

# Cultural Resources Assessment Survey Report

State Road 869 / SW 10<sup>th</sup> Street Connector

Project Development and Environment (PD&E) Study

SW 10<sup>th</sup> Street from Florida's Turnpike / Sawgrass  
Expressway to I-95 (SR 869/Sawgrass Expressway MP 21.077  
to MP 21.835 and SW 10<sup>th</sup> Street MP 0.00 to 1.427)

ETDM No.: 14291 / FAP No.: TBD

Financial Project ID No. 439891-1-22-02

Broward County, Florida



Prepared for:  
FDOT District Four  
3400 W. Commercial Blvd.  
Ft. Lauderdale, FL 33309

September 2018

*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.*

# Cultural Resources Assessment Survey Report

State Road 869 / SW 10<sup>th</sup> Street Connector

Project Development and Environment (PD&E) Study

SW 10<sup>th</sup> Street from Florida's Turnpike / Sawgrass  
Expressway to I-95 (SR 869/Sawgrass Expressway MP 21.077  
to MP 21.835 and SW 10<sup>th</sup> Street MP 0.00 to 1.427)

ETDM No.: 14291 / FAP No.: TBD

Financial Project ID No. 439891-1-22-02

Broward County, Florida



Prepared for:  
FDOT District Four  
3400 W. Commercial Blvd.  
Ft. Lauderdale, FL 33309

Prepared by:  
Janus Research, Inc.  
1107 North Ward Street  
Tampa, FL 33607

September 2018

## Executive Summary

---

At the request of the Florida Department of Transportation (FDOT), District 4, Janus Research, in cooperation with RS&H, Inc., conducted a cultural resource assessment survey (CRAS) for SR 869/ SW 10th Street from Florida's Turnpike / Sawgrass Expressway to I-95 in Broward County, Florida (FM No. 439891-1-22-02). The objective of this CRAS was to identify cultural resources and assess their eligibility for listing in the National Register of Historic Places (National Register) according to the criteria set forth in 36 CFR Section 60.4.

The project proposes placing two roadway facilities within the SW 10<sup>th</sup> Street Corridor. One facility proposed is a four-lane managed lanes roadway to provide a limited access connection from the Florida's Turnpike / Sawgrass Interchange to I-95. The other facility is a four-lane, divided, local roadway with bicycle lanes and sidewalks. Each of the alignments consist of four 12-foot managed lanes, two in each direction separated by a median barrier wall with 8 to 12-foot inside and outside shoulders; four 11-foot local travel lanes separated by a 15.5-foot median; and bicycle lanes and sidewalk. Although the limits of this project extends to west of I-95, this study extends only to Military Trail and the easternmost portion is included within the limits of the CRAS PD&E Study for SR 9/I-95 from south of SW 10th Street to north of Hillsboro Boulevard (FM No. 436964-1-22-01), currently in progress.

This assessment complies with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Public Law 89-665, as amended), as implemented by 36 CFR 800 -- Protection of Historic Properties (incorporating amendments effective August 5, 2004); Stipulation VII of the Programmatic Agreement among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation (ACHP), the Florida Division of Historical Resources (FDHR), the State Historic Preservation Officer (SHPO), and the FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida (Section 106 Programmatic Agreement, effective March 2016, amended June 7, 2017); Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.), as implemented by the regulations of the Council on Environmental Quality (CEQ) (40 CFR Parts 1500–1508); Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC 303 and 23 USC 138); the revised Chapter 267, Florida Statutes (F.S.); and the standards embodied in the FDHR's Cultural Resource Management Standards and

Operational Manual (February 2003), and Chapter 1A-46 (Archaeological and Historical Report Standards and Guidelines), Florida Administrative Code (F.A.C.). In addition, this report was prepared in conformity with standards set forth in Part 2, Chapter 8 (Archaeological and Historical Resources) of the FDOT Project Development and Environment Manual (effective June 14, 2017). All work also conforms to professional guidelines set forth in the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716, as amended and annotated).

Principal Investigators meet the Secretary of the Interior's Professional Qualification Standards (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture. Archaeological investigations were conducted under the direction of James P. Pepe, M.A., RPA. Historic resource investigations were conducted under the direction of Amy Groover Streelman, M.H.P.

No newly or previously recorded archaeological sites were identified within the archaeological area of potential effect (APE). Seven shovel tests were excavated within the archaeological APE. No cultural material was recovered. No subsurface testing could be conducted in most of the project area due to the presence of existing pavement, drainage ditches, and buried utilities.

The historic resources survey resulted in the identification of one newly identified historic structure. This structure, located at 3165-3175 SW 10<sup>th</sup> Street, Deerfield Beach, Florida (8BD6685) is of Masonry Vernacular style construction. The structure lacks historical associations and physical integrity and is considered National Register–ineligible.

While the segment of Military Trail within the current project APE is not historic, portions of Military Trail located outside of the current APE, to the north, have been determined ineligible for listing in the National Register by SHPO in 2016 (Janus Research 2016a, 2016b) and in 2017 (Janus Research 2017a, 2017b). An analysis of historic aerials revealed no evidence of the original trail within the APE and no physical evidence was identified during the survey. Therefore, Military Trail was not documented as part of the current study





*Florida Department of Transportation*

**RICK SCOTT**  
GOVERNOR

3400 West Commercial Blvd.  
Fort Lauderdale, FL 33309

**MIKE DEW**  
SECRETARY

September 19, 2018

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  
SR 869/SW 10<sup>th</sup> Street Connector  
Financial Management #: 439891-1-22-02  
Broward County, Florida

2018 SEP 11 A 10:46  
HISTORIC PRESERVATION

Attention: Ginny Jones

Dear Ms. Jones;

The Florida Department of Transportation (FDOT), District 4, is currently conducting a Project Development & Environment (PD&E) Study to evaluate alternatives to improve SR 869 (SW 10<sup>th</sup> Street) from the Sawgrass Expressway/Florida's Turnpike to west of I-95, a distance of approximately 3.0 miles. The alternatives include placing two roadway facilities within the SW 10th Street Corridor. One facility proposed is a four-lane managed lanes roadway to provide a limited access connection from the Florida's Turnpike / Sawgrass Interchange to I-95. The other facility is a four-lane, divided, local roadway with bicycle lanes and sidewalks. Each of the alignments consist of four 12-foot managed lanes, two in each direction separated by a median barrier wall with 8 to 12-foot inside and outside shoulders; four 11-foot local travel lanes separated by a 15.5-foot median; and bicycle lanes and sidewalk. Although the limits of this project extends to west of I-95, this study extends only to Military Trail and the easternmost portion is included within the limits of the CRAS PD&E Study for SR 9/I-95 from south of SW 10th Street to north of Hillsboro Boulevard (FM No. 436964-1-22-01), currently in progress.

No newly or previously recorded archaeological sites were identified within the archaeological Area of Potential Effect (APE). Seven shovel tests were excavated within the project area. No cultural material was recovered during the pedestrian survey or subsurface testing. No subsurface testing could be conducted in most of the project area due to the presence of existing pavement, drainage ditches, and buried utilities.

The historic resources survey resulted in the identification of one newly identified historic structure. This structure, located at 3165-3175 SW 10th Street, Deerfield Beach, Florida (8BD6685) is of Masonry

*Cultural Resources Assessment Survey*  
*SR-869/SW 10<sup>th</sup> Street Connector*  
*FM 439891.4*

Vernacular style construction. The structure lacks historical associations and physical integrity; therefore, it is considered National Register-ineligible.

The District has determined that no historic properties will be affected by the proposed project. I respectfully request your concurrence with this determination. 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. Roy Jackson, FDOT  
file

Cultural Resources Assessment Survey  
SR-869/SW 10<sup>th</sup> Street Connector  
FM 439891.1

The Florida State Historic Preservation Officer finds the attached Cultural Resources Assessment Report complete and sufficient and concurs with the recommendations and findings provided in this cover letter for SHPO/DHR Project File Number 2018-4708 2016-3851

SHPO Comments:

<hr/> <hr/> <hr/> <hr/>
-------------------------

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

10/2/18  
Date

**Cultural Resources Assessment Survey Report  
For the SR 869 / SW 10<sup>th</sup> Street Connector PD&E Study**

**TABLE OF CONTENTS**

Executive Summary .....	i
1 Introduction .....	1-1
1.1 Project Description .....	1-2
1.2 Purpose and Objectives .....	1-4
1.3 Need for the Project .....	1-4
1.3.1 Project Status .....	1-5
1.3.2 System Linkage .....	1-5
1.3.3 Capacity .....	1-6
1.3.4 Transportation Demand.....	1-7
1.3.5 Legislation .....	1-7
1.3.6 Social Demand and Economic Development .....	1-8
1.3.7 Modal Interrelationships .....	1-8
1.3.8 Traffic Safety .....	1-9
1.3.9 Roadway Deficiencies .....	1-9
1.4 Existing Typical Sections .....	1-9
1.5 No Action Alternative .....	1-11
1.6 Proposed Typical Sections .....	1-11
2 Area of Potential Effect.....	2-1
3 Environmental Setting.....	3-5
3.1 Paleo-Environment and Macro-Vegetational Change .....	3-5
3.2 Regional Environment.....	3-6
3.3 Physical Environment of the Project Area .....	3-7

4	Precontact Overview .....	4-1
4.1	Paleoindian Period (12,000-7,500 BC) .....	4-1
4.2	Archaic Period (7,500-500 BC) .....	4-2
4.2.1	Early Archaic Period (7,500-5,000 BC) .....	4-3
4.2.2	Middle Archaic Period (5,000-3,000 BC) .....	4-4
4.2.3	Late Archaic Period (3,000-500 BC) .....	4-5
4.3	Formative Period (500 BC-AD 1513) .....	4-9
4.3.1	Glades Culture.....	4-11
5	Historic Overview.....	5-1
5.1	European Contact and Colonial Period (c. 1513-1821) .....	5-1
5.2	The Territorial and Statehood Period (1821-1890) .....	5-4
5.3	Civil War and Post War Period (1860-1898) .....	5-6
5.4	Spanish American War Period/ Turn of the Century (1898-1916).....	5-11
5.5	World War I and Aftermath Period (1917-1920) .....	5-13
5.6	Florida Boom Period (1920-1930) .....	5-13
5.7	Depression and New Deal Period (1930-1940).....	5-16
5.8	World War II and the Post War Period (1940-1950).....	5-18
5.9	Period Post World War II and Modern Period (1950-current) .....	5-19
6	Florida Master Site File Search and Literature Review.....	6-1
6.1	Previously Conducted Cultural Resource Surveys .....	6-2
6.2	Previously Recorded Archaeological Resources .....	6-3
6.3	Previously Recorded Historic Resources .....	6-3
6.3.1	Previously Recorded Historic Cemeteries .....	6-3
6.3.2	Previously Recorded Historic Districts .....	6-3
6.3.3	Previously Recorded Historic Structures .....	6-3

6.3.4	Previously Recorded Resource Groups .....	6-3
6.3.5	Potential Historic Structures .....	6-4
6.4	Historic Map and Aerial Photograph Review .....	6-4
6.5	Summary of ETDM Comments .....	6-5
7	Project Research Design and Site Location Models .....	7-1
7.1	Precontact Archaeological Site Location Model .....	7-1
7.2	Historic Archaeological Site Location Model .....	7-2
8	Survey Methods .....	8-1
8.1	Archeological Field Methods .....	8-1
8.2	Architectural Field Methods .....	8-1
8.3	Certified Local Government Consultation .....	8-2
9	Results .....	9-1
9.1	Archaeological Survey .....	9-1
9.2	Architectural Survey .....	9-3
10	Conclusions and Recommendations .....	10-1
10.1	Unanticipated Finds .....	10-1
10.2	Curation .....	10-2
11	References Cited .....	11-1

## LIST OF TABLES

Table	Title	Page
Table 3.3.1:	Detailed Soil Types within the Project Area .....	3-8
Table 4.3.1:	Glades Cultural Sequence .....	4-11
Table 5.3.1:	Land Apportionment in the Project Area as Recorded in the Tract Book Records .....	5-10
Table 6.1.1:	Previous Surveys Conducted within the Project APE.....	6-2

## LIST OF FIGURES

Figure	Title	Page
Figure 1.1.1.:	General Location of the Project Area .....	1-3
Figure 2.1.1:	Project APE (Map 1 of 3) .....	2-2
Figure 2.1.2:	Project APE (Map 2 of 3) .....	2-3
Figure 2.1.3:	Project APE (Map 3 of 3) .....	2-4
Figure 4.3.1:	Glades Cultural Region .....	4-10
Figure 6.4.1:	1957 Aerial Photograph .....	6-6
Figure 6.4.2:	1968 Aerial Photograph .....	6-7
Figure 6.4.3:	1976 Aerial Photograph .....	6-8
Figure 9.1.1:	Drainage Ditch and Marked Utilities East of Powerline Road, Facing West .....	9-1
Figure 9.1.2:	Buried Utilities West of SW 30 <sup>th</sup> Avenue, Facing West .....	9-2
Figure 9.1.3:	Drainage Ditches and Buried Utilities on Powerline Road, Facing North .....	9-2
Figure 9.1.4:	Shovel Test 3, Facing North .....	9-3
Figure 9.2.1:	Identified Historic Resource within the Historic Resource APE .....	9-4
Figure 9.2.2.:	3165-3175 SW 10 <sup>th</sup> Street (8BD6685), Facing West .....	9-5

## LIST OF APPENDICES

APPENDIX A	Existing Typical Sections
APPENDIX B	Proposed Typical Sections
APPENDIX C	FMSF Resource Form
APPENDIX D	Shovel Tests Maps
APPENDIX E	Survey Log

# 1 Introduction

---

At the request of the Florida Department of Transportation (FDOT), District 4, Janus Research, in cooperation with RS&H, Inc., conducted a cultural resource assessment survey (CRAS) for SR 869/ SW 10th Street from Florida's Turnpike / Sawgrass Expressway to I-95 in Broward County, Florida (FM No. 439891-1-22-02). Although the project limits extend to I-95, the area between Military Trail to I-95 will be covered in the CRAS PD&E Study for SR 9/I-95 from south of SW 10th Street to north of Hillsboro Boulevard, currently in progress. The objective of this CRAS was to identify cultural resources and assess their eligibility for listing in the National Register of Historic Places (National Register) according to the criteria set forth in 36 CFR Section 60.4.

