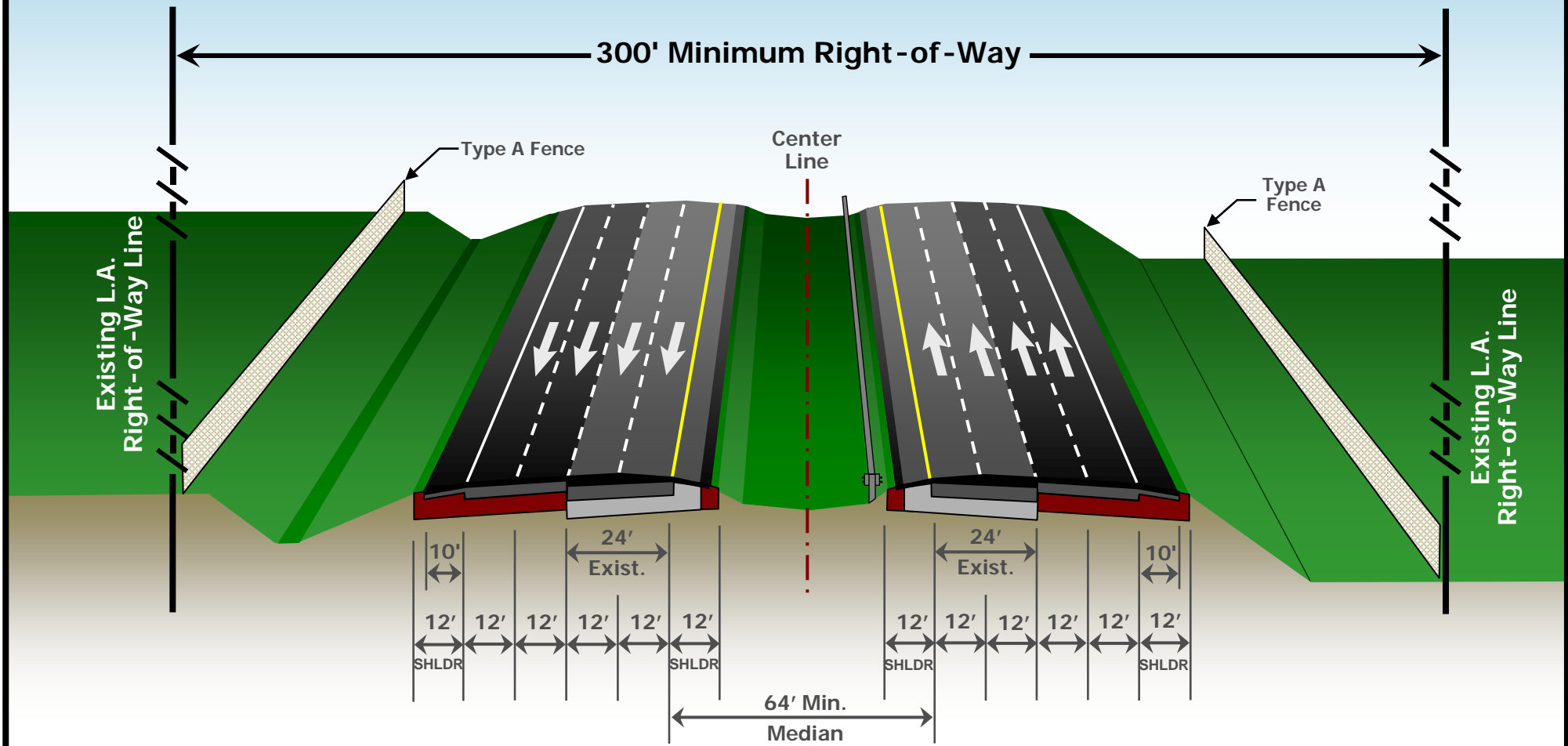


I-75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 1201

I-75 Bridge Typical Section "Inside & Outside" Widening Alternative

Exhibit 1-6

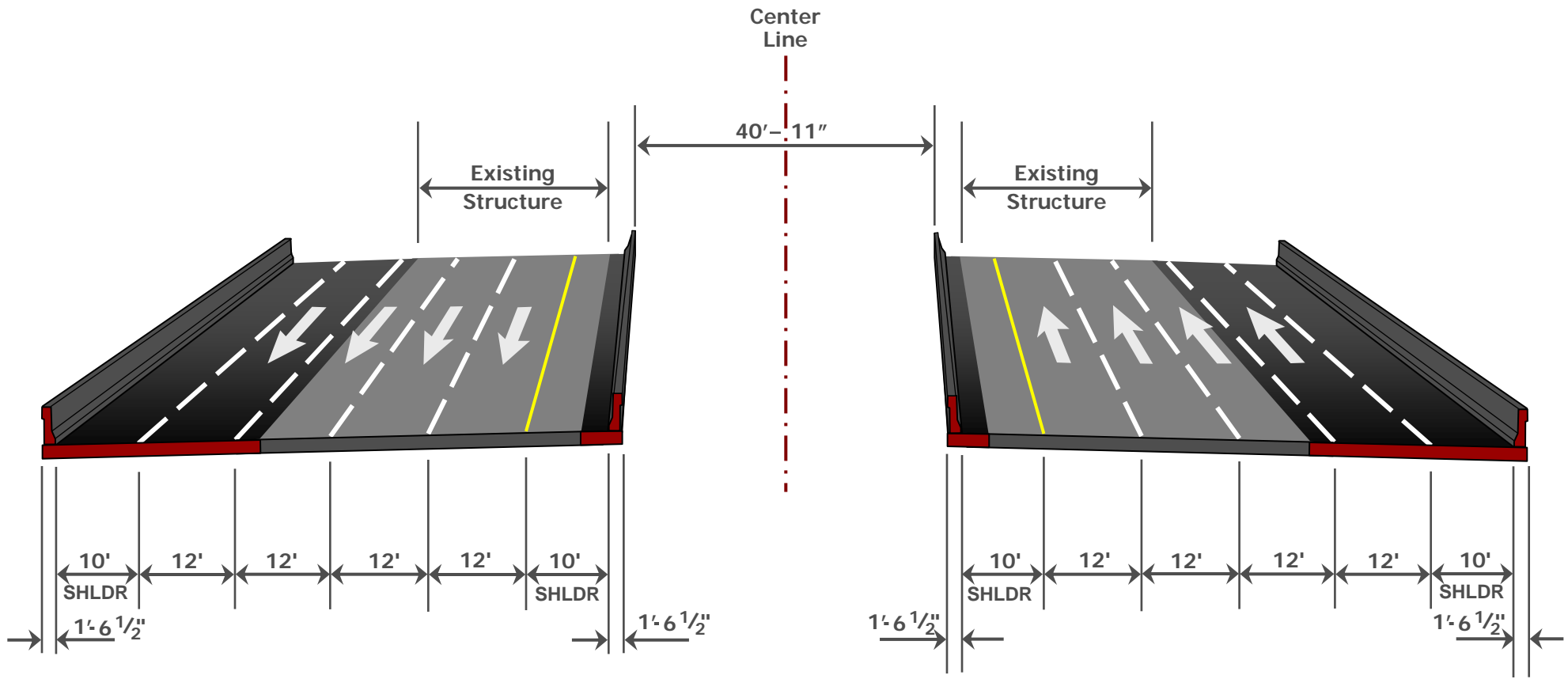
Roadway Typical Section



I-75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 1201

I -75 Mainline Typical Section "Outside" Widening Alternative

Exhibit 1-7



I-75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 1201

I -75 Bridge Typical Section "Outside" Widening Alternative

Exhibit 1-8

2.0 SECTION 4(f) RESOURCES

In the project area, there are two resources subject to Section 4(f) evaluation: the Croom Tract of the Withlacoochee State Forest and the Withlacoochee River Canoe Trail. The locations of these properties are shown in **Exhibit 2-1**.

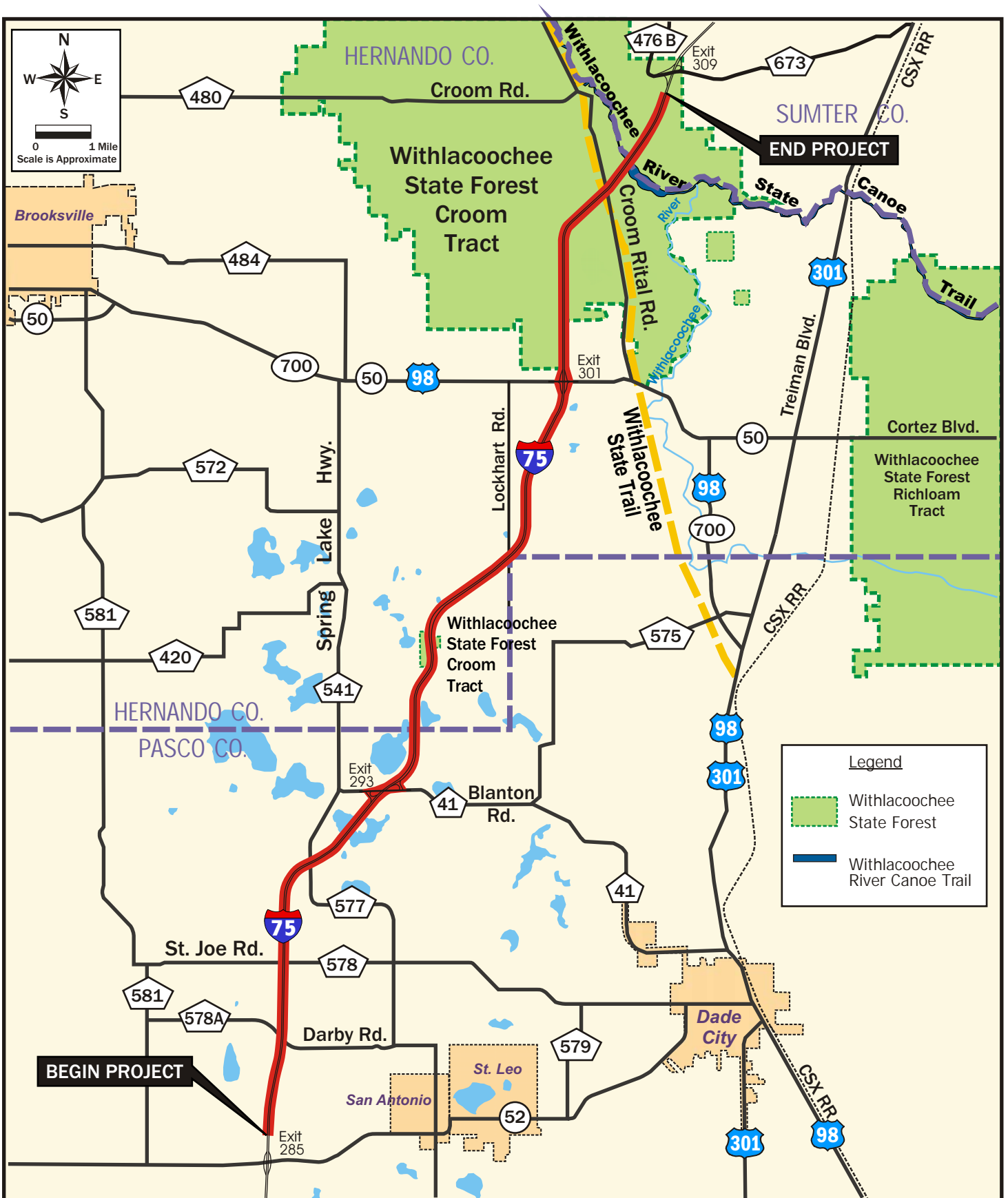
2.1 WITHLACOOCHEE STATE FOREST – CROOM TRACT

The Withlacoochee State Forest (WSF), the second largest state forest in Florida, covers 154,368 acres of land in several discontinuous tracts in Citrus, Hernando, Pasco, and Sumter counties. Initial parcels were acquired by the federal government from private landowners between 1936 and 1939 under the provisions of the U.S. Land Resettlement Administration. In 1958, the property was transferred to the State of Florida through a lease-purchase agreement. Over time, the state has acquired additional tracts of land for management as part of the WSF, and it is now divided into seven distinct tracts, shown in **Exhibit 2-2**. The Croom Tract of the WSF, which is 23,488 acres in size, is located in the study area of this project, and abuts both sides of I-75 north of SR 50. Two small parcels, however, of the Croom Tract –covering a total area of 44.6 acres– are isolated from the remainder of the property and are located on the west side of I-75 in southern Hernando County.