This assessment complies with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Public Law 89-665, as amended), as implemented by 36 CFR 800 -- Protection of Historic Properties (incorporating amendments effective August 5, 2004); Stipulation VII of the Programmatic Agreement among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation (ACHP), the Florida Division of Historical Resources (FDHR), the State Historic Preservation Officer (SHPO), and the FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida (Section 106 Programmatic Agreement, effective March 2016, amended June 7, 2017); Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.), as implemented by the regulations of the Council on Environmental Quality (CEQ) (40 CFR Parts 1500–1508); Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC 303 and 23 USC 138); the revised Chapter 267, Florida Statutes (F.S.); and the standards embodied in the FDHR's Cultural Resource Management Standards and Operational Manual (February 2003), and Chapter 1A-46 (Archaeological and Historical Report Standards and Guidelines), Florida Administrative Code (F.A.C.). In addition, this report was prepared in conformity with standards set forth in Part 2, Chapter 8 (Archaeological and Historical Resources) of the FDOT Project Development and Environment Manual (effective June 14, 2017). All work also conforms to professional guidelines set forth in the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716, as amended and annotated).



Principal Investigators meet the Secretary of the Interior's Professional Qualification Standards (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture. Archaeological investigations were conducted under the direction of James P. Pepe, M.A., RPA. Historic resource investigations were conducted under the direction of Amy Groover Streelman, M.H.P.

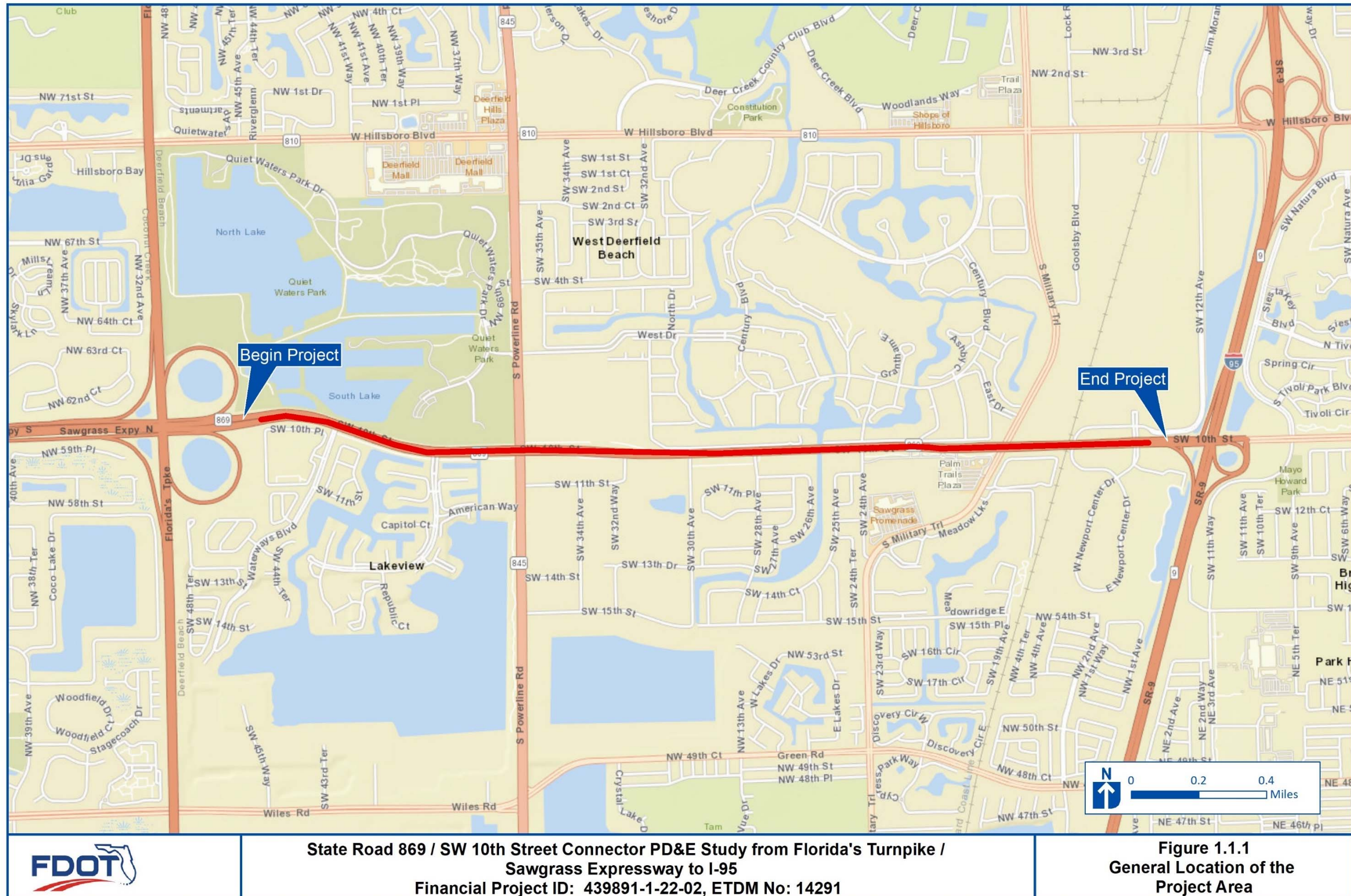
## 1.1 Project Description

The FDOT is evaluating alternatives to improve SR 869 (SW 10th Street) from Sawgrass Expressway / Florida's Turnpike to west of I-95, a distance of approximately 3.0 miles. The project is located in Broward County, Florida and is contained within the municipality of Deerfield Beach. Figure 1.1.1 shows the limits of the SW 10th Street Connector PD&E Study.

SW 10th Street currently consists of six lanes (three in each direction) from Florida's Turnpike to SR 845 (Powerline Road), four lanes (two in each direction) from Powerline Road to east of Military Trail, and five lanes (two westbound and three eastbound) from west of Military Trail to I-95. This segment of SW 10th Street is functionally classified as a Divided Urban Principal Arterial and has posted speed limits of 45 miles per hour from Florida's Turnpike to Military Trail, and 40 miles per hour from Military Trail to I-95. The access management classification from Florida's Turnpike to Powerline Road is Class 1. East of Powerline Road, the access management classification is Class 3.

SW 10th Street is an east-west Principal Arterial that connects three limited access facilities: Florida's Turnpike, Sawgrass Expressway, and I-95. SW 10th Street is part of the state's Strategic Intermodal System (SIS) and the National Highway System (NHS). SW 10th Street from Florida's Turnpike to I-95 is a missing link in the existing and planned regional express lanes system network. This study is proposing to add additional lanes in the corridor for the purpose of closing this gap and providing a continuous link in the managed lanes network that will be separate from the local SW 10th Street facility. In addition, SW 10th Street is designated as an evacuation route.







The proposed improvements are intended to reduce the amount of traffic on local SW 10th Street by allowing vehicles to bypass the area by utilizing the managed lane facility. The ability to provide relief for local traffic is a component of the improved connectivity between the three limited access facilities by providing dual systems (Local Access and Limited Access) within the SW 10th Street right-of-way. Because SW 10th Street is impacted by three major limited access facilities, local traffic relief is necessary before future improvements to the three limited access facilities are implemented. Improvements are planned for the interchange at the Sawgrass Expressway / Florida's Turnpike to the west (FM No. 437153-1) and I-95 at SW 10th Street interchange to the east (FM No. 436964-1). Public involvement will be essential in this PD&E Study due to the residential developments and local businesses along SW 10th Street, as well as in the surrounding areas, as this segment is a missing link in the south Florida managed lanes network.

A Community Oversight Advisory Team (COAT) was formed by the Broward Metropolitan Planning Organization (MPO) and has been working towards consensus on the future of the SW 10th Street corridor. Public involvement efforts are ongoing with the Broward MPO as a partner, continuing their efforts that began with the establishment of the COAT. Public involvement initiatives, including working directly with the COAT, as well as expanded and full representation from the City of Deerfield, City of Parkland, City of Coral Springs, the Broward MPO, the FDOT and members of the public, will be performed during the PD&E Study.

## 1.2 Purpose and Objectives

The purpose of this project is to improve local traffic flow by implementing a separate connection between the Sawgrass Expressway and the I-95 managed lanes, increase capacity, and eliminate various existing operational and safety deficiencies along SW 10th Street between the Sawgrass Expressway / Florida's Turnpike and I-95 while also providing improved connectivity of the regional transportation network.

## 1.3 Need for the Project

The primary need for this project is based on capacity / operational deficiencies for local traffic and regional connector traffic, system linkage and safety issues, with secondary

considerations for the needs of modal interrelationships, transportation demand, social demands and economic development, and emergency response / evacuation for local traffic and the adjacent communities, as well as regional mobility. The primary and secondary needs for the project are discussed in further detail below.

### 1.3.1 Project Status

The SW 10<sup>th</sup> Street Connector project is in the Broward MPO jurisdiction. The Broward MPO Transportation Improvement Program (TIP) Fiscal Year 2018 – 2022 includes funding for the SW 10<sup>th</sup> Street Connector from Powerline Road to West of Military Trail Project for Preliminary Engineering and Right-of-Way. Construction funding is included in years beyond 2022. The Broward MPO 2035 Long Range Transportation Plan (LRTP) also includes the SW 10<sup>th</sup> Street Connector from Powerline Road to Military Trail widening project in the 2035 Cost Feasible Roadway Projects. The FDOT State Transportation Improvement Program (STIP) 2017 includes funding for Preliminary Engineering and Right-of-Way in years 2018 and 2019, respectively. Funding for a Design-Build method of delivery is included in years beyond 2021. The FDOT SIS Adopted Five Year Plan includes funding for the SW 10<sup>th</sup> Street Connector from Powerline Road to West of Military Trail Project for Preliminary Engineering and Right-of-Way. The Construction is included in the FDOT SIS Adopted Second Five Year Plan with funding shown in 2022.

The TIP, STIP, and LRTP are consistent in respect to total funding and time frame. However, the TIP, STIP, and LRTP have different physical project limits than the proposed PD&E Study. The planning documents include SW 10<sup>th</sup> Street from Powerline Road to Military Trail whereas, this PD&E Study extends the limits along SW 10<sup>th</sup> Street from the Sawgrass Expressway / Florida's Turnpike to I-95. The PD&E study limits originally matched the planning documents; however, the limits were extended in order to provide independent utility and a more logical termini for the project.

### 1.3.2 System Linkage

SW 10th Street is part of the state's SIS and the NHS. The SIS is an intermodal network of transportation facilities that seamlessly flows from one mode to the next with the goal of providing the highest degree of mobility for people and goods traveling throughout Florida. The SIS is an integral piece of Florida's goal to enhance economic competitiveness and quality

of life for its citizens and visitors. The NHS is a network of strategic highways within the United States, including the Interstate Highway System and other roads serving major airports, ports, rail or truck terminals, railway stations, pipeline terminals and other strategic transport facilities. Thus, SW 10th Street corridor is an important facility in the transportation network.

SW 10th Street corridor provides the opportunity for commuters and local residents to connect to three major limited access facilities: Florida's Turnpike, Sawgrass Expressway, and I-95. The ability to provide relief for local traffic is a component of the improved connectivity between the three limited access facilities by providing dual systems (Local Access and Limited Access) within the SW 10th Street right-of-way. Because SW 10th Street is impacted by three major limited access facilities, local traffic relief is necessary before future improvements to the three limited access facilities are implemented. These facilities are also on the regional freight network as identified in the March 2010 South Florida Regional Freight Plan (project #269). Florida's Turnpike provides limited access north-south connectivity from Miami-Dade County to Orlando and connects to I-75 northwest of Orlando. The Sawgrass Expressway provides limited access connectivity from the I-75 / I-595 Interchange, to the Florida's Turnpike at the SW 10th Street Interchange. I-95 is the primary north-south interstate facility that links all major cities along the Atlantic Seaboard.

SW 10th Street from Florida's Turnpike to I-95 is a Principal Arterial facility serving local residential communities, commercial properties and commuters alike. This section of roadway has also been considered the missing link in the existing and planned regional express lane network. This project seeks to improve this linkage by reducing congestion and completing the express lane network while reducing operational and safety deficiencies for the local users.

### 1.3.3 Capacity

A need exists to improve local and regional traffic operations along the SW 10th Street corridor. Traffic volumes along SW 10th Street between the Sawgrass Expressway / Florida's Turnpike and I-95 have consistently increased over the past 15 years and are expected to continue to grow over the next 20 years. During the five-year period from 2010 to 2015, Average Annual Daily Traffic (AADT) on SW 10th Street was as follows:

- Sawgrass Expressway / Florida's Turnpike to Powerline Road experienced an AADT of 51,333 vehicles per day (vpd) with a high of 56,500 vpd.
- Powerline Road to Military Trail increased from 40,500 vpd to a high of 46,500 vpd.
- Military Trail to I-95 experienced an AADT ranging from 49,500 vpd to 54,500 vpd.

The existing traffic on SW 10th Street between Powerline Road and I-95 exceeds the current capacity of a four-lane arterial roadway which can accommodate approximately 40,000 vpd. The capacity of SW 10th Street from Sawgrass Expressway / Florida's Turnpike to Powerline Road is 60,000 vpd. With the anticipated growth and the combination of local traffic and those travelers going from one limited access facility to the next, this segment is expected to reach capacity by 2040 or sooner.

Additionally, the following intersections fall below acceptable LOS (LOS D or better) targets during at least one peak hour in the existing conditions:

- SW 10th Street at Military Trail operates at LOS F in both the AM and PM peak.
- SW 10th Street at Newport Center Drive operates at LOS B in AM and LOS F in PM.

These conditions are existing concerns and are projected to worsen in the future if no action is taken. Even with an assumed 10 percent travel time savings or reduction in delay from possible traffic signal optimization, the peak hour operations are not anticipated to operate at an acceptable LOS (LOS D or better).

#### **1.3.4 Transportation Demand**

The SW 10th Street Connector PD&E Study is currently included in the Broward MPO LRTP and TIP. The SW 10th Street Connector PD&E Study will be advanced to move forward in coordination with the I-95 from SW 10th Street to Hillsboro Boulevard PD&E Study (FM# 436964-1) to the east as well as the Sawgrass Expressway widening and interchange PD&E Study (FM# 435763-1) to the west. Additionally, the 2045 SIS Multi-Modal Unfunded Needs Plan listed adding capacity to this segment of SW 10th Street as a needed improvement.