2.1.1 Ownership

A review of the Hernando County and Sumter County Property Appraiser's records indicates that the Croom Tract of the WSF is publicly-owned in fee simple by the State of Florida through its Board of Trustees of the Internal Improvement Trust Fund (TIITF). The Florida Division of Forestry (DOF) is the lead agency responsible for managing the Croom Tract.

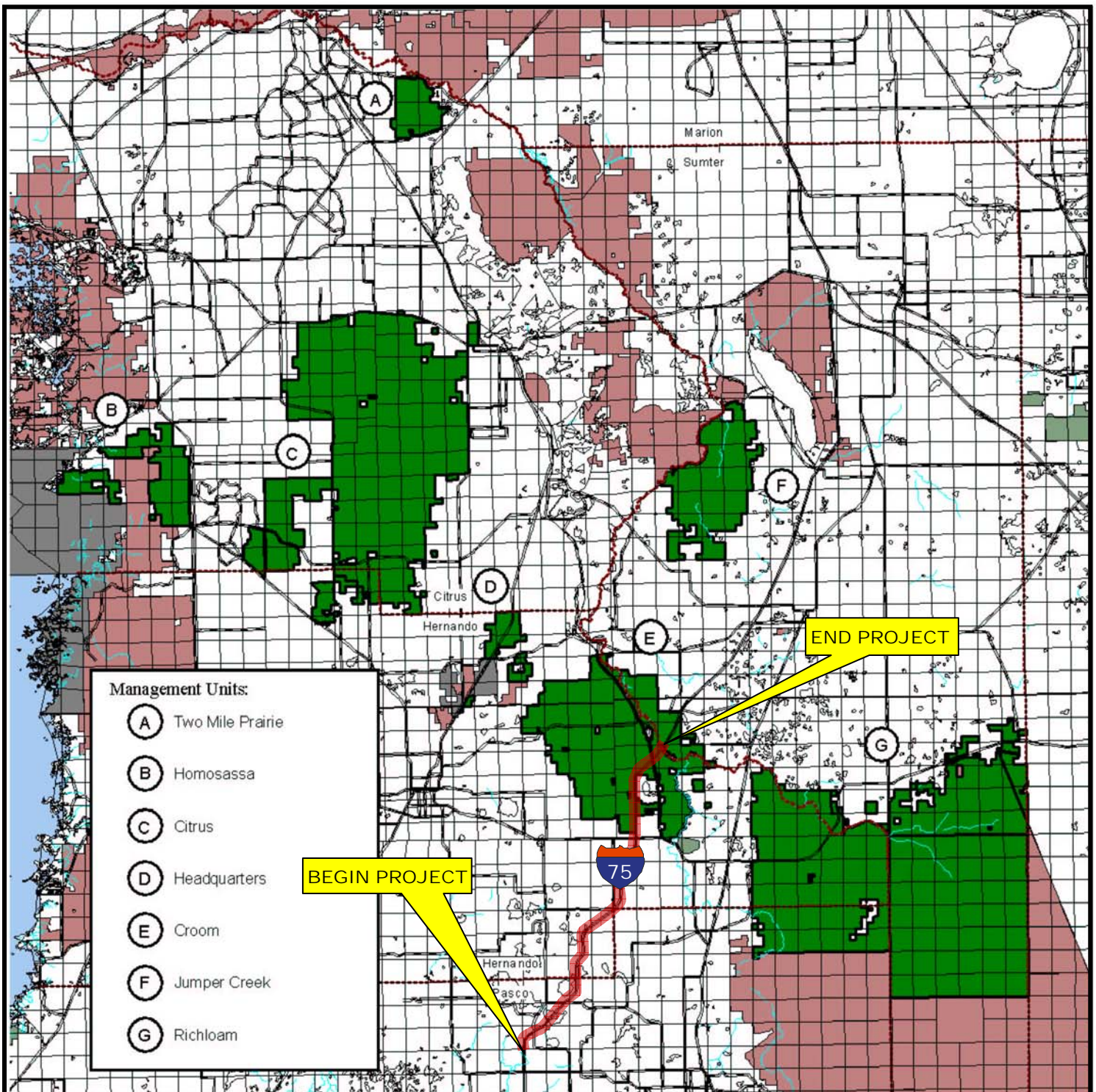
The original agreement of sale of the WSF from the federal government to the state of Florida included a “reverter clause”, which stated that if the land ceases to be used for public purposes, it will revert to federal ownership. During the original construction of I-



I-75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No: 0751-1201

Section 4(f) Resources within the I-75 PD&E Study Area

Exhibit 2-1

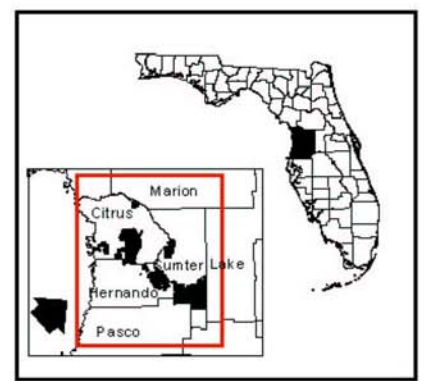
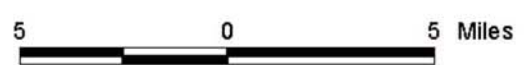


Withlacoochee State Forest Tracts

CITRUS, HERNANDO, PASCO, SUMTER COUNTIES



- FI_cfyl.shp
- Interstate or Major Highway
- Local Road
- Other Major Road
- State Forest
- Federal Ownership
- Local or Private Ownership
- State Ownership



Map Date: APR 1999

Exhibit 2-2

75, however, at least four amendments were made to the original agreement of sale to allow for transfer of forest property to the FDOT for easements for the original construction of I-75.

2.1.2 Property Type

The Withlacoochee State Forest Five-Year Management Plan¹ (See **Appendix A**) indicates that “the WSF is designated for multiple-use management” and that “ecosystem management is the overall concept for multiple-use, which provides for human uses of the Forest and its resources that are compatible with the perpetual maintenance of its native ecosystems.” These uses include conservation and public recreation; the property’s Section 4(f) uses are recreation and wildlife refuge.

2.1.3 Activities/Facilities

Silver Lake Recreational Complex is located within the Croom Tract of the WSF just east of I-75 in the vicinity of Withlacoochee River. It includes three campgrounds, a day use area with a boat launch, and a hiking trailhead. The Silver Lake Campground within this area is adjacent to I-75; the entrance to this facility is currently being upgraded and a gatehouse has been constructed. The Croom Motorcycle Area, on the west side I-75, is designated for use of off-road vehicles. Croom Tract hiking trails and horse trails are located near I-75. Portions of Croom trails are included in the Florida National Scenic Trail system. The Croom trails system is rated as one of the best in the state and is heavily used. The Croom Tract receives the largest number of visitors of all portions of the WSF.

2.1.4 Access and Usage

The main portion of the Croom Tract can be primarily accessed via SR 50 in Hernando County and CR 476B in Sumter County. Numerous forest roads provide additional access.

The two small parcels in southern Hernando County can only be accessed by DOF via I-75. Public access to these parcels is currently restricted by the limited access fencing along I-75. No recreational facilities are provided in these parcels.

2.1.5 Relationship to Similarly Used Lands

The Croom Tract is part of the larger Withlacoochee State Forest system, which consists of several tracts across west central Florida. The Withlacoochee State Trail and Withlacoochee State Canoe Trail public recreational resources travel through the Croom Tract along the Withlacoochee River. Croom Tract trails connect to the Withlacoochee State Trail.

2.2 WITHLACOOCHEE RIVER CANOE TRAIL

The Withlacoochee River Canoe Trail is officially designated as part of Florida's Statewide System of Greenways and Trails². The trail extends 29 miles along the Withlacoochee River, from the Coulter Hammock Recreation Area west of Lacochee, northwesterly to Dunnellon. The trail flows through multiple tracts of the WSF, including the Croom Tract. Two, seven-span, 350-foot-long bridges, carrying the northbound and southbound traffic flows of I-75, cross over Withlacoochee River within the WSF. **Exhibit 2-4** shows views of the river in the vicinity of I-75.

2.2.1 Ownership

As a waterway of Florida, the Canoe Trail is owned by the State of Florida. The Florida Department of Environmental Protection (FDEP) Division of Recreation and Parks is the lead agency responsible for managing the trail.

2.2.2 Property Type

The Five Year Implementation Plan for the Florida Greenways and Trails System² indicates that the Withlacoochee River Canoe Trail is managed for recreational use by the public.

Exhibit 2-4 Views of Withlacoochee River near I-75



**Northwesterly view of
Withlacoochee River at the
I-75 bridge crossing**



**Southerly view of
Withlacoochee River at the
I-75 bridge crossing**



**Boat/canoe ramp at
Withlacoochee River near the
I-75 bridge crossing**

2.2.3 Activities/Facilities

A portion of the canoe trail is near the Silver Lake Recreational Complex in the Croom Tract of the WSF. Camping is permitted at Silver Lake.

2.2.4 Access and Usage

Within the project area, the trail can be accessed via the Silver Lake Recreational Complex. There are also several other access points outside the project area.

2.2.5 Relationship to Similarly Used Lands

Within the Croom Tract, the canoe trail is near the Withlacoochee State Trail and other recreational opportunities.

2.3 REFERENCES

1. *Withlacoochee State Forest Five-Year Management Plan, 2003-2008*; Florida Department of Agriculture and Consumer Services, Division of Forestry; 2003.
2. *Five Year Implementation Plan for Florida's Greenways and Trails System*; Florida Department of Environmental Protection, Office of Greenways and Trails; 1999.

3.0 PROPOSED USE OF SECTION 4(f) RESOURCES

As previously discussed in Section 2, I-75 travels through portions of the WSF-Croom Tract and crosses over the Withlacoochee Canoe Trail. The anticipated involvements of these Section 4(f) resources with the proposed improvements for I-75 are discussed below.

3.1 WITHLACOOCHEE STATE FOREST – CROOM TRACT

As noted earlier in this document, the proposed widening improvements of I-75 to eight lanes will be accommodated within its existing right-of-way. No additional mainline right-of-way will be needed from the WSF to accomplish the proposed widening of I-75. The only direct effects to this Section 4(f) property will involve accommodation of additional stormwater runoff from the I-75 right-of-way within existing natural depression areas, to serve as stormwater management facilities (SMFs) within the WSF. Construction of one SMF within the WSF is anticipated for Basin 19. FDOT will acquire perpetual transportation/drainage/maintenance easements from the Division of State Lands (the present “fee owner” of the WSF lands) to encompass these stormwater management facilities including their drainage conveyance areas.

The I-75 segments that abut WSF lands fall within seven closed drainage basins: Basins 19, 29, 30, 31, 32, 33, and 34 (See Exhibit 2-1). Two stormwater management alternatives were developed and evaluated for each of these basins, as follows:

1. Construct SMFs: This alternative would construct traditional excavated “pond” stormwater management facilities (SMFs) in each of the seven closed drainage basins. Potential sites and required sizes of SMFs were identified for each basin; where possible, three alternate sites were identified. If this alternative is selected for any of the drainage basins, effects to the WSF property would involve acquisition of perpetual transportation/drainage/maintenance easements to construct and maintain the SMFs and conveyance systems (ditches and/or pipes). This alternative would result in direct adverse ecosystem effects caused by the construction of the SMF systems. The construction of SMFs within WSF property is undesirable to the DOF.

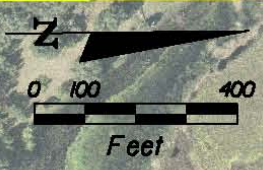
2. Use Natural Depression Areas: This alternative would allow stormwater runoff from I-75 to continue flowing to the natural depression areas, as currently occurs. This method to accommodate the project's stormwater runoff was explored at the recommendation of the Southwest Florida Water Management District (SWFWMD). For the drainage basins within the WSF property, this alternative is expected to cause an approximately 0.5-foot increase in the water surface elevation within the natural depression/storage areas during storm events. If this alternative is selected for any of the drainage basins, effects to the WSF property would involve acquisition of perpetual transportation/drainage/maintenance easements to encompass the depression storage areas and the natural conveyance areas.

This solution would involve no construction activities within the forest and, therefore, no construction disturbance to the existing WSF ecosystems. Accordingly, it is considered by the DOF as the preferred solution.