#### **1.3.5 Legislation**

Currently, there is no legislation mandating the implementation of this project.

### 1.3.6 Social Demand and Economic Development

Social and economic demands on the SW 10th Street corridor will continue to increase as population and employment increase in Broward County, and the greater south Florida region. The University of Florida Bureau of Economic and Business Research (BEBR) high end estimate predicts Broward County's population will grow to 2.3 million by 2040, an increase of 34 percent from the year 2011. This regional population growth will increase travel demands on the SW 10th Street corridor. Due to the built-out nature of the local area surrounding the SW 10<sup>th</sup> Street corridor, the growth will occur in the region, necessitating connections between the limited access facilities.

Multiple residential developments and businesses are located along the SW 10th Street corridor; therefore, this project will consider livability issues as well as vehicular movement. Capacity improvements to SW 10th Street have previously not advanced to design / construction since MPO and FDOT priorities did not adequately address local concerns during previous assessments of this corridor. However, the Broward MPO Board directed its staff to reach out to communities along the corridor and initiate a consensus building effort to evaluate the best way to accommodate the long-term traffic demands as well as the local community considerations. As part of this consensus-building effort, a group of concerned individuals, known as the Community Oversight Advisory Team (COAT), was assembled to represent the communities along the corridor, as well as throughout the greater north Broward County area, to identify the long-term opportunities and vision for the corridor. The COAT developed recommendations for the corridor to be considered by the Department in evaluating the improvements in a PD&E Study.

### 1.3.7 Modal Interrelationships

Sidewalks are located along SW 10th Street's eastbound and westbound lanes from Military Trail to I-95; however, from Waterways Boulevard to Military Trail, sidewalks are only present in the eastbound direction. The City of Deerfield Beach Comprehensive Plan identifies SW 10th Street as a Community Bus Route, although no local bus route is identified in the Broward 2040 LRTP. Bicycle facilities are not designated along SW 10th Street; however, existing five-foot paved shoulders, which serve as undesignated bicycle lanes, are present in both directions. The Broward MPO assigned a LOS F to the bicycle, pedestrian,

and transit services along SW 10th Street. The proposed improvements will provide future accommodations for bicyclist and pedestrians, and transit modes.

### 1.3.8 Traffic Safety

A need exists to resolve safety issues within the project limits along the existing SW 10th Street corridor. SW 10th Street experienced 269 crashes from 2009 to 2014 in this corridor. Of the 269 crashes, 163 were rear-end crashes, which are common in heavily congested facilities. This project seeks to reduce congestion, thus mitigating existing crash patterns, and to enhance safety through the addition of improved bicycle / pedestrian features along the local system.

The project is anticipated to improve emergency evacuation and response capabilities by enhancing capacity and connectivity to major arterials designated on the state evacuation route. SW 10th Street, Florida's Turnpike, Sawgrass Expressway, and I-95 serve as part of the emergency evacuation route network designated by the Florida Division of Emergency Management and by Broward County. SW 10th Street moves traffic from the east to I-95, Florida's Turnpike, and the Sawgrass Expressway. Improved travel times would also result in improved emergency response for local residents and for transport to regional facilities. Broward County Fire and Rescue Station 66 is located at 590 S. Powerline Road, approximately 0.3 miles to the north of the study area.

### 1.3.9 Roadway Deficiencies

Currently, SW 10th Street provides FDOT standard width travel and turn lanes. However, as previously mentioned, sidewalk is limited to the south side of SW 10th Street from Waterway's Boulevard to Military Trail. Sidewalk is present along SW 10th Street eastbound and westbound from Military Trail to I-95. Bicycle facilities are not designated along SW 10th Street, although existing 5-foot paved shoulders, which serve as undesignated bicycle lanes, are present in both directions. No other known roadway deficiencies exist along the corridor.

## 1.4 Existing Typical Sections

SW 10<sup>th</sup> Street is a four-lane to six-lane divided, urban principal arterial and is a designated SIS facility. Sidewalk is present on at least one-side of the road for the entire corridor



however, bicycle facilities are sporadic in the corridor. The existing SW 10<sup>th</sup> Street typical sections are shown in Appendix A.

SW 10<sup>th</sup> Street from the end of the Sawgrass Expressway to Powerline Road (0.76 miles) consists of:

- Three to four 12-foot travel lanes in each direction;
- Five-foot sidewalk on the south side of SW 10<sup>th</sup> Street starting east of Waterways Boulevard;
- 28-foot wide raised median; and
- Right-of-way width of 250 feet.

SW 10<sup>th</sup> Street from Powerline Road to Quiet Waters Business Park Entrance Road (0.35 miles) consists of:

- Three 12-foot travel lanes in each direction;
- Five-foot paved shoulders that serve as bicycle lanes in both directions;
- Five-foot sidewalk on both sides of SW 10<sup>th</sup> Street;
- 28-foot wide raised median; and
- Right-of-way width that varies from 264 feet to 316 feet.

SW 10<sup>th</sup> Street from Quiet Waters Business Park Entrance Road to Military Trail (1.08 miles) consists of:

- Two 12-foot travel lanes in each direction;
- Five-foot paved shoulders that serve as bicycle lanes in both directions;
- Five-foot sidewalk on the south side of SW 10<sup>th</sup> Street;
- 16-foot wide raised median; and
- Right-of-way width that varies from 215 feet to 294 feet.

SW 10<sup>th</sup> Street from Military Trail to East Newport Center Drive (0.38 miles) consists of:

- Three 11-foot travel lanes in each direction;
- Three-foot paved shoulder;
- Five-foot curb-line sidewalk on both sides of SW 10<sup>th</sup> Street;
- Variable width raised median (15 feet to 26 feet); and

- Right-of-way of approximately 250 feet.

### 1.5 No Action Alternative

The No Action Alternative, as its name implies, retains the existing roadway characteristics. Under this scenario, the existing SW 10<sup>th</sup> Street corridor would not be improved and conditions would continue to deteriorate. The No Action Alternative has certain advantages and disadvantages.

The advantages of the No Action Alternative include:

- No expenditure of public funds;
- No disruption or temporary impacts (air, noise, vibration, travel patterns) due to construction activities; and
- No right-of-way acquisition.

The disadvantages of the No Action Alternative include:

- Does not meet the projects purpose and need;
- Increased vehicular congestion and delay, which leads to increased travel costs;
- Increased safety concerns;
- Increased emergency response and evacuation time; and
- Decreased air quality.

### 1.6 Proposed Typical Sections

This project proposes placing two roadway facilities within the SW 10<sup>th</sup> Street Corridor. One facility proposed is a four-lane managed lanes roadway to provide a limited access connection from the Florida's Turnpike / Sawgrass Interchange to I-95. The other facility is a four-lane, divided, local roadway with bicycle lanes and sidewalks. During the Tier 1 analysis, two alignments were evaluated: one alignment, the North Alignment Alternative, places the managed lane facility on the north side of the right-of-way with the local roadway lanes on the south side of the right-of-way; the other alignment, the Center Alignment Alternative, locates the managed lanes in the center of the right-of-way with the local lanes operating on either side of the managed lanes as a one-way frontage road system. Each alignment alternative remains, for the most part, within the existing right-of-way footprint with the

exception of small strips and slivers of right-of-way needed from the south side of the corridor. The proposed SW 10<sup>th</sup> Street typical sections are shown in Appendix B.

Each of the alignments consist of the following elements:

- Four 12-foot managed lanes, two in each direction separated by a median barrier wall with 8 to 12-foot inside and outside shoulders. This facility would be physically separated from the local lanes;
- A large portion of the managed lanes facility was envisioned to be a below-grade, or depressed, section of roadway with intermittent covers to provide landscape opportunities;
- Four 11-foot local travel lanes separated by a 15.5-foot median;
- Bicycle lanes and sidewalk;

Based on feedback received at numerous community meetings and the Alternatives Public Workshop held on April 24, 2018, the Northern Alignment Alternative will be carried through to the next level of analysis. Also, based on feedback, additional alternatives with reduced or minimized depressed sections and hybrid alternatives will be developed and evaluated in Tier 2. However, each new alternative will be based on the North Alignment concept with the managed lanes facility placed in the northern portion of the existing right-of-way and the local SW 10<sup>th</sup> Street lanes located in the southern portion of the corridor. Tier 2 Alternatives will be evaluated within the same right-of-way footprint but have differing profiles for the managed lanes facility. The local SW 10<sup>th</sup> Street profile will remain at-grade.

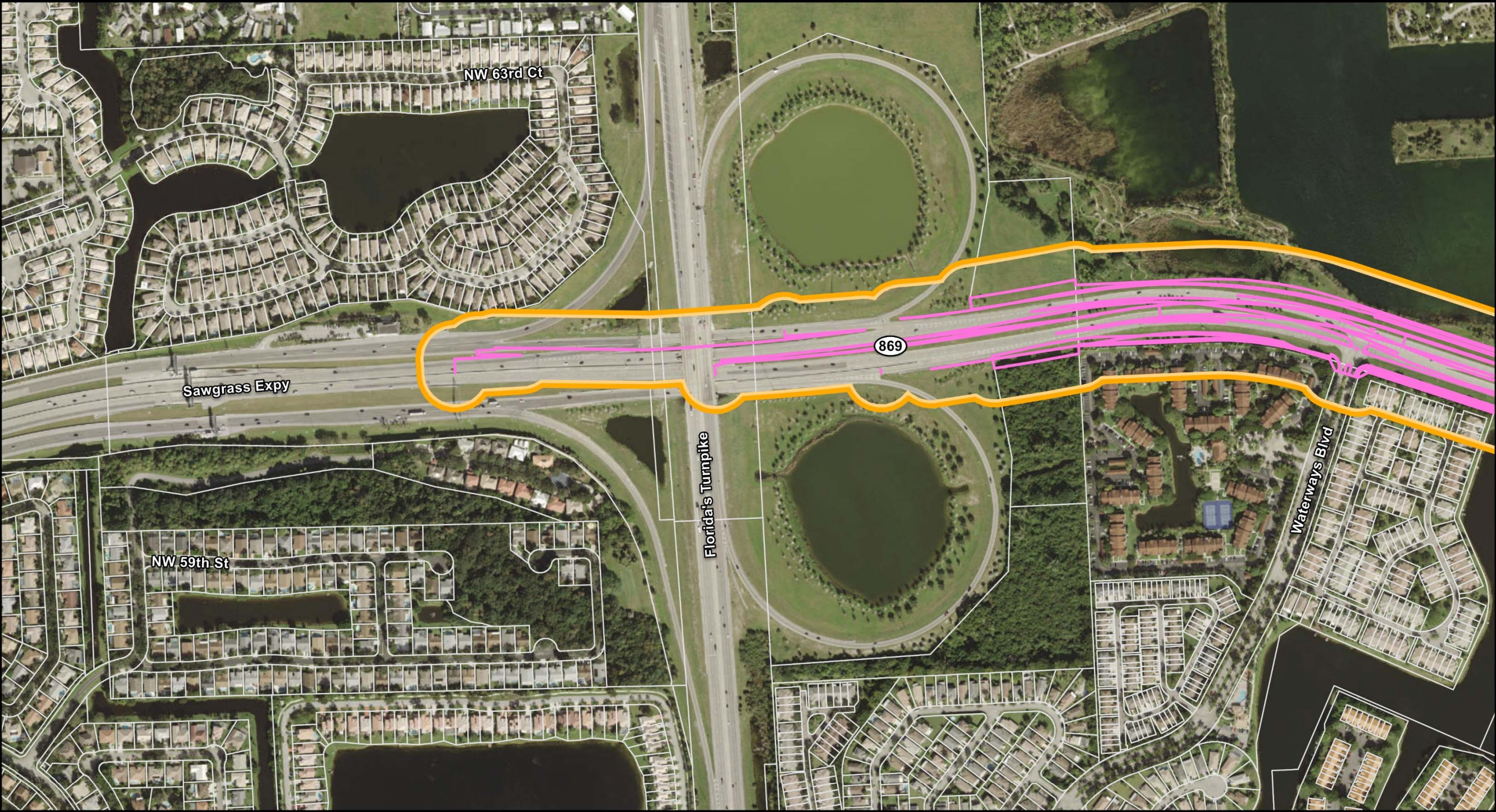
## 2 Area of Potential Effect

---

According to 36 CFR 800.16(d), the area of potential effect (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. The APE is influenced by the scale and nature of the undertaking as well as its geographical setting. The APE must include measures to identify and evaluate both archaeological and historical resources. Normally, archaeological and other below-ground resources will be affected by ground disturbing activities and changes in ownership status. Structural resources and other above ground sites, however, are often impacted by those activities as well as alterations to setting, access and appearance. As a consequence, the survey methodologies for these two broad categories of sites differ.

The archaeological APE focuses upon identifying and evaluating resources within the geographic limits of the proposed improvements and its associated ground disturbing activities within the proposed right-of-way. The archaeological APE, therefore, is confined to the footprint of the proposed project improvements and proposed right-of-way (Figure 2.1.1 through 2.1.3). The APE for historic resources took into consideration the scope of the proposed work and the developed urban nature of the project area. Therefore, the historic resources APE for at-grade improvements consists of the footprint of the proposed improvements and adjacent parcels up to a distance of 150 feet from the footprint (Figure 2.1.1 through 2.1.3). There are no improvements associated with the project between Military Trail and I-95 so this area is outside the APE for this CRAS. This area will be covered in the CRAS PD&E Study for SR 9/I-95 from south of SW 10th Street to north of Hillsboro Boulevard (FM No. 436964-1), currently in progress.