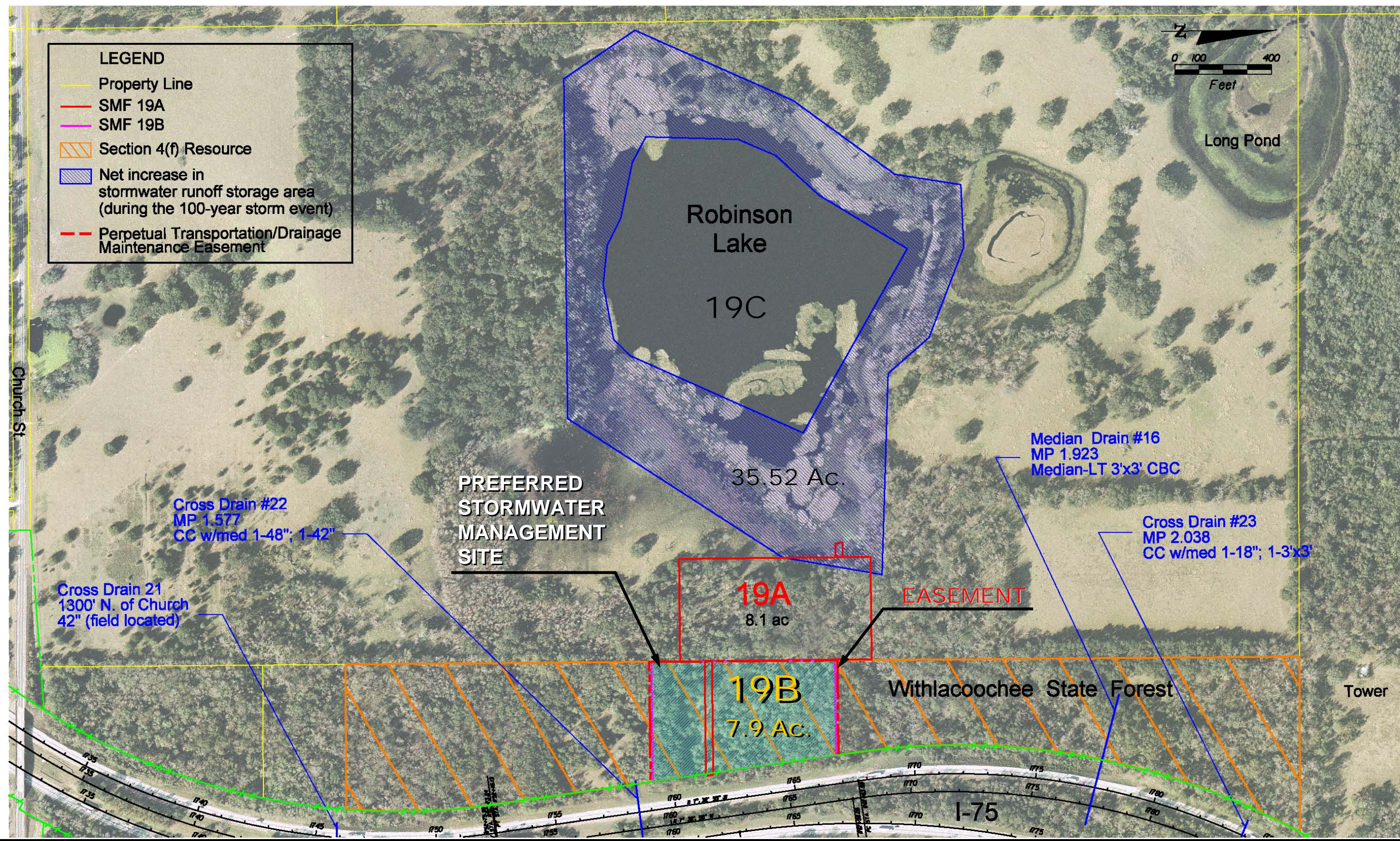
A basin-by-basin presentation of the stormwater management alternatives within the WSF-Croom Tract and their effects is provided below. This discussion includes only the basins where the selected stormwater management alternative involves use of WSF land (Basins 19, 31, 32, 33, and 34). The proposed project did not allow for an avoidance alternative to the use of WSF land for these basins. For Basins 29 and 30, avoidance solutions were selected to accommodate the stormwater runoff within properties located outside of the WSF.

3.1.1 Drainage Basin 19

As shown on **Exhibit 3-1**, Drainage Basin 19 involves the two small isolated parcels of the Croom Tract that abut I-75 in southern Hernando County. These parcels encompass a total area of 44.6 acres. As previously noted, these parcels are landlocked. Access to these parcels can only be gained through the limited access fencing along I-75 and, therefore, their use is limited. The DOF currently does not actively manage either of these parcels.



- LEGEND**
- Property Line
 - SMF 19A
 - SMF 19B
 - Section 4(f) Resource
 - Net increase in stormwater runoff storage area (during the 100-year storm event)
 - Perpetual Transportation/Drainage Maintenance Easement



The natural depression area and low point of the basin are located in Robinson Lake, within privately owned land west of the parcels. There are no natural depression areas within the WSF property. **Exhibit 3-1** depicts the three stormwater management solutions identified for this drainage basin. Alternative SMF Sites No.19A and19B represent construction of SMFs while Alternative 19C assumes stormwater runoff discharge to the natural depression area in Robinson Lake partially through the WSF parcels. Since Alternative SMF Site No. 19B is within an isolated area of the WSF property and since there are no natural depression areas within this property, it is anticipated that the DOF will concur with the construction of this SMF. Therefore, Alternative SMF Site No. 19B was selected as the preferred alternative. Alternative SMF Site No. 19B is expected to occupy approximately 7.9 acres of forest land.

This area within the WSF will be acquired by the FDOT through the execution of a perpetual transportation/drainage/maintenance easement from the Division of State Lands (the present “fee owner” of the WSF lands). The perpetual easement agreements will be executed by the FDOT with the Division of State Lands (DSL) during the project’s future right of way acquisition phase. It has not been determined at this time what the purchase value of the easement will be since this appraisal process will be handled during the agreement negotiation process between the FDOT and the DSL. The easement agreements will have Exhibits which will indicate the surveyed boundary of the areas to be acquired by the FDOT for stormwater management and conveyance purposes. These areas will also be reflected in the SWFWMD permitting process so the easement agreements will match the areas outlined in the permits. These agreements will be executed once the depression and conveyance areas are more accurately determined using detailed stormwater management models and then field surveyed (during design). Once the modeling and survey process is completed, the areas within the WSF will be acquired during the right of way acquisition phase.

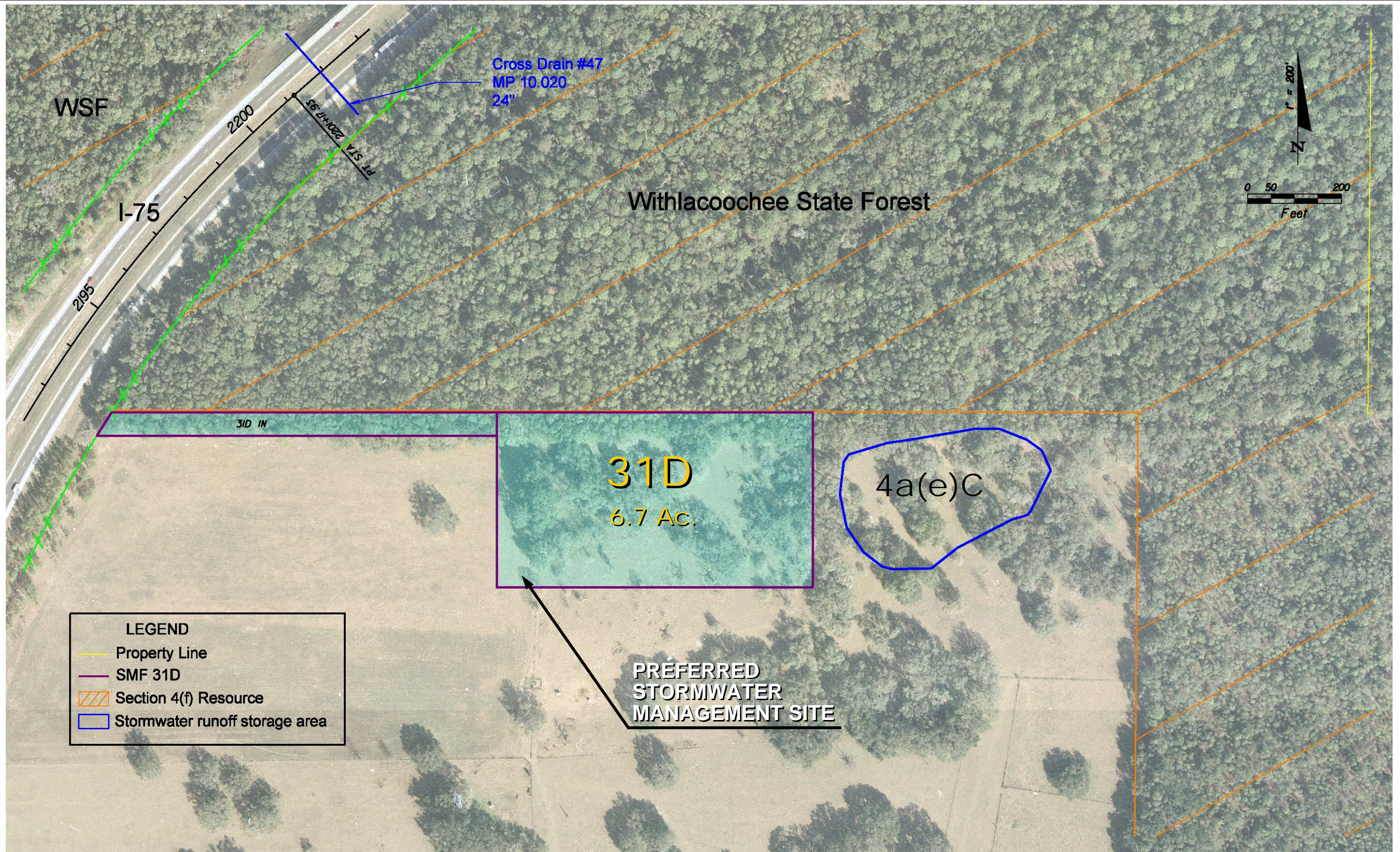
3.1.2 Drainage Basin 31

Four alternative solutions have been considered for stormwater management in Drainage Basin 31. These alternatives are depicted on **Exhibits 3-2A, 3-2B, and 3-2C**. Two alternatives, Alternative SMF Sites No. 31A and 31B, involve the construction of an 8.3-acre and an 8.0-acre SMFs, respectively, within the forest. The third alternative involves the usage of four natural depression areas named 4a(e)C, 4a(w)C, 4b(e)C and 4b(w)C and no construction of SMFs. The selected fourth alternative is a combination of two natural depression areas in the forest to accommodate additional stormwater –depression areas 4b(e)C and 4b(w)C– and construction of a SMF –Alternative SMF Site 31D– on privately owned land.

Exhibit 3-2C depicts the estimated drainage conveyance areas and the corresponding storage area within the natural depression areas that will be required to accommodate the stormwater runoff from the project within the WSF. It is estimated that the total acreage needed for these depression areas within the WSF including the drainage conveyance areas will be approximately 13.7 acres.

As noted in Section 6.2 of this document, the SWFWMD agreed that this will be an acceptable alternative on the condition that this alternative will be appropriately modeled (during the project’s future design phase) and the property owner (State of Florida) will agree with this solution.

These areas within the WSF will be acquired by the FDOT through the execution of a perpetual transportation/drainage/maintenance easement from the Division of State Lands (the present “fee owner” of the WSF lands). These perpetual easement agreements will be executed by the FDOT with the Division of State Lands (DSL) during the project’s future right of way acquisition phase. It has not been determined at this time what the purchase value of the easement will be since this appraisal process will be handled during the agreement negotiation process between the FDOT and the DSL. The easement agreements will have Exhibits which will indicate the surveyed boundary of the areas to be acquired by the FDOT for stormwater management and conveyance purposes.



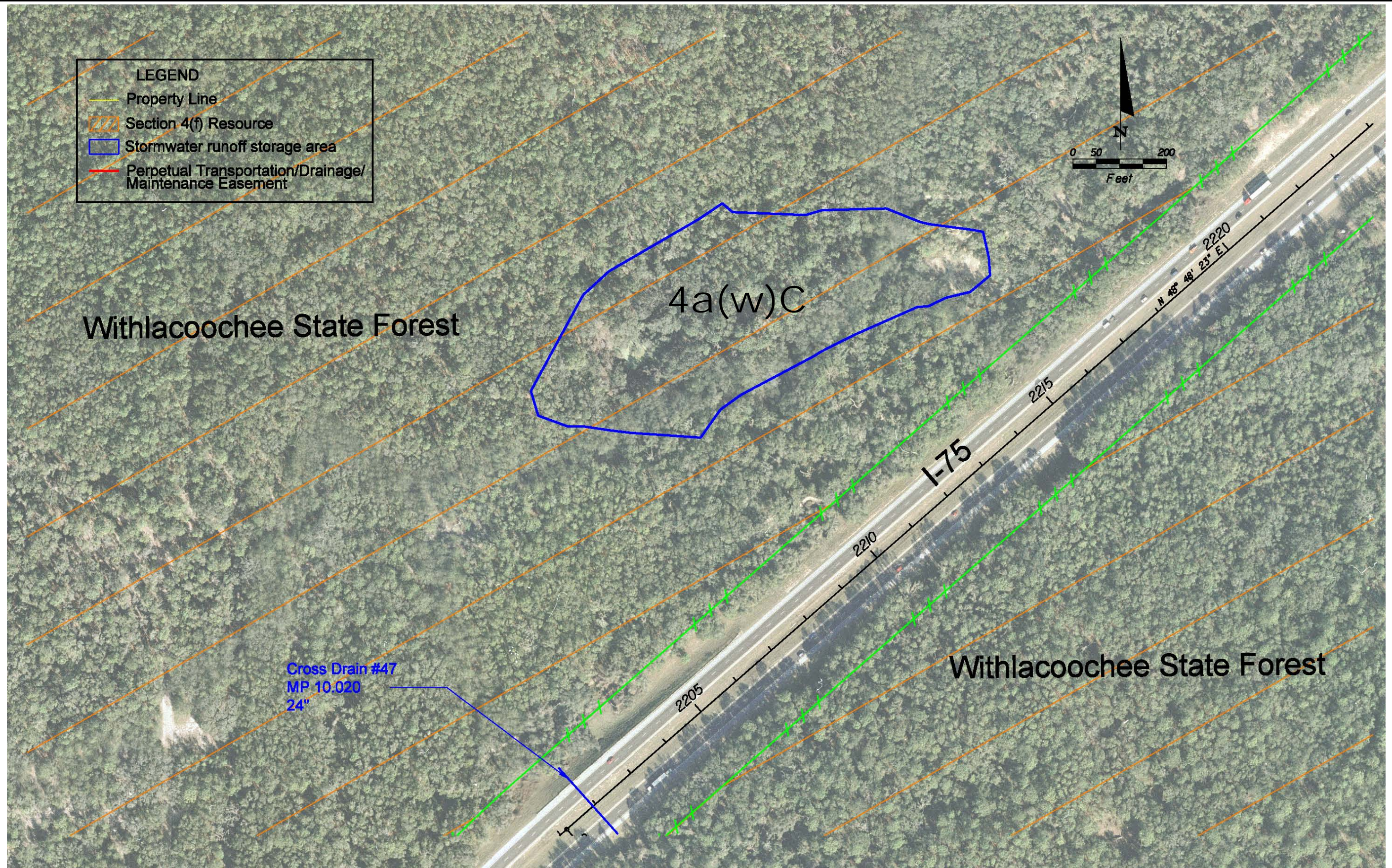
LEGEND

- Property Line
- SMF 31D
- ▨ Section 4(f) Resource
- ▭ Stormwater runoff storage area



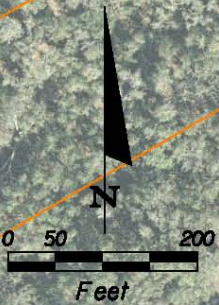
I - 75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 120I

**Alternative Stormwater Management Solutions in
 Drainage Basin 31**



LEGEND

- Property Line
- Section 4(f) Resource
- Stormwater runoff storage area
- Perpetual Transportation/Drainage/Maintenance Easement



Withlacoochee State Forest

4a(w)C

I-75

Withlacoochee State Forest

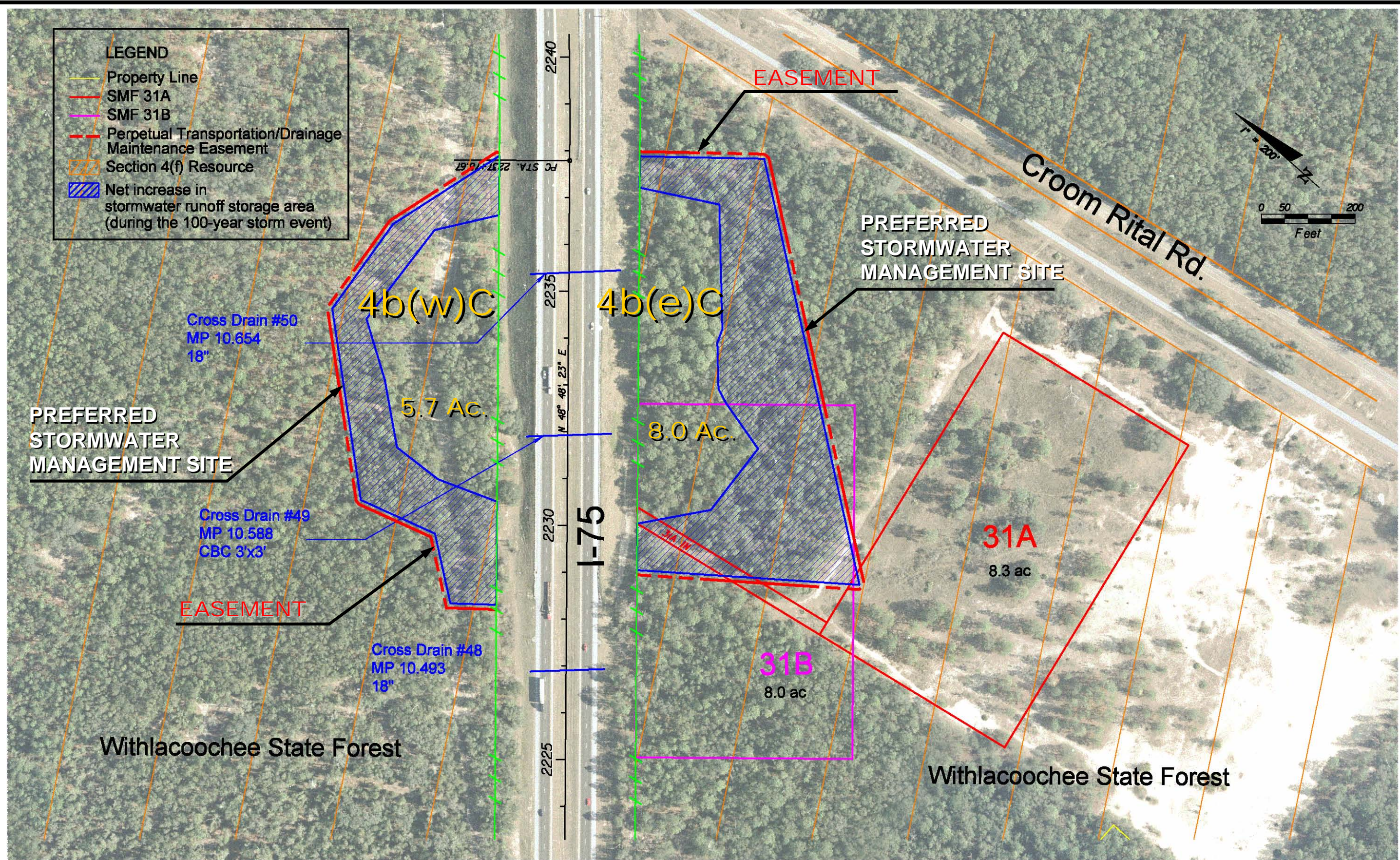
Cross Drain #47
MP 10.020
24"



I - 75 PD&E Study
From N. of SR 52 to S. of CR 476B
Pasco, Hernando & Sumter Counties
WPI Seg. No.: 411014 1
FAP No.: 0751- 120I

**Alternative Stormwater Management Solutions in
Drainage Basin 31**

Exhibit 3-2B



These areas will also be reflected in the SWFWMD permitting process so the easement agreements will match the areas outlined in the permits. These agreements will be executed once the depression and conveyance areas are more accurately determined using detailed stormwater management models and then field surveyed (during design). Once the modeling and survey process is completed, the areas within the WSF will be acquired during the right of way acquisition phase.

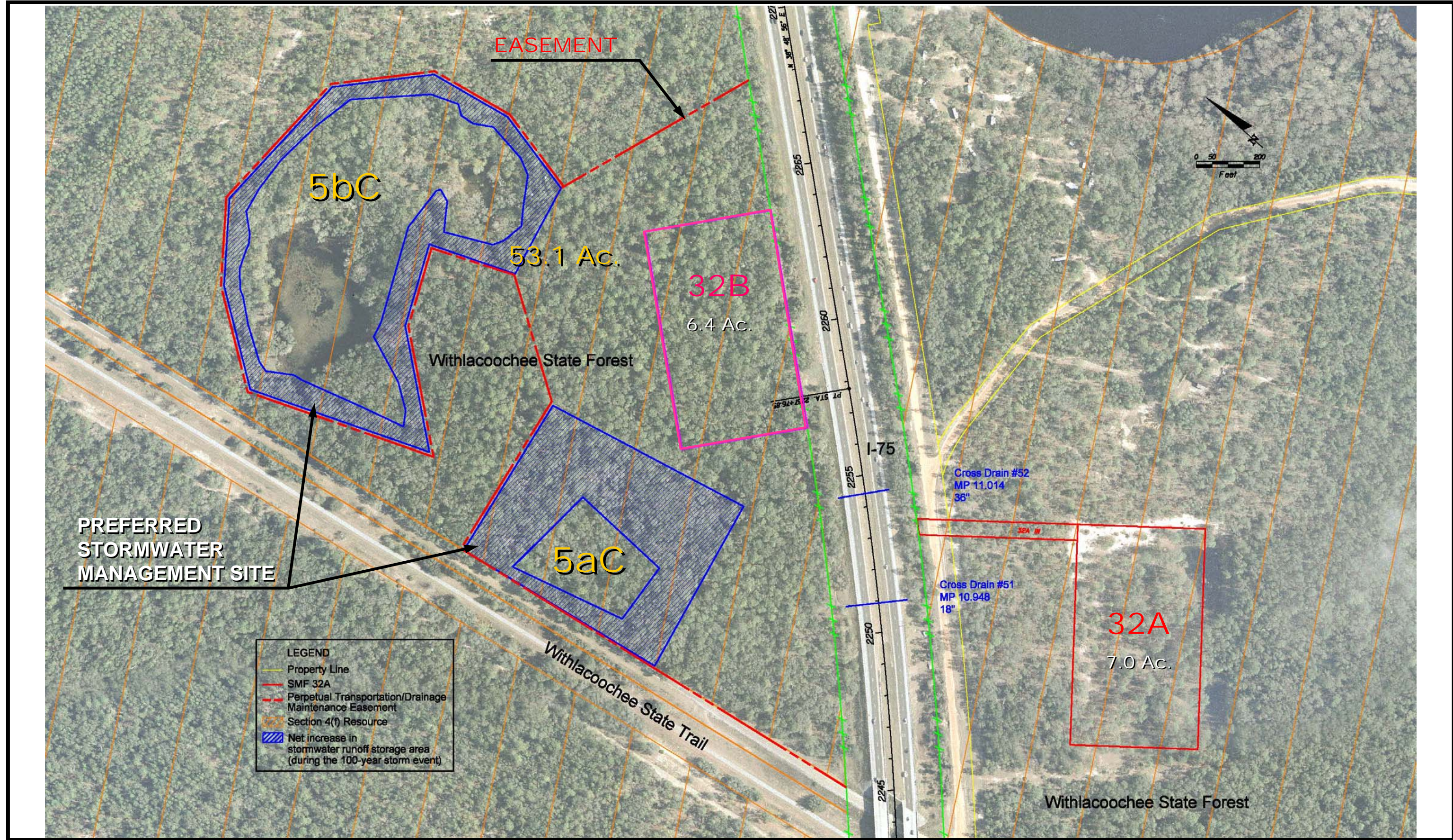
It should be noted that the impacted areas around the perimeter of the natural storage areas within the WSF –for this basin as well as the other basins– were calculated using conservative assumptions. These areas were based on required storage volumes calculated using the 100-year storm event and also assume that the soils do not provide any percolation. The areas were also based on SWFWMD maps that do not provide detailed topographic contour information.

As presented above, all of the available stormwater management solutions for this drainage basin will involve usage of WSF property in varying sizes. The selected alternative involves the construction of a SMF –Alternative SMF Site 31D– on privately owned land and usage of two natural depression areas in the WSF to accommodate additional stormwater volumes –depression areas 4b(e)C and 4b(w)C–which minimizes the use of forest property.