**Figure 2.1.1: Project APE**  
(Map 1 of 3)

SR 869/SW 10th Street Connector  
PD&E Study from Florida's  
Turnpike/Sawgrass Expressway to  
I-95 (FM No. 439891-1-22-02,  
ETDM No. 14291)

- Archaeological APE
- Historic Resources APE

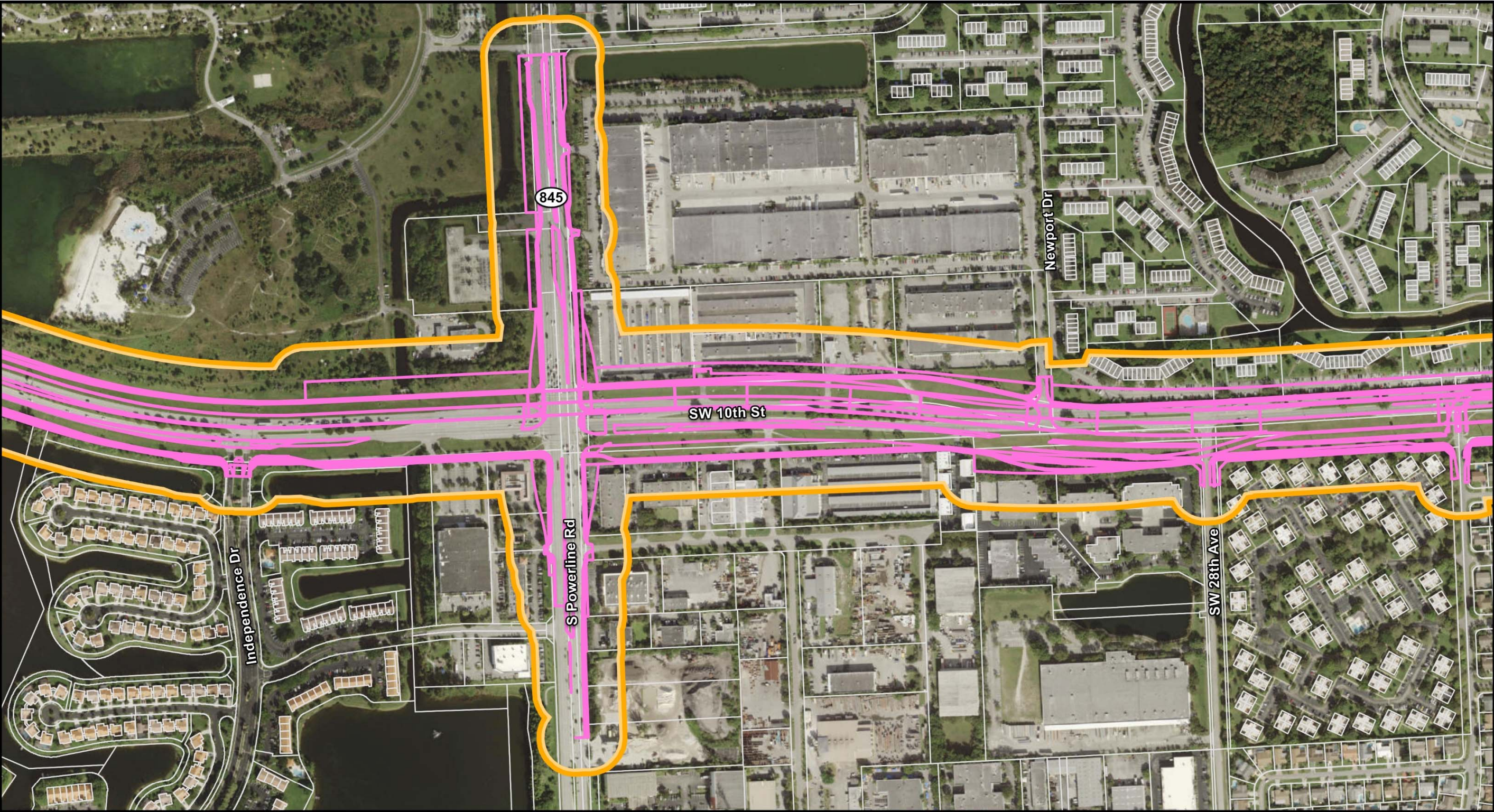
**Broward County**



0 250 Feet

0 50 100 Meters

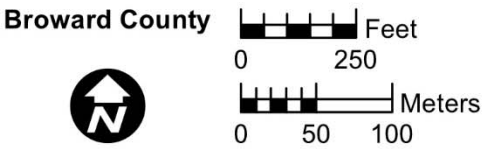




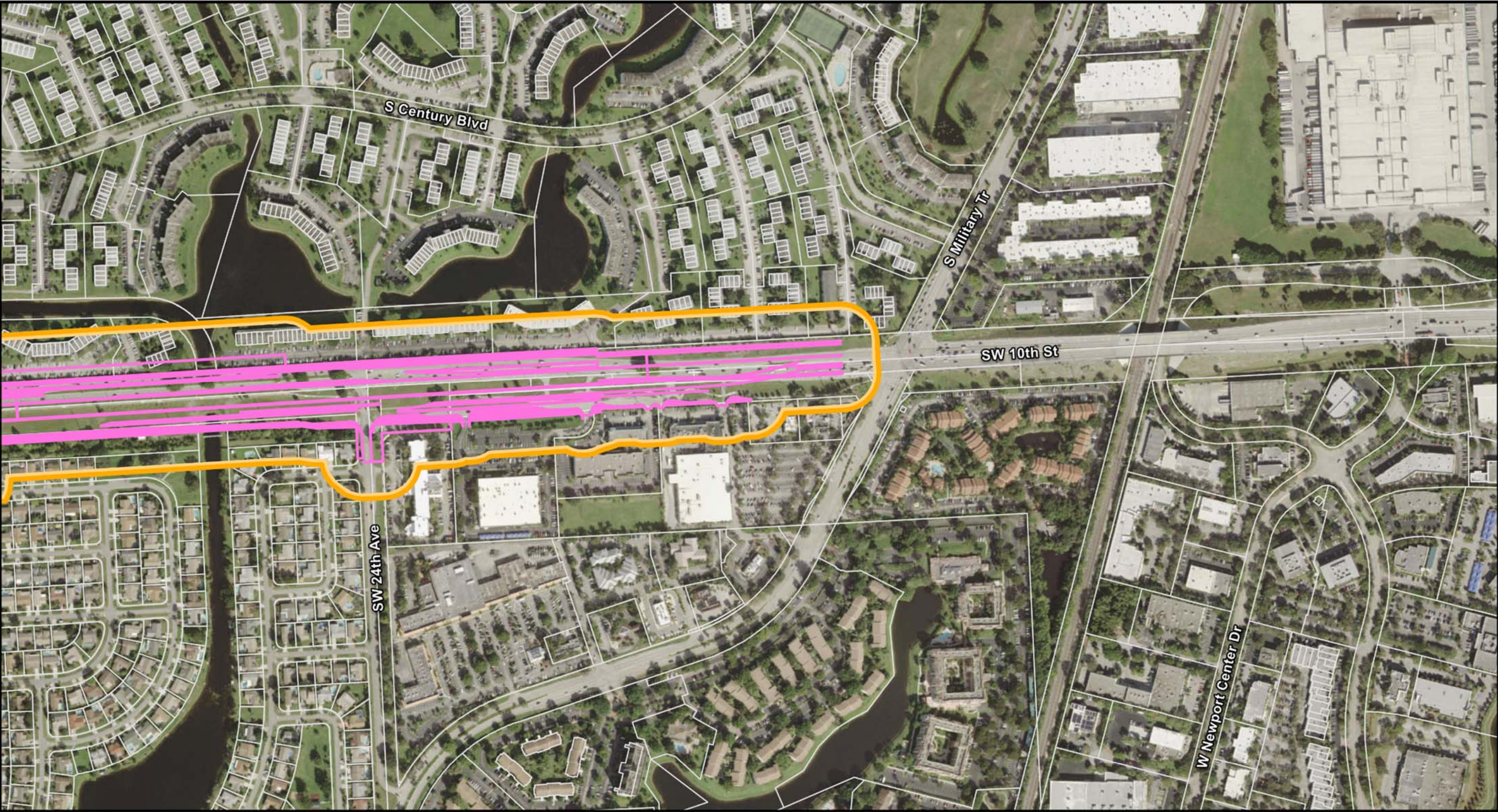
**Figure 2.1.2: Project APE**  
(Map 2 of 3)

SR 869/SW 10th Street Connector  
PD&E Study from Florida's  
Turnpike/Sawgrass Expressway to  
I-95 (FM No. 439891-1-22-02,  
ETDM No. 14291)

- Archaeological APE
- Historic Resources APE








**Figure 2.1.3: Project APE**  
(Map 3 of 3)

SR 869/SW 10th Street Connector  
PD&E Study from Florida's  
Turnpike/Sawgrass Expressway to  
I-95 (FM No. 439891-1-22-02,  
ETDM No. 14291)

- Archaeological APE
- Historic Resources APE

**Broward County**



0 250 Feet

0 50 100 Meters



### 3 Environmental Setting

---

Environmental and ecological factors through time have had a direct influence on the choice of occupation sites by precontact populations and early historic settlers. Therefore, factors such as geologic, hydrologic, and meteorological processes that may have affected the project APE and its biotic resources are important elements in the formulation of a settlement/subsistence model for precontact and early historic peoples.

#### 3.1 Paleo-Environment and Macro-Vegetational Change

Although a comprehensive paleoenvironmental reconstruction is beyond the scope of this report, a brief description of the large-scale climatic and hydrologic conditions that have occurred since 31,050 BC is provided. This description is drawn primarily from the work of W. A. Watts (1969, 1971, 1975, and 1980) and Watts and Hansen (1988). Carbone (1983) has promoted the reconstruction of local paleoenvironments, or small-scale environmental change, with an effort towards developing regional paleoenvironmental mosaic landscapes. Vegetation and animals (including humans) either adapt to local areas (micro-habitats) or move to preferred locations. The descriptions given here provide some indication of the ecological context of precontact groups at different times, in particular, the environmental limitations. However, these descriptions are general and cannot be used to reconstruct the microhabitats of the project APE.

Since the termination of the Pleistocene Epoch at the end of the Wisconsin glaciation, roughly 11,550 BC, Florida has undergone significant climatic and environmental change. Notable changes in climate and subsequently in flora and fauna required human groups to adapt to their surroundings. These adaptations resulted in cultural changes in their hunting/foraging strategies and seasonal migration patterns. Within the archaeological record, these changes can be observed by differences in settlement patterns, midden composition, refuse disposal patterns, and the kinds of stone tools or pottery made.

The first 5,000 years or so of the Holocene were marked by rapid rises in sea levels. This inhibited the development of estuaries along the Gulf Coast and may have had the same impact on the Atlantic coast (Griffin 1988). However, even though sea levels were rising, they were still considerably lower than present levels. This, combined with low interior water



tables, resulted in arid conditions for the interior of southern Florida (Watts 1983; Watts and Hansen 1988). The marshes and swamps for which southern Florida are famous had not yet been formed (Webb 1990).

At about 3050 BC, give or take 1,000 years, sea levels had risen to within a few meters of their current levels (Griffin 1988). Increased rainfall resulted in the formation of Lake Okeechobee, the Everglades, and other modern ecosystems (Watts and Stuiver 1980; Brooks 1984:38; Gleason et al. 1984:311). The relative sea level stability combined with freshwater discharge allowed for the development of coastal estuaries (Widmer 1988). Around 750 BC, the rising sea level had slowed to the point that some modern beach ridges in southern Florida, like Cape Sable, began to form. Increased precipitation in the interior made cypress common in many areas, including the Big Cypress Swamp, and made droughts in the Everglades less common (Griffin 1988). The southern rim of Lake Okeechobee reached its maximum height about this time (Brooks 1984:38). Vegetation reached its present distributional patterning and estuaries were fully formed and supplied by enough freshwater drainage to become highly productive (Widmer 1988; Griffin 1988).

### 3.2 Regional Environment

The project APE is located within the Atlantic Coastal Ridge physiographic region. The Atlantic Coastal Ridge is characterized by low, poorly drained flatlands that represent the shallow, flat bottoms of ancient seas. Features associated with this province include the Atlantic Ocean to the east, the Everglades to the west, and the Southern Slope to the south. Superimposed on this flat terrain are several linear sand ridges that parallel the coast and are remnants of ancient shorelines, dunes, or offshore bars (White 1970:Plate 1-C). Elevation along the Atlantic Coastal Ridge averages approximately 10–15 feet (3–4.5 meters).

Limestone and dolostone dominate the sediments of Broward County. Outcrops of silicified limestone, or chert, which were often sought out by precontact peoples as raw material sources for the manufacture of stone tools, do not occur in this area (Lane et al. 1980). The closest known outcrops lie to the west along the Peace River in the central part of the state (Scott 1978; Upchurch et al. 1982).

Water resources consist of both ground and surface water. The principal groundwater aquifer is the Floridan, which occurs under artesian conditions with slowly permeable clays and sands forming a confining layer that effectively prevents the vertical movement of water from the surficial aquifer to the Floridan aquifer (Lane 1980). Surface sand deposits contain the surficial aquifer, which is recharged through local rainfall. Because of low hydraulic gradients, movement of water within this zone is very slow. Water is discharged from the aquifer through lateral seepage to streams or lakes, evapotranspiration, or movement downward to the Floridan aquifer where sinkhole development has breached the underlying confining layer of clay (Lane 1980; Lane et al. 1980). Major rivers and streams include the North and South Fork of the Middle River and the New River Sound.

### 3.3 Physical Environment of the Project Area

A review of the General Land Office (GLO) historic plat map (Florida Department of Environmental Protection [FDEP] 1870a) and surveyor's field notes (FDEP 1870b) was conducted to examine past environmental conditions within the vicinity of the archeological APE. The surveyor's notes describe most of the area as wet prairie with a few hammocks on the westernmost end of the project corridor.

Aerial photographs from 1947, 1949, 1953, 1957, 1964, 1968, 1969, 1971, 1976, and 1980 (FDOT, Surveying and Mapping Office 2016; University of Florida, George A. Smathers Libraries 2016) were reviewed to examine land use within the vicinity of the archaeological APE during the 20th century. In 1947 and 1949 the area was mostly undeveloped. Both Powerline Road and SW 10<sup>th</sup> Street were present. Thick vegetation was present in the area west of Powerline Road, as well as southeast of the intersection of Powerline Road and SW 10<sup>th</sup> Street. The remaining area north and south of SW 10<sup>th</sup> Street between Powerline Road and Military Trail was undeveloped agricultural fields. In 1964, some development had begun to the northeast of Powerline Road and SW 10<sup>th</sup> Street, but most of the area remained rural. By 1980, several commercial buildings replaced the agricultural fields to the north of SW 10<sup>th</sup> Street and residential communities were being built to the south of SW 10<sup>th</sup> Street.