3.1.3 Drainage Basin 32

Three alternative solutions have been considered for stormwater management in Drainage Basin 32, all involving usage of WSF land. These alternatives are depicted on **Exhibit 3-3**. Two alternatives –Alternative SMF Sites No. 32A and 32B– involve construction of 7.0-acre and 6.4-acre SMFs, respectively. The selected alternative involves use of two natural depression areas, named 5aC and 5bC.

The alternative that involves usage of the two natural depression areas is the preferred alternative for this drainage basin, due to the advantages it presents over constructing SMFs in the WSF.



I - 75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 120I

Alternative Stormwater Management Solutions in Drainage Basin 32

Exhibit 3-3

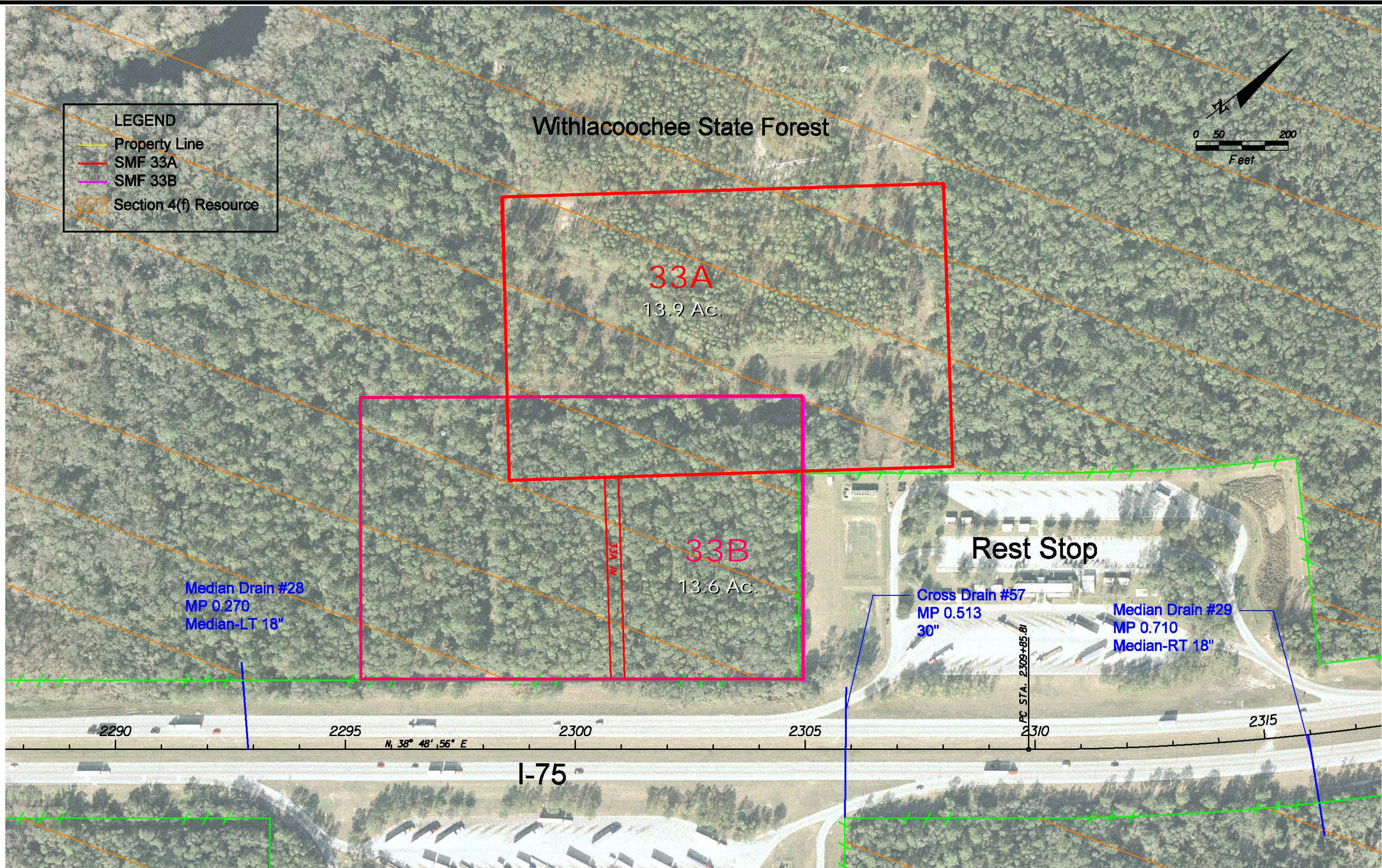
Exhibit 3-3 depicts the estimated drainage conveyance areas and the corresponding storage area within the natural depression areas that will be required to accommodate the stormwater runoff from the project. It is estimated that the total acreage needed for these depression areas including the drainage conveyance areas will be approximately 53.1 acres.

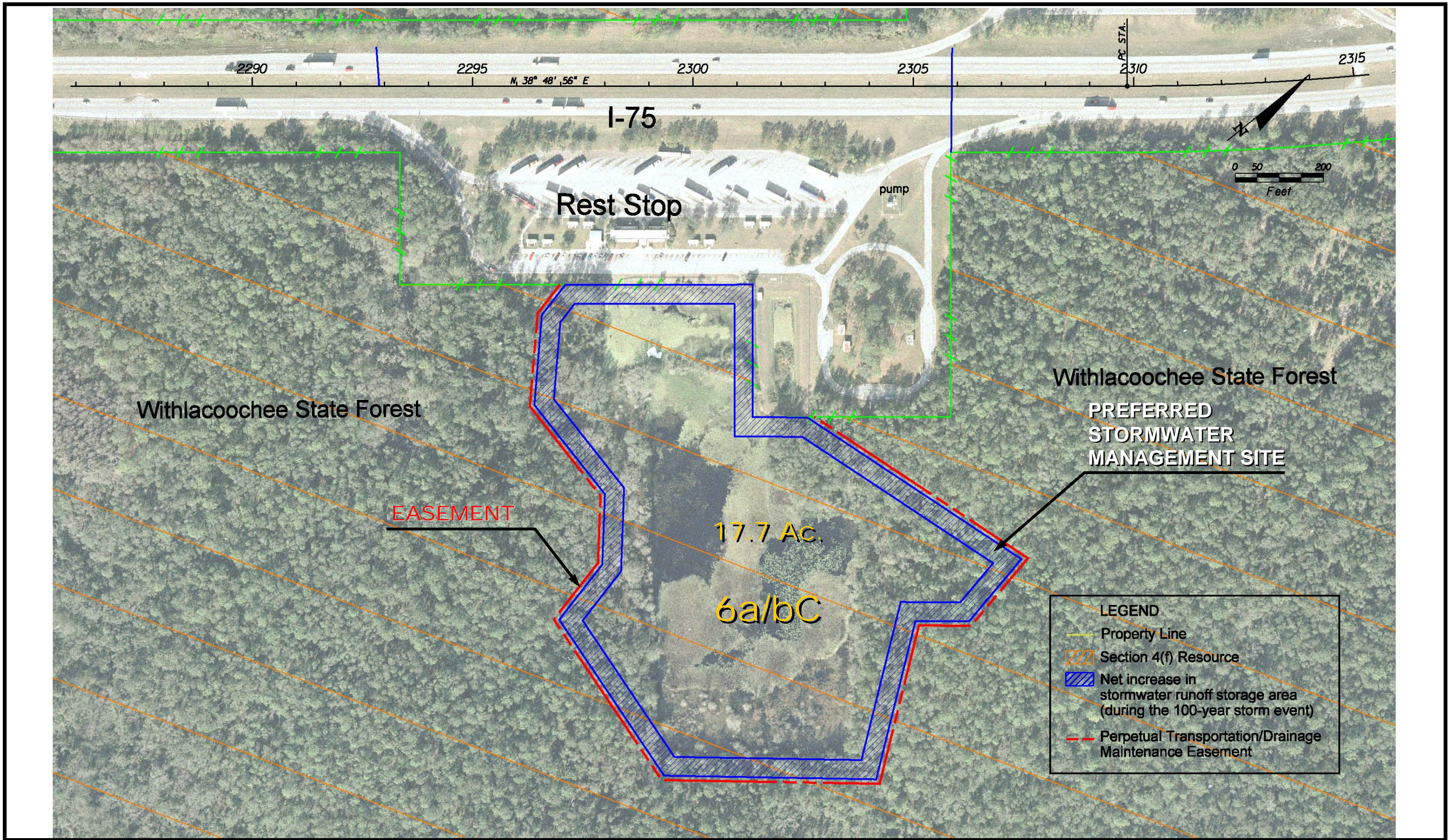
As noted in Section 6.2 of this document, the SWFWMD agreed that this will be an acceptable alternative on the condition that this alternative will be appropriately modeled (during the project's future design phase) and the property owner (State of Florida) will agree with this solution.

These areas within the WSF will be acquired by the FDOT through the execution of a perpetual transportation/drainage/maintenance easement from the Division of State Lands (the present "fee owner" of the WSF lands). These perpetual easement agreements will be executed by the FDOT with the Division of State Lands (DSL) during the project's future right of way acquisition phase. It has not been determined at this time what the purchase value of the easement will be since this appraisal process will be handled during the agreement negotiation process between the FDOT and the DSL. The easement agreements will have Exhibits which will indicate the surveyed boundary of the areas to be acquired by the FDOT for stormwater management and conveyance purposes. These areas will also be reflected in the SWFWMD permitting process so the easement agreements will match the areas outlined in the permits. These agreements will be executed once the depression and conveyance areas are more accurately determined using detailed stormwater management models and then field surveyed (during design). Once the modeling and survey process is completed, the areas within the WSF will be acquired during the right of way acquisition phase.

3.1.4 Drainage Basin 33

Three alternative solutions have been considered for stormwater management in Drainage Basin 33, all involving usage of WSF land. These alternatives are depicted on **Exhibits 3-4A, 3-4B, and 3-4C**.

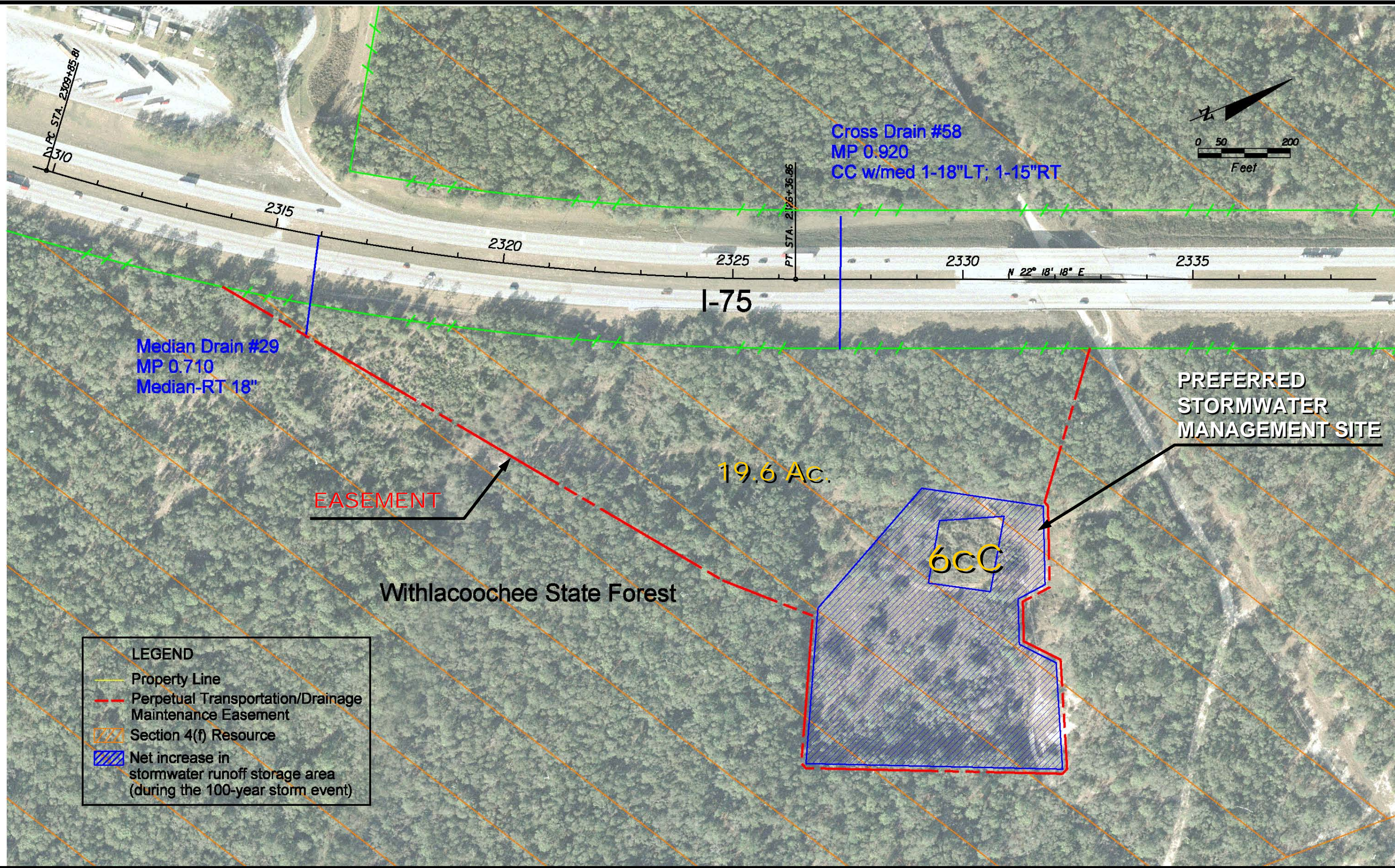




I-75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 120I

**Alternative Stormwater Management Solutions in
 Drainage Basin 33**

Exhibit 3-4B



I - 75 PD&E Study
From N. of SR 52 to S. of CR 476B
Pasco, Hernando & Sumter Counties
WPI Seg. No.: 411014 1
FAP No.: 0751- 120I

**Alternative Stormwater Management Solutions in
Drainage Basin 33**

Exhibit 3-4C

Two alternatives –Alternative SMF Sites No. 33A and 33B– involve construction of 13.9-acre and 13.6-acre SMFs, respectively. The selected alternative involves usage of two natural depression areas, named 6a/bC and 6cC.