The Soil Survey of Broward County, Florida Eastern Part (United States Department of Agriculture [USDA] 1984) was reviewed to help determine the predevelopment environment,

assess the level of modification, and identify natural features within the project corridor indicative of increased archaeological site potential. The project corridor is located within the Immokalee-Urban land-Pompano soil association. The Immokalee-Urban land-Pompano association is made up of broad, low ridges interspersed with sloughs and broad flats (USDA 1984:9). Natural vegetation includes slash pine, saw palmetto, and native grasses. Drainage characteristics and environmental association for each detailed soil type within the APE are included in Table 3.3.1.

**Table 3.3.1: Detailed Soil Types within the Project Area**

Drainage Characteristics	Soil Type	Environmental Association
Moderately well drained	Pomello fine sand	This soil is found on low ridges east of the Everglades. Native vegetation consists of pine, palmetto, live oak, and native grasses.
Poorly drained	Immokalee fine sand	This soil is found on broad, low ridges. Natural vegetation consists of slash pine, saw palmetto, and grasses.
	Pompano fine sand	This soil is found in sloughs and broad flats. Native vegetation consists of pepper, slash pine, guava trees, native grasses, and cypress in low areas.
	Margate fine sand	This soil is found on level, low terraces between the Everglades and Atlantic Coastal Ridge. Natural vegetation is native grasses, wax myrtle, and cypress trees.
Not Applicable	Arents-Urban land complex	Urban land is covered with structures, pavement, and other urban features so natural soil in these areas are not readily observable
	Udorthents	Unconsidered or heterogeneous material removed from ditched, canals, lakes, ponds, commonly piles along banks.

Source: USDA 1984: 16–18, 26–27, 31–32, 41–43, 45–48

Currently, the project area consists primarily of existing pavement; curb and gutter; sidewalk; driveways; access drives; and grassy shoulder with buried utilities, junction boxes, overhead transmission line poles, and planted ornamentals. The level of development within the current project corridor has resulted in the removal of native vegetation.

## 4 Precontact Overview

---

Native peoples have inhabited Florida for at least 14,000 years. The earliest cultural stages are pan-Florida in extent, while later cultures exhibited unique cultural traits. The following discussion of the precontact time period in the vicinity of the APE is included in order to provide a framework within which the local archaeological record can be understood.

### 4.1 Paleoindian Period (12,000-7,500 BC)

The earliest period of precontact cultural development dates from the time people first arrived in Florida. The greatest density of known Paleoindian sites in Florida is associated with the rivers of northern and north-central Florida where distinctive lanceolate projectile points and bone pins have been found in abundance in and along the Santa Fe, Silver, and Oklawaha Rivers (Dunbar and Waller 1983). The majority of these have been found at shallow fords and river crossings where Native Americans presumably ambushed Pleistocene mammals. The bones of extinct species such as mammoth, mastodon, and sloth are commonly found preserved in the highly mineralized waters of the area's springs and rivers. Despite early claims to the contrary, present evidence strongly supports the contemporaneity of Paleoindians and these extinct mammals.

The climate of Florida during the late Pleistocene was cooler and drier, and the level of the sea was as much as 160 feet (49 meters) lower (Milanich 1994:38–41). Rising sea levels are assumed to have inundated many coastal sites dating to the Paleoindian and Early Archaic periods (e.g., Ruppe 1980; Goodyear and Warren 1972; Goodyear et al. 1980; Dunbar et al. 1988). It is difficult to determine the dependence of Paleoindian groups on estuarine and littoral resources because little is known of these submerged archaeological sites.

The prevailing view of the Paleoindian culture, a view based on the uniformity of the known tool assemblage and the small size of most of the known sites, is that of a nomadic hunting and gathering existence, in which now-extinct Pleistocene megafauna were exploited. Settlement patterns were restricted by availability of fresh water and access to high-quality stone from which the specialized Paleoindian tool assemblages were made. Waller and Dunbar (1977) and Dunbar and Waller (1983), from their studies of the distribution of known

Paleoindian sites and artifact occurrences, have shown that most sites of this time period are found near karst sinkholes or spring caverns.

The majority of Paleoindian sites in Florida consist of surface finds. The most widely recognized Paleoindian tool in Florida is the Suwannee point, typically found along the springs and rivers of northern Florida. Other points, including Simpson and Clovis points, are found in lesser numbers. Other Paleoindian stone tools are known from the Harney Flats site (Daniel and Wisenbaker 1987:41–97), the Silver Springs site in Marion County (Neill 1958), and other northern Florida sites (Purdy 1981:8–32). These Paleoindian tools tend to be unifacial and plano-convex, with steeply flaked, worked edges (Purdy and Beach 1980:114–118; Purdy 1981). Bifacial and “hump-backed” unifacial scrapers, blade tools, and retouched flakes, including spokeshaves, have been found at these sites (Purdy 1981; Daniel and Wisenbaker 1987:62–81, 86–87). However, some tools are little more than flakes or blades that were struck from cores, used, and discarded (Milanich 1994:51).

By the end of the Paleoindian period, the climate had become warmer and wetter and it is possible that the modern wetlands of southern Florida began to emerge. Sea levels began a fairly rapid rise, shrinking the available land mass through coastal inundation. These dramatic climate changes, and possible pressure from Paleoindian hunters, led to the extinction of the Pleistocene megafauna and other species.

## 4.2 Archaic Period (7,500-500 BC)

During the Archaic period, climate and sea levels gradually stabilized. The Archaic period is known for the adaptations made by Florida’s earliest inhabitants to the modernizing climate and landscape. At the beginning of the Archaic, lifeways in Florida were quite similar to those of the preceding Paleoindian period. However, by the end of the Archaic, Florida’s natives had developed more sedentary lifestyles, made many technological innovations, the most important of which was the invention of pottery, and began to differentiate themselves into distinct regional subcultures. Florida’s Archaic is divided into Early, Middle, and Late sub-periods, each of which have recognized horizons that are limited to restricted geographic areas and/or times.

#### 4.2.1 Early Archaic Period (7,500-5,000 BC)

With the wetter conditions that began about 8000 BC and the extinction of some of the Pleistocene animal species that helped to sustain earlier populations, Paleoindian subsistence strategies were no longer efficiently adapted to the Florida environment. As environmental conditions changed, surface water levels throughout the state increased and new locales became suitable for occupation. Early Archaic peoples might be viewed as a population changing from the nomadic Paleoindian subsistence pattern to the more sedentary coastal- and riverine-associated subsistence strategies of the Middle Archaic period.

The settlement patterns and tools of Early Archaic people in Florida were initially very similar to those of the preceding Paleoindian period. Cultural changes began after about 8000 BC with changes in projectile-point types, specifically a transition from lanceolate to stemmed varieties. Beginning about 7500 BC, Paleoindian points and knives were replaced by a variety of stemmed tools, such as the Kirk, Wacissa, Hamilton, and Arredondo types (Milanich 1994:63).

Kirk points and other Early Archaic diagnostic tools are often found at sites with Paleoindian components, suggesting that Early Archaic peoples and Paleoindians shared similar lifeways (Daniel and Wisenbaker 1987:33–34). However, it appears that the distribution of Early Archaic artifacts is wider than that of Paleoindian materials. Sites having both Paleoindian and Early Archaic components have been found to be largely restricted to natural springs and the extensive perched water sources of northern Florida.

Most of what is known about Early Archaic subsistence comes from highly preserved materials recovered from the anaerobic muck of the Windover Pond site in Brevard County. The Windover analysis (Andrews et al. 2002) indicates that Early Archaic peoples utilized the fibers of sabal palm, saw palmetto, and other plants in the weaving of baskets and textiles. Windover also illustrates that at least some Early Archaic populations had developed an intensive exploitation strategy focused on inland aquatic resources supplemented by terrestrial game (Dickel and Doran 2002:54). However, since the site has no correlates, it is unclear how representative it is of other Early Archaic sites in southern Florida (Dickel 2002).



#### 4.2.2 Middle Archaic Period (5,000-3,000 BC)

Throughout the Middle Archaic, environmental and climatic conditions would become progressively more like modern conditions, which would appear by the end of the period, circa 3000 BC. During this period, rainfall increased, surface water became much less restricted and, as a result, vegetation patterns changed. The Middle Archaic period is characterized by increasing populations and a gradual shift toward shellfish, fish, and other food resources from freshwater and coastal wetlands as a significant part of their subsistence strategy (Milanich 1994:75–84; Watts and Hansen 1988:310). Pollen evidence from Florida and south-central Georgia indicates that after about 4000 BC, a gradual change in forest cover took place, with oaks in some regions giving way to pines or mixed forests. The vegetation communities that resulted from these changes, which culminated by 3000 BC, are essentially the same as those found in historic times before widespread land alteration took place (Watts 1969, 1971; Watts and Hansen 1988).

The Middle Archaic artifact assemblage is characterized by several varieties of stemmed, broad-blade projectile points. The Newnan point is the most distinctive and widespread in distribution (Bullen 1975:31). Other stemmed points of this period include the less common Alachua, Levy, Marion, and Putnam points (Bullen 1968; Milanich 1994). In addition to these stemmed points, the Middle Archaic lithic industry, as recognized in Florida, includes production of cores, true blades, modified and unmodified flakes, ovate blanks, hammerstones, “hump-backed” unifacial scrapers, and sandstone “honing” stones (Clausen et al. 1975; Purdy 1981). Additionally, thermal alteration, a technique in stone tool production, reached its peak during the Middle to Late Archaic periods.

Three common types of Middle Archaic sites are known in Florida (Bullen and Dolan 1959; Purdy 1975). The first are small, special-use camps, which appear archaeologically as scatters of lithic waste flakes and tools such as scrapers, points, and knives. These sites are numerous in river basins and along wetlands and probably represent sites of tool repair and food processing during hunting and gathering excursions (Milanich 1994:78). The second common site type is the large base camp. This type of site may cover several acres or more, and contains several thousand or more lithic waste flakes and tools. The third common type of site is the quarry-related site that occurs in localities of chert outcrops.



Middle Archaic sites are found in a variety of locations, including, for the first time, freshwater shell middens along the St. Johns River and the Atlantic Lagoon. Middle Archaic sites have been found in the Hillsborough River drainage northeast of Tampa Bay, along the southwestern Florida coast, and in South Florida locales such as Little Salt Spring in Sarasota County. In addition, Middle Archaic sites occurred throughout the forests of the interior of northern Florida (Milanich 1994:76). Due to rising sea levels since the Middle Archaic, many sites dating to this period are now submerged beneath the waters of the Gulf of Mexico and Atlantic Ocean. One such site in St. Lucie County may be the Douglass Beach Midden (8SL17), from which artifacts predating the Late Archaic have been recovered (Murphy and Cummings 1990).

#### **4.2.3 Late Archaic Period (3,000-500 BC)**

By the beginning of the Late Archaic, all of the modern physiographic regions and ecosystems of southern Florida were present in essentially their modern forms. This includes the entire Kissimmee-Lake Okeechobee-Everglades drainage system. Although the environment of southern Florida had achieved some sense of stability, the archaeological record of this period is much more dynamic. Different ideas and perhaps, human populations, were moving into the area during this time. As a result, there is a great deal of variability between Late Archaic sites in central and southern Florida.

The one point upon which all researchers seem to agree is that, at the beginning of the Late Archaic, pottery had not yet been invented. How long this aceramic state persisted, what the earliest pottery types are and how they vary over space and time is a matter for considerable conjecture.

Until recently, variations of Bullen's chronology for the Late Archaic Orange culture in northeastern Florida were generally used for the Late Archaic in central and southern Florida. Using this scheme, fiber-tempered pottery, the earliest pottery type known for all of North America, was considered to be a marker for the pottery portion of the Late Archaic. The generally accepted chronological sequence for the Late Archaic was expressly unilineal, with plain (undecorated) fiber-tempered pottery, followed by decorated fiber-tempered pottery, replaced finally by plain pottery that was not tempered with fibers (Bullen 1954, 1955, 1972). It was also understood that sand was eventually added as a tempering agent to

fiber-tempered pottery. As the Late Archaic progressed, the amount of sand temper was supposed to have increased while the amount of fiber temper decreased. Orange pottery tempered with both fiber and sand is sometimes referred to as “semi-fiber tempered.” The application of this chronology to southern Florida seemed to indicate that most of the area, especially the Everglades, was sparsely settled during the Late Archaic due to the general absence of Orange pottery at sites (Griffin 2002:146-149; Widmer 1988:201-201).

The use of the “standard” fiber-tempered sequence for the Late Archaic in southern Florida eventually came into question by several researchers. Based on his research in southwestern Florida, Widmer (1988:68) hypothesized that the earliest sites there “include untempered chalky pottery and limestone-tempered pottery as well as the usual fiber-tempered Orange pottery.” Austin (1997:136) states that the “identification of a true Orange Horizon in south Florida is debatable.” He points out that, in the Kissimmee River Valley, pure fiber-tempered components are rare. Instead, what is more common is the presence of “semi-fiber tempered” pottery in the basal levels of middens, “often in association with thick St. Johns Plain or Sand-tempered Plain sherds, and overlying either culturally sterile sands, or sparse scatters of lithic artifacts” (Austin 1996, 1997:136). Both Widmer and Austin agree that semi-fiber tempered components at sites throughout southern Florida are “ephemeral” and soon replaced in the archaeological record by components consisting of exclusively sand-tempered pottery (Austin 1997:136; Widmer 1988:72-73).

Mike Russo has investigated the Joseph Reed Shell Ring on Jupiter Island (Russo and Heide 2002). Radiocarbon dates indicate that the site was constructed sometime between 3527-2746 CALYBP (Russo and Heide 2002:73). This confirms that the site dates to the Late Archaic period. However, no fiber-tempered pottery was recovered from the site. Instead, excavations yielded only chalky (possible early St. Johns Plain) and plain sand-tempered pottery. This is an earlier appearance for these types of pottery than has been predicted for southeastern Florida. Radiocarbon dates indicate that the chalky pottery appears at the Joseph Reed Shell Ring between 3500 and 3300 CALYBP whereas sand-tempered pottery is hypothesized to appear around 3280 CALYBP. Based on the evidence obtained from excavations at the Joseph Reed Shell Ring, Russo and Heide tentatively proposed a new chronology for the Late Archaic in southeastern Florida. A period labeled Late Archaic I is proposed that is marked by fiber-tempered and/or semi-fiber tempered plain pottery. During the next proposed period,

Late Archaic II, only chalky ware pottery, possibly early St. Johns Plain, is predicted to occur. This is based on the earliest pottery-bearing levels from the Joseph Reed Shell Ring. The next proposed period, Late Archaic III, is distinguished by the presence of plain sand-tempered pottery along with the chalky pottery. This period is based on the latest levels from the Joseph Reed Shell Ring. Russo and Heide point out that this chronology is closest in resemblance to the chronology proposed by Widmer (1988) for southwestern Florida, suggesting, among other things, that non-fiber-tempered pottery was developed earlier in southern Florida than elsewhere in the state.