The alternative that involves usage of the two natural depression areas is the preferred alternative for this drainage basin, due to the advantages it presents over constructing SMFs in the forest. **Exhibits 3-4B** and **3-4C** depict the estimated drainage conveyance areas and the corresponding storage area within the natural depression areas that will be required to accommodate the stormwater runoff from the project. It is estimated that the total acreage needed for these depressional areas including the drainage conveyance areas will be approximately 37.3 acres.

As noted in Section 6.2 of this document, the SWFWMD agreed that this will be an acceptable alternative on the condition that this alternative will be appropriately modeled (during the project’s future design phase) and the property owner (State of Florida) will agree with this solution.

These areas within the WSF will be acquired by the FDOT through the execution of a perpetual transportation/drainage/maintenance easement from the Division of State Lands (the present “fee owner” of the WSF lands). These perpetual easement agreements will be executed by the FDOT with the Division of State Lands (DSL) during the project’s future right of way acquisition phase. It has not been determined at this time what the purchase value of the easement will be since this appraisal process will be handled during the agreement negotiation process between the FDOT and the DSL. The easement agreements will have Exhibits which will indicate the surveyed boundary of the areas to be acquired by the FDOT for stormwater management and conveyance purposes. These areas will also be reflected in the SWFWMD permitting process so the easement agreements will match the areas outlined in the permits. These agreements will be executed once the depression and conveyance areas are more accurately determined using detailed stormwater management models and then field surveyed (during design). Once the modeling and survey process is completed, the areas within the WSF will be acquired during the right of way acquisition phase.

3.1.5 Drainage Basin 34






Three alternative solutions have been considered for stormwater management in Drainage Basin 34, all involving usage of WSF land. These alternatives are depicted on **Exhibits 3-5A** and **3-5B**. Two alternatives –Alternative SMF Sites No. 34A and 34B– involve construction of 8.3-acre and 10.2-acre SMFs, respectively. The selected alternative involves usage of a natural depression area, named 7C.

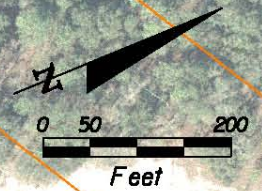
The alternative that involves usage of the natural depression area is the preferred alternative for this drainage basin, due to the advantages it presents over constructing SMFs in the forest. **Exhibits 3-5A and 3-5B** depict the estimated drainage conveyance areas and the corresponding storage area within the natural depressional areas that will be required to accommodate the stormwater runoff from the project. It is estimated that the total acreage needed for the depressional areas including the drainage conveyance will be approximately 10.8 acres.

As noted in Section 6.2 of this document, the SWFWMD agreed that this will be an acceptable alternative on the condition that this alternative will be appropriately modeled (during the project’s future design phase) and the property owner (State of Florida) will agree with this solution.

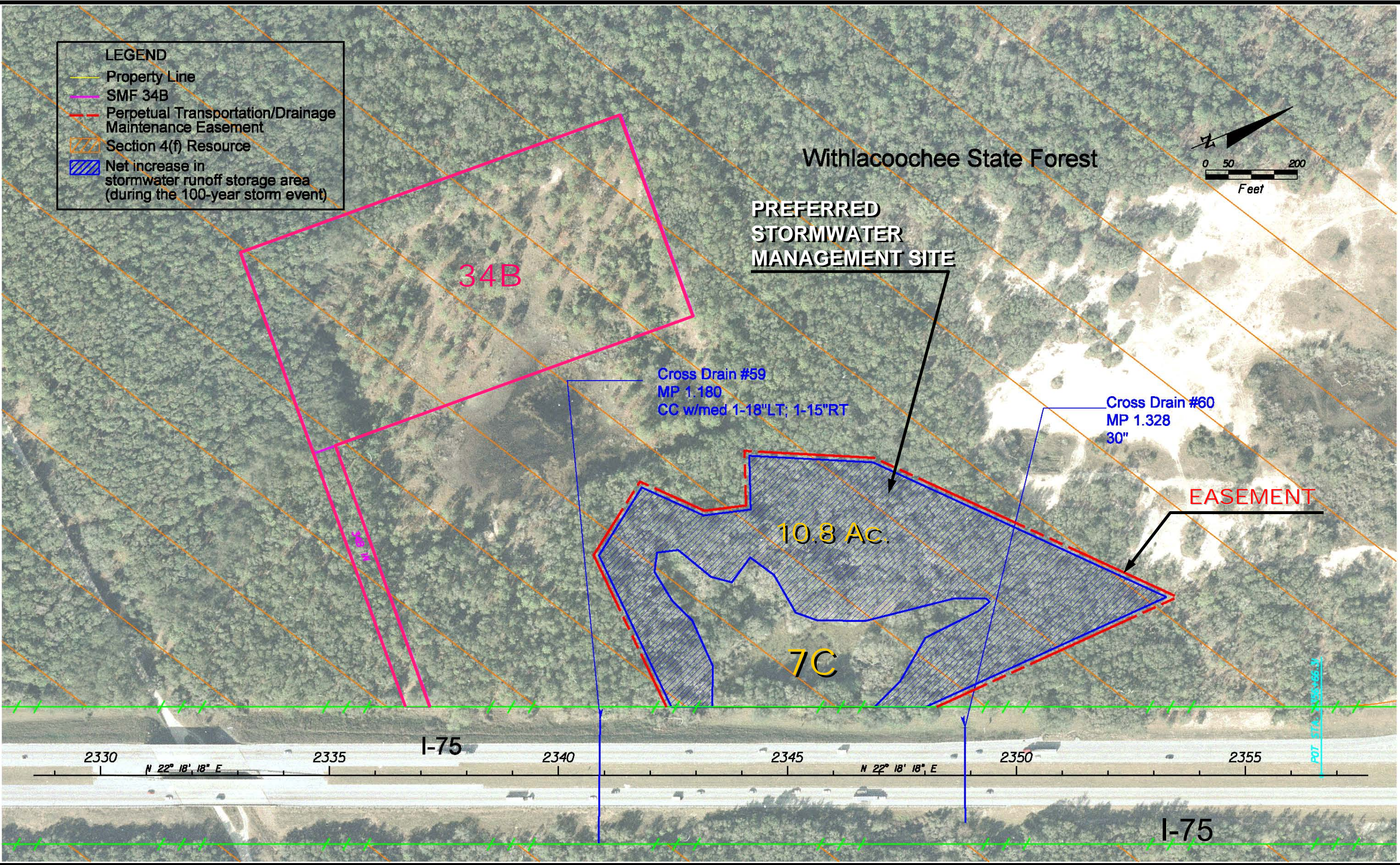
These areas within the WSF will be acquired by the FDOT through the execution of a perpetual transportation/drainage/maintenance easement from the Division of State Lands (the present “fee owner” of the WSF lands). These perpetual easement agreements will be executed by the FDOT with the Division of State Lands (DSL) during the project’s future right of way acquisition phase. It has not been determined at this time what the purchase value of the easement will be since this appraisal process will be handled during the agreement negotiation process between the FDOT and the DSL. The easement agreements will have Exhibits which will indicate the surveyed boundary of the areas to be acquired by the FDOT for stormwater management and conveyance purposes. These areas will also be reflected in the SWFWMD permitting process so the easement agreements will match the areas outlined in the permits.

LEGEND

-  Property Line
-  SMF 34B
-  Perpetual Transportation/Drainage Maintenance Easement
-  Section 4(f) Resource
-  Net increase in stormwater runoff storage area (during the 100-year storm event)



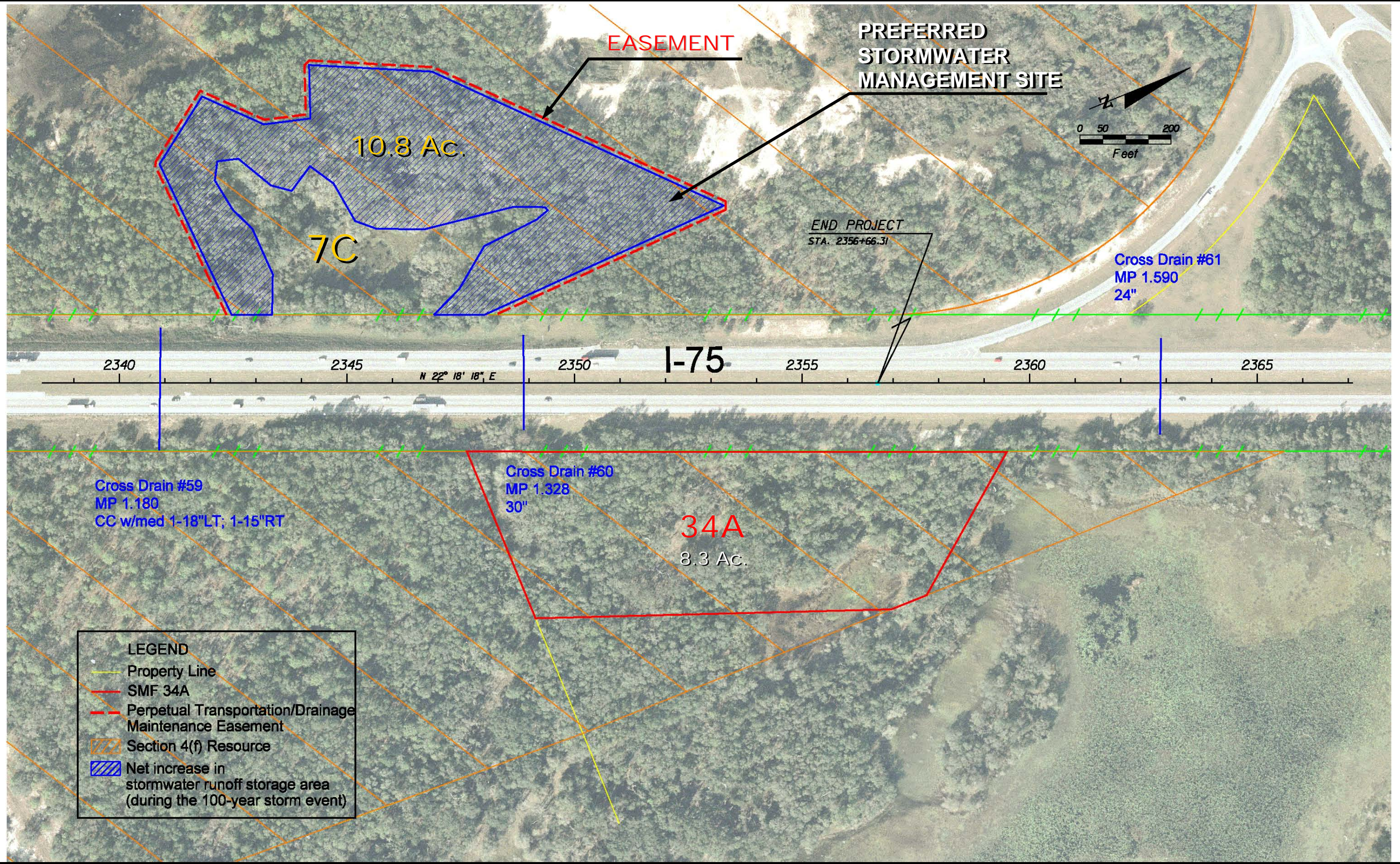
0 50 200
Feet



I-75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 120I

**Alternative Stormwater Management Solutions in
 Drainage Basin 34**

Exhibit 3-5A



LEGEND

- Property Line
- SMF 34A
- - - Perpetual Transportation/Drainage Maintenance Easement
- ▨ Section 4(f) Resource
- ▨ Net increase in stormwater runoff storage area (during the 100-year storm event)



I - 75 PD&E Study
 From N. of SR 52 to S. of CR 476B
 Pasco, Hernando & Sumter Counties
 WPI Seg. No.: 411014 1
 FAP No.: 0751- 120I

**Alternative Stormwater Management Solutions in
 Drainage Basin 34**

Exhibit 3-5B

These agreements will be executed once the depression and conveyance areas are more accurately determined using detailed stormwater management models and then field surveyed (during design). Once the modeling and survey process is completed, the areas within the WSF will be acquired during the right of way acquisition phase.

3.1.6 Summary of Effects

In addition to the proposed construction of SMFs within Drainage Basins 19 and 31, treatment of the stormwater runoff will be accommodated within the natural depression areas of the WSF and will involve discharging additional volumes of stormwater to two natural depression areas in Drainage Basin 31, two natural depression areas in Drainage Basin 32, two natural depression areas in Drainage Basin 33, and one natural depression area in Drainage Basin 34. These areas within the WSF will be acquired by the FDOT through the execution of perpetual transportation/drainage/maintenance easements from the Division of State Lands (the present “fee owner” of the WSF lands).

Table 3-1 summarizes the stormwater management alternatives considered within each drainage basin which will involve WSF property. As shown, the estimated total area of the forest to be involved due to the additional stormwater runoff treatment needs due to the widening of I-75 is 122.8 acres, representing 0.52% of the total WSF-Croom Tract area. Of this area, 7.9 acres will be involved due to the construction of a SMF within the isolated parcel of the WSF in Drainage Basin 19 and 114.9 acres will be involved through the expansion of the treatment areas in seven (7) natural depression areas.

Table 3-2 provides the estimated water level elevations for the 100-year storm events under the current and the proposed conditions –after construction of the project– for the depression areas within the WSF property that will receive increased volumes of stormwater.

Table 3-1 – Summary of Effects on WSF Land Due to Stormwater Management

Drainage Basin No.	Stormwater Management Alternative		Location along I-75 (station)	Size (acres)	Preferred Alternative	Effect on WSF Land (acres)
19	SMF ¹	19A	1765+00 LT	8.1	No	
	SMF	19B	1763+00 LT	7.9	Yes	7.9
	DDA ¹	19C	1763+00 LT	35.5 ²	No	
31	SMF	31A	2228+00 RT	8.3	No	
	SMF	31B	2227+00 RT	8.0	No	
	DDA	4a(e)C	2205+00 RT	0.6 ³	No	
		4a(w)C	2212+00 LT	5.7		
		4b(e)C	2233+00 RT	4.7		
		4b(w)C	2233+00 LT	2.5		
COMB DDA	31D ⁴ 4b(e)C	2200+00 RT 2233+00 RT	20.4 8.0	Yes	13.7	
DDA	4b(w)C	2233+00 LT	5.7			
32	SMF	32A	2250+00 RT	7.0	No	
	SMF	32B	2260+00 LT	6.4	No	
	DDA	5aC	2252+00 LT	53.1	Yes	53.1
5bC		2265+00 LT				
33	SMF	33A	2303+00 LT	13.9	No	
	SMF	33B	2300+00 LT	13.6	No	
	DDA	6a/bC	2300+00 RT	17.7	Yes	37.3
6cC		2339+00 RT	19.6			
34	SMF	34A	2353+00 RT	8.3	No	
	SMF	34B	2342+00 LT	10.2	No	
	DDA	7C	2345+00 LT	10.8	Yes	10.8
Total Affected WSF Land						122.8

¹ SMF: stormwater management facility; DDA: discharge to a depression area; COMB: combined use of SMF and DDA.

² For DDAs, the reported area represents the estimated area of FDOT acquired perpetual transportation/drainage/maintenance easements inclusive of increased storage of stormwater in depression areas and conveyance areas.

³ This natural depression area is located in privately owned land. The water level increase will partially involve the WSF. The area reported on the table represents the involved area only within the WSF.

⁴ The SMF will be constructed in privately owned land

■ Indicates the selected preferred alternative.

Table 3-2 – Summary of Effects within the Natural Depression Areas of the WSF

Drainage Basin No.	Natural Depression Area Name	Stage Elevation *			Effect on WSF Land (acres)
		Current (feet)	Proposed (feet)	Increase (feet)	
31	4b(e)C	62.4	63.0	0.6	4.7
	4b(w)C	62.6	63.4	0.8	2.5
32	5aC	56.6	57.0	0.4	6.8
	5bC	49.3	50.0	0.7	5.2
33	6a/bC	50.1	50.6	0.5	3.7
	6cC	55.7	56.0	0.3	5.7
34	7C	52.6	53.2	0.6	7.4

* Water level elevations were estimated based on the 100-year storm events using the NGVD Datum and assuming that the soils provide no percolation.

3.2 WITHLACOOCHEE RIVER CANOE TRAIL

No direct or indirect effects are anticipated on this Section 4(f) resource. Under either of the widening alternatives of I-75, the bridge structure at the crossing of the Trail will provide, at a minimum, the same clearances as currently present.

4.0 POTENTIAL MEASURES TO AVOID/MINIMIZE IMPACTS TO SECTION 4(f) RESOURCES

As noted in Section 3, the WSF-Croom Tract is the only Section 4(f) resource within the study area that would be involved with the proposed improvements of I-75. Several measures were evaluated to either avoid and/or minimize the anticipated effects to this resource. These measures are discussed below.

4.1 THE “AVOID EFFECTS” ALTERNATIVE

As previously noted, the northern segment of I-75 –north of SR 50– travels through the WSF-Croom Tract. A potential solution to avoid effects to the WSF land from the project stormwater runoff could be the construction of linear SMFs within the existing right-of-way of I-75.

The Southwest Florida Water Management District (SWFWMD) dictates that, for safety concerns, 4:1 side slope ratios and a depth of only one or two feet should be used for linear swale-type SMFs adjacent to roadway travel lanes. These criteria combined with the restricted width of the existing border severely limit the areas suitable for linear SMFs along I-75 adjacent to the WSF. These linear SMFs would be significantly smaller than the required areas –see **Table 4-1**– and, therefore, render this alternative infeasible for the I-75 stormwater management needs within the WSF-Croom Tract area. In addition, this solution is not compatible with the ultimate plan to widen I-75 to 10 lanes, as the construction of the additional lanes would require elimination of these linear SMFs.

Therefore, the option to avoid direct effects to the WSF by providing linear SMFs within the right-of-way of I-75 is neither a prudent nor a feasible avoidance alternative.

4.2 THE “MINIMIZE EFFECTS” ALTERNATIVES

To minimize the areas needed within the WSF, the drainage basins within the WSF-Croom Tract were analyzed to estimate a conservative water level increase in existing natural depressions. This was based on an assumption that future stormwater runoff from I-75 would continue flowing to these natural depressions, as it currently occurs. As

Table 4-1 – Effects of Avoidance and Minimization Alternatives on the WSF

Basin No.	Station From – To	“Avoid Effects” Alternative Build Linear SMFs in I-75 ROW			“Minimize Effects” Alternative 1 Use Entirely WSF Land		“Minimize Effects” Alternative 2 Shared Use of I-75 ROW and WSF Land		
		Required SMF Size (ac)	Suitable Area in I-75 ROW ¹ (ac)	Feasible ?	Total Affected WSF Area (ac)	Feasible ?	SMF Size in I-75 ROW (ac)	Total Affected WSF Area (ac)	Practical ?
19 ²	1735+90 – 1779+35	6.5	1.1	No	7.9	Yes	1.1	7.9	No
31	2189+00 – 2239+15	8.0	0.0	No	13.7	Yes	0.0	13.7	No
32	2239+15 – 2272+50	6.5	0.6	No	53.1	Yes	0.6	53.1	No
33	2275+25 – 2332+15	13.6	2.0	No	37.3	Yes	2.0	37.3	No
34	2332+15 – 2356+67	10.0	0.5	No	10.8	Yes	0.5	10.8	No
TOTAL		44.6	4.2		122.8		4.2	122.8	

¹ Area was estimated based on SWFWMD design criteria for linear SMFs, available right-of-way, and existing topography.

² Drainage Basin No. 19 involves the two isolated parcels of the Croom Tract in southern Hernando County.

noted in Section 6.2, during a coordination/pre-application meeting held on March 15, 2005, SWFWMD indicated that this would be a reasonable alternative to construction of SMFs within the WSF, as long as appropriate modeling is done during the permitting phase to assure that natural flow channels and natural depressions are sufficient for stormwater conveyance and storage.

Two options were considered to minimize impacts on WSF lands under this alternative:

- “Minimize Impacts” Alternative 1 assumes that the entire stormwater runoff from I-75 will flow to the natural depression areas following the existing drainage patterns. **Table 4-1** summarizes the effects of this alternative on the WSF lands which, as explained in Section 3.1, will consist of minor increases in the water level at the low point/storage areas during the storm events.
- “Minimize Impacts” Alternative 2 assumes a combination of using linear SMFs within the I-75 right-of-way –which as noted in Section 4.1 are very limited– and allowing part of the stormwater runoff to flow to the natural depression areas following existing drainage patterns. This alternative was considered to evaluate whether or not provision of linear SMFs in the right-of-way will result in substantial reduction of the stage increases at the low point/storage areas and therefore, reduction of the affected WSF lands. As shown in **Table 4-1**, provision of linear SMFs –due to their limited capacity– are not effective in reducing the affected WSF lands. In view of these results and considering safety concerns associated with linear SMFs within the right-of-way, this alternative was eliminated from further consideration.

5.0 APPLICABILITY OF PROGRAMMATIC SECTION 4(f) EVALUATION

When uses of Section 4(f) land by a highway project are considered minor, programmatic Section 4(f) evaluations can be used in place of individual evaluations. Use of WSF Croom Tract land for improvements to I-75 would fall under this classification for the following reasons:

- the project would affect approximately 122.8 acres of the Croom Tract, which is less than 1% of the total area of the Croom Tract (23,488 acres),
- the purpose of the project is to improve the operational characteristics of an existing highway,
- the Croom Tract is adjacent to I-75,
- use of Croom Tract land for project improvements will not impair the use of the Croom Tract property for recreation and wildlife refuge, and
- the project will not be processed with an Environmental Impact Statement (EIS).

As described in previous sections, several avoidance alternatives were fully evaluated, as follows:

- the No-Build Alternative,
- change project alignment or location to avoid effects on Section 4(f) land, and
- fit the improvements within the existing right-of-way to avoid use of Section 4(f) land.

It has been determined that these avoidance alternatives are neither feasible nor prudent.

6.0 COORDINATION

Coordination and communication has been maintained with the various environmental and resource management agencies since initiation of this PD&E study. Key coordination activities relevant to the Section 4(f) resources are described below.

6.1 ADVANCE NOTIFICATION

An Advance Notification (AN) package was circulated to all concerned parties at the onset of this PD&E Study on March 21, 2005.

The Florida Department of Agriculture and Consumer Services – Division of Forestry (DOF), responding to the AN, offered the following comments with regards to the facilities and resources within the WSF:

- “Please note that the entrance to the Croom Motorcycle Area of the Withlacoochee State Forest (WSF) is located north of SR 50 and west of the interstate –the gatehouse along with the access road is all immediately adjacent to the interstate. This facility receives very high levels of public use and is valuable source of state forest revenue. There are not many places in Florida that provide this type of recreational use. It is recommended that the site not be impacted by the proposed interstate widening project.”
- “The Silver Lake Recreational Area is located on the east side of the interstate just before the Withlacoochee River. We are currently in the process of up-grading the entrance to this facility and constructing a gatehouse. It is recommended that the site not be impacted by this interstate widening project.”
- “With the reference to the other Withlacoochee State Forest lands, funds have been spent on site preparation and reforestation of these lands. The WSF also manages 60 acres of land south of SR 50 and just north of the Pasco County Line where our only access is off of I-75.”

In conclusion, the DOF suggested that “this project comply with the Florida Board of Trustees of the Internal Improvement Trust Fund (TIITF) Linear Facilities Policy, which addresses avoidance, minimization of impacts, and compensation for impacts to natural

resources, natural resource lands, and related appurtenances on state lands, including WSF lands.”