It is worth noting that all of these researchers mention in their Late Archaic chronologies the presence of St. Johns Plain, or plain “chalky ware” pottery. Specimens of this type are usually described as “thick” or “thick walled.” The same phenomenon has been mentioned for Late Archaic sites in the Everglades (Mowers and Williams 1972). Often, this pottery is described in reports as “early St. Johns Plain.”

Of perhaps equal interest to the reported early manifestations of St. Johns Plain are the early reports of Sand-tempered Plain pottery from some sites in southern Florida. In addition to the early examples of Sand-tempered Plain sherds from the Joseph Reed Shell Mound, early examples of this type are also reported from southwestern Florida. At the Mulberry Midden (8CR697), Sand-tempered Plain pottery was dated at about 3390 and 3430 CALYBP (Lee et al. 1993:46; dates recalibrated by Russo and Heide 2002). Dates for Sand-tempered Plain from Heineken Hammock (8CR231) are even earlier, ranging from 4000 to 4500 CALYBP (Lee et al. 1998; dates recalibrated by Russo and Heide 2002). Again, using the standard fiber-tempered sequence for southern Florida, Sand-tempered Plain pottery should not be present at such early dates, only fiber-tempered pottery.

Finally and importantly, it is now becoming clear that many of the ubiquitous faunal bone middens located in the interior wetlands of southern Florida date to Late Archaic times, despite the fact that many of them lack pottery of any kind. These sites are notoriously difficult to date because, not only do they often lack chronologically diagnostic artifacts, but most of the faunal bone at the sites lacks collagen, the datable material in bone samples sent to radiocarbon labs. Nevertheless, many sites clearly have aceramic components that underlie pottery-bearing strata, logically indicating that these aceramic components most

likely date at least as far back as Late Archaic times. Indeed, a few radiocarbon dates have been obtained from some of these components, mostly from shell artifacts or ecofacts. For instance, Taylor's Head (8BD74) yielded a radiocarbon date of  $4840 \pm 210$  CALYBP from an aceramic stratum that lay beneath pottery-bearing strata, although no fiber-tempered pottery was identified (Masson et al. 1988:346). Additionally, radiocarbon dates from the lower, aceramic stratum at the Francis Groves Midden/Muhley site (8BD2911) are reported as ranging from 3960-3630 CALYBP (Pepe and Elgart 2006), despite the fact that fiber-tempered pottery is known during this time elsewhere in Florida (Russo and Heide 2002). Ongoing research by the National Park Service in the Big Cypress National Preserve and Everglades National Park has also yielded dense aceramic faunal bone middens yielding radiocarbon dates between 4800 and 3500 CALYBP (Michael Russo, personal communication with James Pepe 2007; Schwadron 2006).

To explain this dichotomy between Late Archaic Everglades area sites that lack fiber-tempered pottery and large, coastal shell mounds that have abundant examples of early pottery, Pepe and Jester (1995:19) propose that there are two, distinct Archaic traditions in southeastern Florida. In this model, the fiber-tempered pottery tradition is largely a coastal phenomenon associated with shell mound building, while the aceramic Archaic or "Glades Archaic" is a more widespread tradition, perhaps giving rise to the distinctive regional culture of the Tequesta and their ancestors (Pepe 2000:29-32; Russo and Heide 2002:80; Wheeler et al. 2002:143-144).

Additionally, Austin suggests that the presence of "semi-fiber-tempered" pottery at sites in southern Florida may not actually date to the Late Archaic, but instead may signify the beginning of the subsequent post-Archaic Tradition (Austin 1997:138). In other words, Austin holds out the possibility that the ephemeral "semi-fiber-tempered" components in the basal levels of middens in southern Florida may better be incorporated into the initial periods of post-Archaic chronologies (i.e. Glades I Early, Okeechobee Basin I, etc.).

The preceding discussion illustrates that a lack of fiber-tempered pottery at a site in southern Florida does not necessarily mean that the site does not date to the Late Archaic. In fact, recent research indicates that, at some sites or in some areas, the earliest pottery present may be Sand-tempered Plain or thick, chalky (St. Johns?) wares. Finally, Austin holds out

the possibility that fiber-tempered pottery in southern Florida may not date to the Late Archaic at all, but instead, may be markers of the earliest post-Archaic expressions in the region.

#### **4.3 Formative Period (500 BC-AD 1513)**

The Formative Period is represented by changes in pottery and technology occurring throughout Florida. The specific changes in pottery traditionally used by archaeologists to mark the beginning of this period include the replacement of fiber-tempered pottery with sand-tempered, limestone-tempered, and chalky-paste ceramics. Three different projectile point styles (basally notched, corner-notched, and stemmed) also occur in some areas in contexts contemporaneous with these new ceramic types. This profusion of ceramic and tool traditions suggests population movement and social interaction between culture areas. The earliest known major occupations of southern Florida date to this period (Bullen et al. 1968; Sears 1982).

The regional diversity marking this period has been attributed to local adaptation to varied ecological conditions. It has been described archaeologically in terms of cultural periods based on variations in ceramic types. The ceramic tradition for southern Florida, characterized by sand tempered bowls with incurvate rims, is known as the Glades or Everglades cultural tradition.

The project APE is located in the Glades (Milanich 1994:301). As defined by Milanich (1994:298), the Glades cultural region includes all of south Florida “east and south of the Caloosahatchee and Okeechobee regions. It includes most of St. Lucie County, the Everglades itself, a largely sawgrass marsh in Hendry, Palm Beach, Broward, Dade, and Monroe counties; the Big Cypress Swamp west of the Everglades in Collier County; and extensive saltwater marshes and mangrove forests once found along both coasts, now almost totally destroyed in Broward and Dade counties” (Figure 4.3.1).

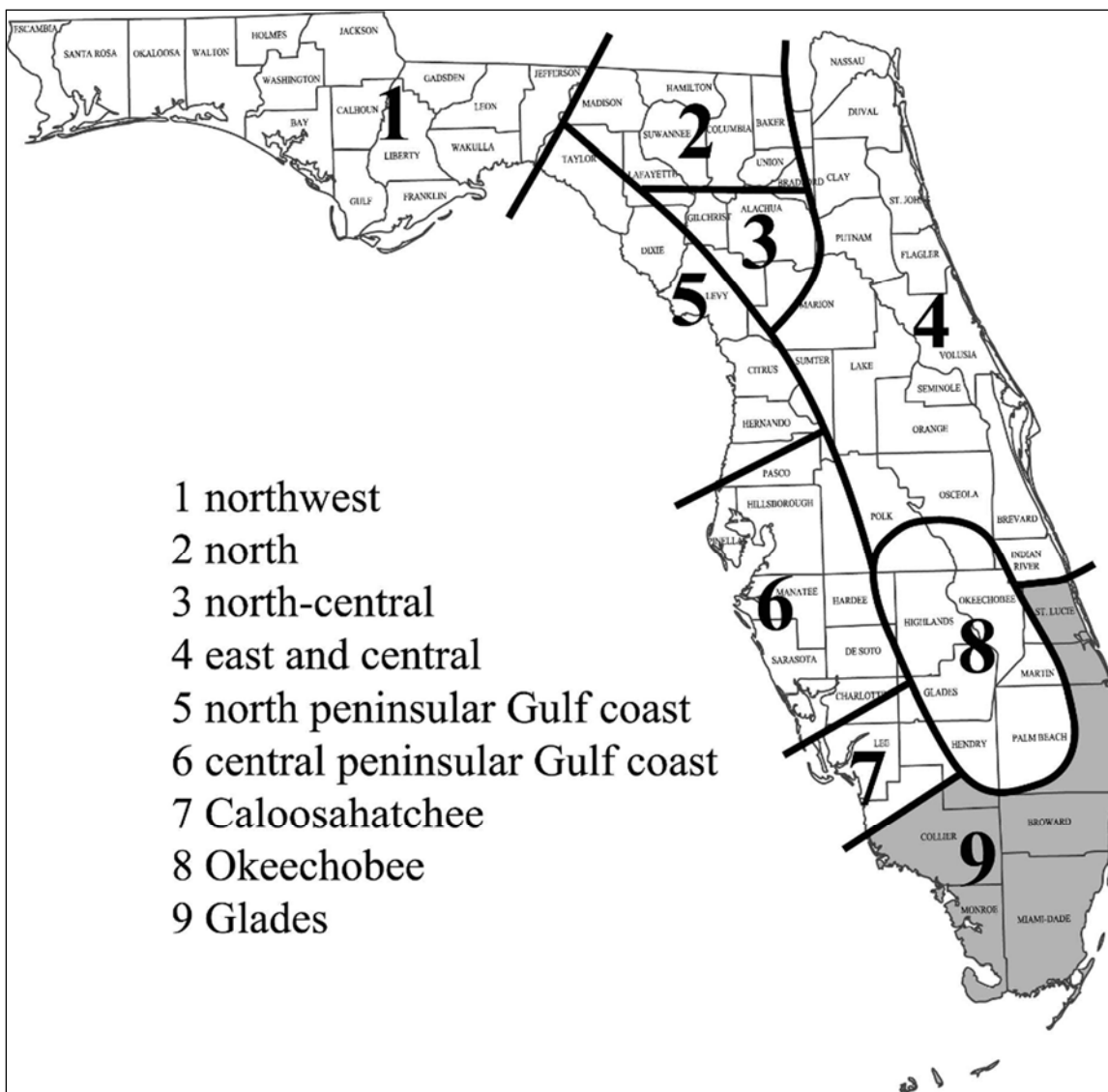


Figure 4.3.1: Glades Cultural Region



#### 4.3.1 Glades Culture

Environmentally, the interior portions of the Everglades area are dominated by inundated or formerly inundated humic or peat soils which are drained by massive sheet-flow instead of river channeling. The Atlantic coast, which has developed from beach dune deposition, has a few rivers cutting through the Atlantic Coastal Ridge and a coast-parallel lagoon system.

John Goggin established a ceramic sequence for the Glades region on the basis of work he conducted from the 1930s to early 1950s (Goggin n.d.). Subsequent research has only served to refine his basic chronological framework. The most recent revision was presented by John Griffin (1988), who based his research on a series of radiocarbon dates from the Granada site in Dade County (Griffin et al. 1982) and research he conducted on the Bear Lake site in Everglades National Park. In presenting his revisions, Griffin makes a point to emphasize that the Glades sequence represents a chronology of stylistic and technological changes in ceramics to which other cultural traits have been added.

Table 4.3.1 is based on Griffin's 1988 work and presents the most thorough chronological framework for southern Florida. Summaries of the ceramic markers associated with each period are provided, as well. It is important to note that the information provided in this table is most applicable to the heartland of the Glades archaeological area: The Big Cypress Swamp, Everglades, and coastal portions of southern Florida to south of Lake Okeechobee.

**Table 4.3.1: Glades Cultural Sequence**

Period	Dates	Distinguishing Characteristics
Glades I early	500 BC–AD 500	First appearance of sand-tempered pottery; no decoration
Glades I late	AD 500–750	First appearance of decorated pottery: Fort Drum Incised, Fort Drum Punctated, Cane Patch Incised, Gordon's Pass Incised, Opa Locka Incised, Sanibel Incised; sand-tempered plain persists
Glades IIa	AD 750–900	Appearance of Key Largo Incised and Miami Incised; sand-tempered plain and Opa Locka Incised persist; none of the earlier decorated types are present

Period	Dates	Distinguishing Characteristics
Glades IIb	AD 900–1100	Sand-tempered plain and Key Largo Incised persist; Matecumbe Incised appears; none of the earlier decorated types are present; certain rim modifications (incised lip arcs and lip crimping and grooving) also appear for the first time
Glades IIc	AD 1100–1200	Almost no decorated ceramics; some grooved lips but no more lip arcs or crimped rims; Plantation Pinched appears
Glades IIIa	AD 1200–1400	Plantation Pinched is no longer present; Sand-tempered plain and grooved lips persist; appearance of Surfside Incised and St. Johns Check Stamped
Glades IIIb	AD 1400–1513	Glades Tooled, sand-tempered plain and St. Johns Check Stamped are present, Surfside Incised and grooved lips are not present
Glades IIIc	AD 1513-ca.1700	Same as previous period with the addition of historic artifacts

Griffin 1988:124–142

Glades period sites include those at Gordon's Pass (Goggin 1939), Goodland Point (Goggin 1950), Marco Island (Van Beck and Van Beck 1965), Useppa Island (Milanich et al. 1984), Horr's Island (McMichael 1982), Sanibel Island (Fradkin 1976), and the Turner River site (Sears 1956). An interesting feature of these large coastal sites is the progressive movement of habitation areas toward the water (Cushing 1896; Goggin 1950; Sears 1956), and indications are that dwellings may have been built to extend out over the water. Inland sites consist of shell and dirt middens along major watercourses (Laxson 1966) and small dirt middens containing animal bone and ceramic sherds in oak/palm hammocks or palm islands associated with freshwater marshes. The coastal Glades subsistence pattern is typified by the exploitation of fish and shellfish, wild plant food, and inland game, while Glades sites in the Big Cypress Swamp show a greater, if not exclusive, reliance on interior resources.



## 5 Historic Overview

---

The intent of this section is to identify the possible locations of any historic sites within the cultural assessment project area and to provide a background for the determination of their historical potential. To this end, books, maps, and manuscripts located at the University of South Florida Special Collections Department, Florida Department of Environmental Protection, Division of State Lands, and Janus Research were examined, and interviews with local informants were conducted.

### 5.1 European Contact and Colonial Period (c. 1513-1821)

The earliest contact between the native populations and the Europeans occurred through slave hunting expeditions. “Slaving expeditions,” which provided workers for the mines of Hispaniola and Cuba, were not recorded in official documents as the Spanish Crown prohibited the enslavement of Caribbean natives. Evidence of these slave raids comes from the familiarity with the Florida coast stated by navigators of the earliest official coastal reconnaissance surveys (Cabeza de Vaca 1542: Chapter 4). The hostile response of the native population to expeditions during the 1520s may confirm this hypothesis.

Official credit for the European discovery of Florida belongs to Juan Ponce de León, whose voyage of 1513 took him along the eastern coast of the peninsula (Tebeau 1971:21). He is believed to have sailed as far north as the mouth of the St. Johns River before turning south, stopping in the Cape Canaveral area and possibly at Biscayne Bay. The expedition then continued southward; following the Florida Keys, making contact with the local Tequesta people en route before turning to the northwest, where they encountered the Calusa along the southwestern Gulf Coast. Other Spanish explorers followed Juan Ponce de León, and over the next 50 years the Spanish government and private individuals financed expeditions hoping to establish a colony in “La Florida.” In 1565, King Philip II of Spain licensed Pedro Menéndez de Avilés to establish a settlement in St. Augustine, Florida. Between 1565 and 1566, Menéndez sailed along the Florida coast placing crosses at various locations and leaving Spaniards “of marked religious zeal” to introduce Christianity to the Native American people (Gannon 1965:29). Settlements with associated missions were established at St. Augustine, San Mateo (Ft. Caroline) and Santa Elena, and smaller outposts and missions were located in Ais, Tequesta, Calusa, and Tocobaga territory (Gannon 1965:29).

Jesuit missions were established in what are now referred to as the Central Peninsular Gulf Coast and Glades archaeological regions, including the mission of Carlos at Charlotte Harbor, the mission of Tocobaga at Tampa Bay, and a mission at a Tequesta village at the mouth of the Miami River. In March of 1567, Menéndez sailed into the Bay of Tocobaga (now Old Tampa Bay) with a group of 30 soldiers, Captain Martinez de Coz, and Fray Rogel. The mission was established at the village of the cacique known as Tocobaga and consisted of 24 houses (Velasco 1571:161). It was abandoned in January of 1568 due to the hostility of the Native Americans (Solis de Meras 1964:223–230). This Jesuit mission represented the final Spanish attempt to colonize the region.

In 1567, Brother Francisco Villareal was sent to one of the large Tequesta villages located on Biscayne Bay. In 1568, a skirmish between the Spanish soldiers and the Tequesta Indians temporarily closed the mission. By the end of 1568, the Tequesta were willing to reopen the mission, largely due to the work of Don Diego, a Tequesta who had visited Spain. Despite zealous attempts, the native groups in Florida continued to resist conversion, and in 1572 Jesuit authorities decided to abandon their missionary efforts in Florida.

Undaunted, Menéndez turned his attention to another order, the Franciscans, and entreated them to send priests. The Franciscan mission effort was most successful in the northern areas of Florida. One possible reason may have been differences in Native American settlement patterns and economies. According to Milanich (1978:68), the failure of the Spanish missions among the southern Florida native populations was due partially to the groups' subsistence pattern, which required seasonal movement for maximum resource exploitation. Consequently, for the remainder of the First Spanish period (1565–1763), southern Florida was virtually ignored as the Spanish concentrated their efforts in the northern half of the peninsula.

Another attempt to build a mission in southeastern Florida took place nearly 150 years after the establishment of St. Augustine. Because it was in Spain's best interest to maintain control along the Florida coastline and alliances with the native groups inhabiting the coast, a missionary effort was supported in the Biscayne Bay area (Parks 1982:55–65). Father Joseph María Monaco and Joseph Xavier Alaña were sent from Cuba in 1743 and arrived at a Native American village located at the mouth of the Miami River. The village did not appear

any more receptive towards accepting Christianity than before. After Joseph Xavier Alaña conveyed this to the Governor of Cuba, the mission was closed, and the fort they had erected was destroyed to prevent its fall into hostile hands (Parks 1982:55–65). Although the Spanish were resigned to the fact that missionization and settlement of South Florida came at too high a price, they did strive to maintain good relations with the various native people who lived in the area.

By the beginning of the eighteenth century, the Native American population of South Florida had declined considerably as a result of disease, slave raids, intertribal warfare, and attacks from a new group of Native Americans, the Seminoles. The Seminoles, descendants of Creek Indians, moved into Florida during the early eighteenth century to escape the political and population pressures of the expanding American colonies to the north (Wright 1986:218).

During the eighteenth century, Cuban fishermen had established seasonal fishing camps or ranchos along the Gulf coast. These fishermen were engaged in catching mullet and drying them for sale in the Havana markets. By the early nineteenth century, Native Americans were often employed as workers in these “ranchos pescados,” which is probably why they were called “Spanish Indians” in Anglo-American documents (Wright 1986:219).

By the end of the eighteenth century, the Seminoles had become the dominant Native American group in the state. Groups of fugitive African American slaves also had settled among the Seminoles by the early nineteenth century (Brown 1991:5–19). Armed conflict with pioneers, homesteaders, and eventually the United States Army resulted in the removal of most of the Seminoles from Florida. This action forced the withdrawal of the remaining Seminole population to the harsh environment of the Everglades and Big Cypress Swamp by the late nineteenth century.

The first known non-Indian residents of what is now Fort Lauderdale were the Charles Lewis family, who arrived from the Bahamas with the British adventurer William Augustus Bowles in the late eighteenth century. Bowles tried to establish a sovereign nation of the native Creek Indians, and Lewis established a plantation along the New River. In 1810, the Spanish government awarded nobleman Juan Arrambide a huge land grant extending from New

River south to Biscayne Bay. Arrambide developed this land as a lumber source and, in the process, introduced black slaves to the region (Historic Property Associates 1995:28–29).

## 5.2 The Territorial and Statehood Period (1821-1890)

In 1821, after several years of negotiations with Spain, the U.S. acquired Florida as a territory. The population of the territory at that time was still centered in the northern areas around Pensacola, St. Augustine, and Tallahassee. By 1830, the New River Settlement included approximately 60 to 70 inhabitants. The leader of the settlement was William Cooley. Richard Fitzpatrick established plantation practices on his property (Historic Property Associates 1995:29–30). His assistant was Stephen Russell Mallory, who traveled from Key West to the New River area in 1830 and established a plantation in the Fort Lauderdale vicinity. Only there 12 months, he spent his time fishing, hunting and learning woodcraft from the Seminoles, who fished around the coast (Kemper 1981:4–6). In 1840, a skirmish occurred between the Seminoles and a small command of soldiers near the West Lake tract (Kemper 1981:4). Apparently, the Indians fired on two boats under the command of Lieutenant Rankin. The Indians were pursued inland but were not apprehended.

As more European-American settlers moved into the region, conflicts arose with the Seminole people over available land. Pressure began to bear upon the government to remove the Seminoles from northern Florida and relocate them farther south. The Treaty of Moultrie Creek (1823) restricted the Seminole people to approximately four million acres of land in the middle of the state, running south from Micanopy to just north of the Peace River (Mahon 1967:Rear foldout map). The Seminoles did not approve of this treaty because they were reluctant to move from their established homes to an area that they felt could not be cultivated. Other treaties soon followed such as Payne's Landing (1832) and Fort Gibson (1833), which called for Seminole emigration to the western territories (Mahon 1967:75–76, 82–83). These treaties fostered Seminole resentment of settlers that would culminate in the Second Seminole War in 1835.

During the Second Seminole War, the area around Lake Tohopekaliga was a Seminole stronghold. They kept their cattle in the woods around the lake and retreated into the cypress swamp west of the lake at the approach of soldiers (Mahon 1967; Sprague 1964; Moore-

Willson 1935). Tohopekaliga means “Fort Site” and the lake was so named because the islands within the lake housed the forts and stockades of the Seminoles (Moore-Willson 1935:29).

In January 1837, General Jesup’s men encountered the Seminoles near the “Great Cypress Swamp.” The soldiers drove the Indians into the swamp, across the “Hatcheelusteell” and into even more dense swamp (Sprague 1964:172). On the 28th of January, the army “moved forward and occupied a strong position on Lake Tohopekaliga, within a few miles of the point at which the Cypress Swamp approaches it, where several hundred head of cattle were taken” (Sprague 1964:172). Hetherington (1980:3), citing Major Edward Keenan, a “noted authority on the Seminole Wars,” believes that General Jesup’s base camp was located in the vicinity of the present-day Kissimmee Airport. The “Great Cypress Swamp” and “Hatcheelusteell Creek” referred to by Sprague (1964) are now called Reedy Creek Swamp and Reedy Creek (MacKay and Blake 1839; Mahon 1967: Rear fold out map; USGS Lake Tohopekaliga Quadrangle Map 1953; Hetherington 1980:3).

At the beginning of the Second Seminole War, the conflict was centered near the Withlacoochee region. In 1838, U.S. troops moved south to pursue the retreating Seminoles into the Lake Okeechobee and Everglades regions. Colonel Zachary Taylor was sent to the area between the Kissimmee River and Peace Creek. Colonel Persifor Smith and his volunteers were dispatched to the Caloosa-hatchee River, and U.S. Navy Lt. Levi N. Powell was assigned the task of penetrating the Everglades (Mahon 1967:219–220). Powell’s detachment had several skirmishes with Seminole people near Jupiter Inlet. Powell established a depot on the Miami River and erected Fort Dallas in the approximate location of present-day downtown Miami. For three months, Fort Dallas was a base of operations as Powell led his men into the Everglades in search of the Seminoles (Gaby 1993:47).

Following the Second Seminole War, the New River settlement was brought to an end. Seminoles massacred Cooley’s family in 1836 and the settlers fled to Cape Florida. In March 1938, Major William Lauderdale of the Tennessee Volunteers and his troops constructed an outpost near New River called Fort Lauderdale, which was later replaced by two other forts. The Third Seminole war in 1855 was fought primarily in other parts of the state, but some troops did visit New River (Historic Property Associates 1995:32–35).

The Second Seminole War had a deleterious effect on new settlement in Florida. To encourage settlement in the middle portion of the territory after the war, the Armed Occupation Act of 1842 offered settlers 160 acres of land at no cost, provided they built a house, cleared five acres, planted crops, and resided on the land for five years. Any head of a family or single man over 18 years of age and able to bear arms, was eligible to receive a homestead. This act, plus the end of the Second Seminole War, created a small wave of immigration by Anglo-American pioneers to central Florida. Most of these immigrants were Anglo-American farmers and cattle ranchers, or “crackers,” from the southeastern United States (Gaby 1993).

### 5.3 Civil War and Post War Period (1960-1898)

With the beginning of the Civil War, cattle were needed to help feed the Confederate Army. Herds from as far south as central Florida were driven to railheads near the Georgia border. However, cattle ranchers discovered they could sell their herds in Cuba for a greater profit and began dealing with blockade-runners. The Union attempted to stop all shipping from Florida ports, but blockade-runners were too abundant. Cattle ranchers from all over Florida drove their cattle to Punta Rassa to be shipped to Cuba for payment in Spanish gold. Jacob Summerlin, a successful cattle rancher from the Fort Meade area, gave up his contract with the Confederate government to supply cattle and in 1863 teamed up with James McKay from the Tampa area. McKay, a successful and daring blockade-runner, supplied the schooners and Summerlin the cattle. It is not known how many cattle were shipped from the port during the Civil War. However, after the war as cattle continued to be shipped; it is reported that in the decade between 1870 and 1879, more than 165,000 head were shipped (Grismer 1949).

The New River region was sparsely settled during the Civil War. A Miami Unionist who served as a gunboat pilot, Isaiah Hall, and his family lived there after being driven from the Miami area by Confederate sympathizers (Historic Property Associates 1995:35). In 1868, hog farmer and beachcomber John J. “Pig” Brown settled on New River with his family, as well. Brown was elected to the Florida Legislature in 1876 and never returned from Tallahassee. During the same time, the United States Life Saving Service established 10 Government Houses of Refuge for shipwrecked sailors along the uninhabited eastern coastline, and the first permanent white settler in present day Fort Lauderdale came to the area in 1876 to occupy one of the cabins (Nance 1962:334). At this time, the population center



of present-day Broward County was Pine Island, west of present-day Davie. Approximately 30 Seminole families cultivated gardens and roamed the Everglades in search of game (McGoun 1999).

The post-war economic conditions of much of the rest of the south contributed to changes in the economy of the Tampa Bay area and communities to the south along the Gulf Coast. An influx of poor farmers coinciding with the southward movement of cattle ranches made the economic stability of the area dependent upon reliable sources of overland freight transport. Beginning about 1870, many settlers began to buy the land on which they had homesteaded for so many years in anticipation of the coming railroad (Hetherington 1980:86).

Concern for future settlement created survey activity in Broward County. It had already been surveyed in 1845, but in 1870 many more areas were surveyed. The Florida Surveyor General approved a plat map on November 30, 1870 (Kemper 1981:12). Isolated events such as the surveying would lead to increased development of Broward County. Another such event was the purchase of four million acres of Florida's land with a drainage project in mind. The drainage project would turn swampland into agriculture and development lands.

In the 1880s, interest in the resources of South Florida increased due in large part to people like Hamilton Disston and Henry B. Plant. By 1881, the State of Florida faced a financial crisis involving a title to public lands. On the eve of the Civil War, land had been pledged by the Internal Improvement Fund to underwrite railroad bonds. After the War, when the railroads failed, the land reverted to the State. Almost \$1 million was needed by the state to pay off the principal and accumulated interest on the debt, thereby giving clear title.

Hamilton Disston, son of a wealthy Philadelphia industrialist, contracted with the State of Florida in two large land deals: the Disston Drainage Contract and the Disston Land Purchase. The Drainage Contract was an agreement between Disston and the State in which Disston and his associates agreed to drain and reclaim all overflow lands south of present-day Orlando and east of the Peace River in exchange for one-half the acreage that could be reclaimed and made fit for cultivation.

The Disston Land Purchase was an agreement between Disston and the State in which Disston agreed to purchase Internal Improvement Fund Lands at \$0.25 an acre to satisfy the indebtedness of the fund. A contract was signed on June 1, 1881 for the sale of 4,000,000 acres for the sum of \$1 million, the estimated debt owed by the Improvement Fund. Disston was allowed to select tracts of land in lots of 10,000 acres, up to 3,500,000 acres. The remainder was to be selected in tracts of 640 acres (Davis 1938:206–207). Before he could fulfill his obligation, Disston sold half of this contract to a British concern, the Florida Land and Mortgage Company, headed by Sir Edward James Reed (Tischendorf 1954:123).