As noted previously in Section 3, the widening improvements of I-75 will occur within its existing right-of-way and, therefore, will not affect any of the resources identified above by the DOF’s comments. Also, the measures described in Section 4.2 –to minimize effects to the WSF in relation to SMF needs for this project– will not involve the Croom Motorcycle Area nor the Silver Lake Recreational Area and gatehouses.

6.2 PRE-APPLICATION MEETING WITH THE SWFWMD

A Pre-application Meeting was held in March 15, 2005 between the FDOT and the Southwest Florida Water Management District (SWFWMD) to discuss the methodology and criteria for the development of SMFs for the widening improvements of I-75.

Part of the discussion at this meeting was focused on stormwater treatment options for the segment of I-75 traversing the WSF. The option to provide linear ponds within the existing right-of-way was explored but was deemed limited due to the SWFWMD requirements to provide 4:1 side slopes and depths of only up to 2.0 feet for safety reasons. Instead, the alternative of not developing SMFs along this segment but allowing the runoff to naturally flow to the low point of the depressions was considered a prudent and viable option. SWFWMD representatives at the meeting agreed that this would be an acceptable alternative on the condition that this alternative will be appropriately modeled and the property owner (State of Florida) will agree with this solution. This solution is consistent with past experience, since it has been already applied on several other roadway improvement projects where the FDOT controlled roadway right-of-way abuts State property.

6.3 COORDINATION WITH THE DOF

The FDOT has maintained an open and continuous communication with the DOF staff since the beginning of this PD&E Study. After circulating the AN package on March 15, 2005 and receiving the DOF's response on April 27, 2005 –see Section 6.1–, FDOT staff contacted the DOF representatives on June 9, 2005 and received records on the ownership status, management, and usage of the WSF-Croom Tract.

The major coordination events are discussed below.

6.3.1 Meeting with the DOF on November 29, 2005

Promptly after the preliminary drainage analyses results were available, and following up with SWFWMD's suggestion –see Section 6.2–, FDOT staff met with the DOF representatives on November 29, 2005. The objective of this meeting was to present the stormwater management options under consideration for this project within the WSF area and receive feedback from the DOF on which options would be preferable. At the meeting the two stormwater management options –construction of SMFs and storage in the natural depression areas– were discussed. The DOF staff indicated that construction of SMFs would be the least favorable solution, especially in the vicinity of the Croom Motorcycle Area where such facilities could pose as an attractive nuisance raising potential liability concerns.

The meeting adjourned with the request by the DOF staff of additional time to assess the effects of the stormwater management alternatives on the forest and decide on the preferred action.

6.3.2 DOF Letter Dated May 5, 2006

On May 5, 2006, the DOF provided a letter summarizing their comments, questions, and concerns regarding the stormwater management alternatives presented during the November 29, 2005, meeting.

In this letter, the DOF stated its preference on the stormwater storage in the natural depression areas alternative instead of constructing SMFs in the forest. In addition, the

DOF requested additional information regarding the amount of water expected to be discharged into the forest wetlands, whether or not drainage devices (ditches, weirs) will be used to moderate water flow into the forest, and the percolation rates of the soils in the forest. A question was also asked on whether the areas affected by the stormwater storage account for all future needs of I-75 or new areas (or SMFs) will be needed in the future for any additional widening of I-75.

6.3.3 FDOT Letter Dated August 7, 2006

In a letter dated August 7, 2006, the FDOT responded to the comments, questions, and concerns expressed by the DOF in the May 5, 2006 letter. In summary, the responses were as follows:

- The estimated water level increase in each of the natural depression areas due to the additional stormwater runoff will be minimal and on average will be approximately six inches. The additional storage areas that will be required during storm events was previously presented in Section 3.0.
- The stormwater runoff will be discharged into the natural depression areas following the current flow patterns.
- To be on the conservative side, the drainage analysis, the water level increases, and estimates of the involved areas were based on the assumption that the soils provide no percolation. This is not expected to be the true case in this area.
- The drainage analyses and calculations of the involved areas were based on the assumption that I-75 will be widened up to 10-lanes, based on current permitting requirements. Widening I-75 to 10 lanes is the ultimate plan.
- No SMFs or stormwater storage in natural depression areas will be considered in the vicinity of the Croom Motorcycle Area.

6.3.4 Meeting with the DOF on August 8, 2006

A meeting was held on August 8, 2006, at the DOF's offices in Tallahassee. In addition to DOF staff, the meeting was attended by the FDOT's Central Office key staff, the FDOT District Seven Modal, Planning and Development staff, and the FDOT's project

consultant staff. The objective of the meeting was for the FDOT to assist the DOF understand the stormwater storage in the natural depression areas alternative and its effects so that a consensus can be reached on the appropriate means to compensate the DOF for using the WSF lands.

The key points of the discussion were as follows:

- The DOF staff expressed again their preference to use natural discharge and natural depression storage areas. The DOF considers this method of discharge and storage as the least invasive option compared to constructing drainage conveyance and stormwater management facilities even though the area of effect of the latter could be smaller.
- The FDOT staff pointed out that the existing natural depression areas already receive stormwater runoff from the existing I-75 lanes. The FDOT staff noted that once design is underway for the I-75 segments that include the drainage basins within the WSF, additional drainage and geotechnical data are likely to be available.
- The FDOT's Central Office staff expressed interest in participating in this future evaluation process as it relates to creating a policy for undertaking the same discharge/storage methodology for future statewide projects. They also noted that they need to develop a Memorandum of Understanding (MOU) between the DOF and the FDOT that addresses how to jointly coordinate future statewide projects where state owned and managed lands may need to be used for a FDOT project.

6.3.5 DOF Letter Dated December 18, 2006

This document was provided to the DOF for their review and concurrence that the FDOT, on behalf of the FHWA, has determined that: a) there is no feasible or prudent alternative to the planned use of the WSF, and b) the recommended alternative includes all possible planning to minimize harm to the WSF from the intended use. In a letter dated December 18, 2006, the DOF concurred with the recommendations and conclusions presented in the Programmatic Section 4(f) Evaluation. A copy of the letter is provided in **Appendix B**.

7.0 SECTION 4(f) EVALUATION CONCLUSIONS

There are two Section 4(f) resources within the study area: 1) the Withlacoochee State Forest (WSF) – Croom Tract, which includes some recreational facilities such as the Silver Lake Recreational Complex, the Croom Motorcycle Area, and the Croom Tract hiking and horse trails, and 2) the Withlacoochee River Canoe Trail.

I-75 crosses over the Withlacoochee River Canoe Trail. The widening improvements under consideration for I-75 are not anticipated to have any direct or indirect effects on this Section 4(f) resource because the improved bridges will allow, at a minimum, the same horizontal and vertical clearances as currently afforded by the existing bridges.

North of SR 50, approximately 6.0 miles of I-75 traverse WSF Croom Tract lands. There are also two small isolated parcels of the Croom Tract that abut I-75 in southern Hernando County. The widening improvements under consideration for I-75 will be accomplished within its existing right-of-way and therefore, will not directly affect this Section 4(f) resource or any of its recreational facilities. However, there is no prudent and feasible alternative to accommodating the stormwater management for this project outside of the WSF property. As a solution to minimize adverse effects on the WSF, the option to allow stormwater runoff to flow to the natural depressions within the WSF in a pattern equivalent to existing drainage patterns is proposed.

This solution will not require construction of traditional excavated “pond” Stormwater Management Facilities (SMFs) within the WSF except for one location within Basin 19. The Southwest Florida Water Management District (SWFWMD) has indicated that this would be an acceptable solution as long as the State is agreeable to this solution and appropriate modeling is done during the permitting phase to assure that natural flow channels and natural depressions are sufficient for stormwater conveyance and storage.

In addition to the proposed construction of an SMF in Drainage Basin 19 within the WSF property, treatment of stormwater runoff from the project will be accommodated within the natural depression areas of the WSF and will involve discharging additional volumes of stormwater to two natural depression areas in Drainage Basin 31, two natural depression

areas in Drainage Basin 32, two natural depression areas in Drainage Basin 33, and one natural depression area in Drainage Basin 34. These areas within the WSF will be acquired by the FDOT through the execution of perpetual transportation/drainage/maintenance easements from the Division of State Lands (the present “fee owner” of the WSF lands).

The natural depression areas and natural conveyance areas within the WSF will be acquired by the FDOT through the execution of a perpetual transportation/drainage/maintenance easement from the Division of State Lands (the present “fee owner” of the WSF lands). These perpetual easement agreements will be executed by the FDOT with the Division of State Lands (DSL) during the project’s future right of way acquisition phase. It has not been determined at this time what the purchase value of the easement will be since this appraisal process will be handled during the agreement negotiation process between the FDOT and the DSL. The easement agreements will have Exhibits which will indicate the surveyed boundary of the areas to be acquired by the FDOT for stormwater management and conveyance purposes. These areas will also be reflected in the SWFWMD permitting process so the easement agreements will match the areas outlined in the permits. These agreements will be executed once the depression and conveyance areas are more accurately determined using detailed stormwater management models and then field surveyed (during design). Once the modeling and survey process is completed, the areas within the WSF will be acquired during the right of way acquisition phase.

In a letter dated December 18, 2006, the DOF concurred with the recommendation to allow stormwater runoff from I-75 to flow to the natural depression areas of the forest, for the project segments where there are no feasible solutions to provide stormwater management facilities outside the WSF.

Based on the considerations presented in this document, it is evident that there is no feasible and prudent alternative to the use of land from the WSF and the proposed action includes all possible planning to minimize harm to the WSF from the intended use.

APPENDICES

**APPENDIX A – Withlacoochee State Forest Five-Year Management Plan; 2003-
2008**

APPENDIX B – Miscellaneous Coordination Documents

APPENDIX A

Withlacoochee State Forest Five-Year Management Plan; 2003-2008

* Included as CD in document

APPENDIX B

Division of Forestry Letter Dated December 18, 2006



Florida Department of Agriculture and Consumer Services
CHARLES H. BRONSON, Commissioner
The Capitol • Tallahassee, FL 32399-0800
www.doacs.state.fl.us

Please Respond to:

Division of Forestry
Forest Management Bureau
3125 Conner Blvd. C-25
Tallahassee, FL 32399-1650
Telephone: (850) 488-6611
Fax: (850) 921-6724

December 18, 2006

Mr. Manuel Santos, Project Manager
Florida Department of Transportation
11201 N. McKinley Drive
Tampa, Florida 33612-6456

RE: I-75 PD&E, WPI Seg. No: 411014 1/FAP No: 0751-120 I

Dear Mr. Santos:

We have reviewed the October, 2006, Draft Programmatic Section 4(f) Evaluation for this project and concur with its conclusion to not construct storm water management areas within the Withlacoochee State Forest in order to accommodate the future widening of I-75. We also concur with plans to continue allowing water from I-75 to flow to the natural depressions within the Forest when there are no appropriate alternative areas outside of the Forest. We believe that the methods of using the Forest property outlined in the Evaluation are an acceptable measure to minimize any harm to this Section 4(f) property. However, we agree with the condition put forth by the Southwest Florida Water Management District, that the alternative be appropriately modeled during the permitting phase to assure that natural flow channels and natural depressions are sufficient for stormwater conveyance and storage.

We believe this project will need to be considered under the Board of Trustees Linear Facilities Policy. The Draft Evaluation adequately makes the case that there are no other practical and prudent alternatives and that the project minimizes impacts to natural resource lands. If a flowage easement instrument is necessary, a fair market value will need to be established. In addition, the Policy establishes that there will be compensation for actual adverse impacts reasonably expected. Since this intentional use of State Forest natural resources, i.e., wetlands, is a relatively new concept for us, we would want to monitor the forest composition and condition of the wetlands to determine if there are any negative impacts from increased flow. The Draft Evaluation indicates that additional drainage and geotechnical data are likely to be available. We believe that collecting this data is essential to the project and should include collection of vegetation data. We welcome the opportunity to work out these details as the project moves forward.



Florida Agriculture and Forest Products
\$87 Billion for Florida's Economy

RECEIVED
PLANNING UNIT
2006 DE 27 PM 2:17

Mr. Manuel Santos
December 18, 2006
Page 2

If you have any further questions, please contact Mr. Keith Mousel (352/754-6777 x 117) or Dr. Dennis Hardin (850/414-8293).

Sincerely,

CHARLES H. BRONSON
COMMISSIONER OF AGRICULTURE

A handwritten signature in cursive script, appearing to read "Michael Long".

Michael C. Long, Director,
Division of Forestry
850/488-4274

MCL/edh

cc: Keith Mousel
Dennis Hardin