Disston changed Florida from a wilderness of swamps, heat, and mosquitoes into an area ripe for investment. This enabled Henry B. Plant to move forward with his plans to open the west coast of Florida with a railroad-steamship operation called the Jacksonville, Tampa & Key West Railway. Through the Plant Investment Company, he bought up defunct rail lines such as the Silver Springs, Ocala & Gulf Railroad, Florida Transit and Peninsular Railroad, South Florida Railroad, and Florida Southern Railroad to establish his operation (Mann 1983:68; Harner 1973:18–23). In 1902, Henry Plant sold all of his Florida holdings to the Atlantic Coast Line, which would become the backbone of the southeast (Mann 1983:68).

During 1881 and 1882, channels were dug between the lake systems to the north and the Kissimmee River (Tebeau 1971:288). The Atlantic and Gulf Coast Canal and Okeechobee Land Company was responsible for opening up Lake Okeechobee to the Gulf of Mexico by dredging a channel to the Caloosahatchee River. Disston and his associates received 1,652,711 acres of land under the Drainage Contract, although they probably never permanently drained more than 50,000 acres (Tebeau 1971:280). Drainage operations began and the Florida Land and Improvement Company and Kissimmee Land Company were formed to help fulfill the drainage contract (Hetherington 1980:6).

Private land claims between 1881 and 1883 were probably squatters acquiring the land on which they lived prior to the land transfers under the Disston Land Purchase contract. The flurry of land transfers recorded in the early 1880s was mainly the result of two factors: large influxes of people as a result of the railroads, and the widespread unpopularity of the Disston Land Purchase and Drainage Contracts.

The Disston Land Purchase and Disston Drainage Contract were not very well liked among many of Florida's residents. They resented the \$0.25 per acre price Disston paid under the land contract, as they were required to pay \$1.25 per acre under the terms of the Homestead Act of 1876. Claims also were made that Disston was receiving title to lands that were not swamplands or wetlands (Tebeau 1971:278). Many residents bought up the higher, better-drained parcels of land for speculation, knowing that the surrounding wetlands and flatwoods would be deeded to Disston under the Land Purchase contract. Many hoped that their more desirable land purchases would increase in value.

In August 1881, at the same time Disston's companies were beginning their work, the legislature granted a state charter to the privately owned Florida Coast Line Canal & Transportation Company to construct a continuous waterway from the St. Johns River to Miami; the intracoastal channel would provide a sheltered, inland passage for shallow-draft vessels. The charter granted the company 3,840 acres of land for every mile of canal built. Construction began in 1883 on a 5-foot-deep, 50-foot-wide, intracoastal channel connecting coastal bays, rivers, and lakes (Buker 1975:117). Although the canal company dredged almost continuously from 1883 until the 268-mile channel was completed in 1912, the firm's waterway operations were never successful. While the channel was still under construction, the company faced a formidable challenge from competing transportation interests expanding into South Florida (Buker 1975:120).

Development in Broward County was slow, but sure. By the early 1890s, land was purchased and development was being planned (Kemper 1981:12). For example in Hollywood, tract book records indicate the majority of the township's land, approximately 27 square miles out of the town's total 36 square miles, was purchased by the Florida Coast Line Canal and Transportation Company on September 24, 1890. By 1910, the first person lived in the Hollywood area. Fred Zirbs established a five-acre farm where he grew peppers and tomatoes (Kemper 1981:12). New River was the site of a ferry and an overnight camp for stage line passengers. Frank Stranahan, who is regarded as the first permanent white settler of what is now Fort Lauderdale, ran both the ferry and the camp (Historic Property Associates 1995:38).

Development and settlement would increase after the freezes of 1894 and 1895 that killed citrus crops, vegetables, and coconut palms north of Broward County. This event in part caused Henry M. Flagler to extend the Florida East Coast Railway 70 miles south to Miami, where no damaging frosts had occurred (Shepard Associates 1981:1–10). The completion of the railroad to Miami in 1896 launched the most significant period in the region’s development. The railroad brought farmers from the north, and agriculture was developed. Other businesses also began to emerge (Historic Property Associates 1995:39–42). A comprehensive overview of the land apportionment within the project APE is outlined in Table 5.3.1.

The historic plat map for the project area was also examined and no evidence was found of military forts, historic homesteads or roads.

**Table 5.3.1: Land Apportionment in the Project Area as Recorded in the Tract Book Records**

Township 48 South, Range 42 East			
Section	Portion Owned	Owner	Date of Deed or Sale
2	All	Florida Coastline Canal and Canal Transportation Company	September 24, 1890
3	All	Florida Coastline Canal and Canal Transportation Company	September 24, 1890
4	All	Florida Coastline Canal and Canal Transportation Company	September 24, 1890
5	E ½	Florida Coastline Canal and Canal Transportation Company	September 24, 1890
5	W ½	Florida Coastline Canal and Canal Transportation Company	December 1, 1906
8	E ½	Florida Coastline Canal and Canal Transportation Company	September 24, 1890
8	W ½	Florida Coastline Canal and Canal Transportation Company	December 1, 1906
9	All	Florida Coastline Canal and Canal Transportation Company	September 24, 1890
10	All	Florida Coastline Canal and Canal Transportation Company	September 24, 1890
11	All	Florida Coastline Canal and Canal Transportation Company	September 24, 1890

#### 5.4 Spanish American War Period/ Turn of the Century (1898-1916)

At the turn-of-the-century, Florida's history was marked by the outbreak of the Spanish-American War in 1898. As Florida is the closest state to Cuba, American troops were stationed and deployed from the state's coastal cities. Harbors in Tampa, Pensacola, and Key West were improved as more ships were launched with troops and supplies. "The Splendid Little War" was short in duration, but evidence of the conflict remained in the form of improved harbors, expanded railroads, and military installations (Miller 1990).

Fort Lauderdale saw growth at this time despite a yellow fever epidemic, in 1899. In the same year, the area's first schoolhouse was built. The 1900 census reported 52 residents in Fort Lauderdale. The area's first incorporated communities were Dania in 1904, Pompano in 1908, and Fort Lauderdale in 1911; these communities predate the formal incorporation of Broward County (McGoun 1978:19). Fort Lauderdale's downtown began to develop at this time; the commercial area centered on the intersection of the railroad and the New River. Unfortunately, a fire in June of 1912 destroyed most of the business district, but the disaster did little to impair Fort Lauderdale's growth (Historic Property Associates 1995:42-47).

In 1904, Governor Napoleon Bonaparte Broward initiated significant reforms in Florida's politics. Several of Broward's major issues included the Everglades drainage project, railroad regulation, and the construction of roads. The draining of the Everglades resulted in the construction of canals, an increase in land available for agriculture, and the fueling of Fort Lauderdale's growth. One of the first elements of the project was the dredging of the North New River Canal. By 1912, the New River Canal extended all the way to Lake Okeechobee, and shipping of agricultural products along the water route was immediately the preferred method of transportation (Historic Property Associates 1995:44).

During this time, railroads were constructed throughout the state and automobile use became more prevalent. Improved transportation in the state opened the lines to export Florida's agricultural and industrial products (Miller 1990). As various products such as fruits and vegetables were leaving the state, people were arriving in Florida. Some entered as new residents and others as tourists.

Between 1900 and 1910, the state population increased from 528,542 residents to 752,619. At this time, St. Lucie and Palm Beach counties were established, indicative of the increasing numbers of people moving to the east coast of the state. Fort Lauderdale incorporated in 1906. A fire in June of 1912, which destroyed most of the business district, did little to slow the city's growth (Historic Property Associates 1995:4–47).

Broward County incorporated in 1915 with a population of 8,000 (Wells et al.:8–12), and Fort Lauderdale was named county seat (Historic Property Associates 1995:50). The county was named after the former Governor Broward. As recently as 1910, the County had been a wilderness of pine trees and swampland and had few homesteaders. Agriculture was still the main economy (Wells et al.:8–12). Before 1915, Broward County had at times been part of St. Johns, Monroe, Mosquito, Dade, St. Lucie, Brevard, and Palm Beach counties. By the time of the County's incorporation, most citizens were living in the eastern areas along the coast such as Dania, Pompano, Fort Lauderdale, Deerfield, Hallandale, Davie, Colohatchee, and Progresso (Shepard Associates 1981:I-10).

The area's tourist trade began to emerge around the time of incorporation. Development of the Fort Lauderdale beach area began in 1914 when D. C. Alexander purchased 32 acres of beachfront property. In July 1915, the Dixie Highway, the first major highway linking Fort Lauderdale with the rest of the nation, was completed. This highway and other new Broward County roads would play a significant role in Florida's growing tourist trade (Historic Property Associates 1995:50–51).

Rapid and widespread growth was the theme of this period in Florida history. Thousands of miles of railroad tracks were laid, including the Florida East Coast, Atlantic Coast Line, and Seaboard Air Line railroads. While agriculture, especially the citrus industry, had become the backbone of Florida's economy, manufacturing and industry began growing during the beginning of the century. Fertilizer production, boat building, and lumber and timber products were strong secondary industries (Weaver et al. 1996:3).



### 5.5 World War I and Aftermath Period (1917-1920)

The World War I and Aftermath period of Florida's history begins with the United States' entry into World War I in 1917. Wartime activity required the development of several training facilities in the state, and protecting the coastlines was a priority at this time. Although the conflict only lasted until November 1918, the economy was boosted greatly by the war. For example, the war brought industrialization to port cities such as Tampa and Jacksonville, where shipbuilding accelerated. These cities also functioned as supply depots and embarkation points. An indirect economic benefit of the war was an increase in agricultural production, as beef, vegetables, and cotton were in great demand (Miller 1990).

Area development was halted temporarily during World War I, although the construction of bridges from the mainland over to the beaches at Pompano, Hallandale, and Fort Lauderdale were completed in 1917 (Historic Property Associates 1995:51). Truck farming still dominated Broward County's economy before the 1920s Boom Times development began in earnest. Higher areas in the county were preferred for planting crops like beans, squash, cabbage, tomatoes, pineapples, and turpentine mangoes (Shepard Associates 1981:I-11-13, 34).

While Florida industrialization and agriculture flourished, immigration and housing development slowed during the war. Tourism increased as a result of the war in Europe, which forced Americans to vacation domestically. Tycoons such as Henry Flagler and Henry Plant were building the hotels and railroads for people desiring winter vacations in sunny Florida. These magnates took an interest in the improvements and promotion of Florida in an effort to bring in more tourist dollars. The end of the war marked a slight increase in population, and Flagler and Okeechobee counties were created at this time.

### 5.6 Florida Boom Period (1920-1930)

After World War I, Florida experienced unprecedented growth. Many people relocated to Florida during the war to work in wartime industries or were stationed in the state as soldiers. Bank deposits increased, real estate companies opened in many cities, and state and county road systems expanded quickly. Road building became a statewide concern as it shifted from a local to a state function. These roads made even remote areas of the state

accessible and allowed the boom to spread. On a daily basis up to 20,000 people were arriving in the state. Besides the inexpensive property, Florida's legislative prohibition on income and inheritance taxes also encouraged more people to move into the state.

Earlier land reclamation projects created thousands of new acres of land to be developed. Real estate activity increased steadily after the war's end and drove up property values. Prices on lots were inflated to appear more enticing to out-of-state buyers. Every city and town in Florida had new subdivisions platted and lots were selling and reselling for quick profits. Southeastern Florida, including cities such as Miami and Palm Beach, experienced the most activity, although the boom affected most communities in central and South Florida (Weaver et al. 1996:3).

In the late 1910s and early 1920s Fort Lauderdale was used as a setting for movies. Real estate sales increased as swamps were dredged and "finger islands," narrow strips of fill alternating with channels of water, were developed. Building included exclusive and moderately priced homes, as well as hotels and commercial structures downtown. These activities in Florida's southeastern "Gold Coast" represented the highest intensity of Florida's land boom. By 1925, Fort Lauderdale's population reached 16,000 people (Historic Property Associates 1995:51–54). Other cities in Broward County were incorporated during the Land Boom period including Hollywood, Davie, Floranada and Deerfield (McGoun 1978:20). Deereidl was incorporated June 11, 1925 and George Emory Butler, Jr. was elected as the first mayor. The town added their first public library to their modest list of public buildings which served a population of almost 1,300 residents (Deerfield Beach Historical Society n.d.).

In 1918, George Henry came to Fort Lauderdale to build the Broward Hotel. The city financed the development in part in hopes of bringing an economic boom similar to those that occurred in Palm Beach and St. Augustine. After the hotel's opening in 1919, tourists flocked to the area. In 1921, Joseph Young bought land that would transform the area of Hollywood from truck farming agricultural fields into a city. Development began full-scale in the summer of 1921; the town was based on the design for Indianapolis, Indiana where Young had lived. By 1925, the town would have neighborhoods, a country club and golf course, and the famous Hollywood Beach Hotel (Shepard Associates 1981:I-11–13, 34).

An important development in Fort Lauderdale during the late 1920s was the division of the city into quadrants, which not only assisted tourists in finding their destinations, but also solidified racial segregation. Blacks arrived as laborers on the railroad and remained as farmers, settling in the northwestern section of the town. Following the adoption of the grid system, the city officially restricted black homes to the northwest quadrant (Historic Property Associates 1995:56–58).

The Boom period began to decline in August 1925, when the Florida East Coast Railway placed an embargo on freight shipments to South Florida. Ports and rail terminals were overflowing with unused building materials. In addition, northern newspapers published reports of fraudulent land deals in Florida. In 1926 and 1928, two hurricanes hit southeastern Florida, killing hundreds of people and destroying thousands of buildings. The 1926 hurricane hit Hollywood, killing 37 people there and 15 in Fort Lauderdale. The collapse of the real estate market and the subsequent hurricane damage effectively ended the boom. The 1929 Mediterranean fruit fly infestation that devastated citrus groves throughout the state only worsened the recession (Weaver et al. 1996:4).

For Broward County, 1926 saw a dramatic reversal of fortune, as real estate activity declined as a result of a stock market slump the previous November. People began defaulting on payments, and business came to a near standstill (Kemper 1981:47). Overspeculation in real estate, the F.E.C. Railway freight embargo, and the 1926 hurricane created economic havoc, further devastating the area's land boom (Historic Property Associates 1995:55–56). In order to promote morale and development, right-of-way was granted to the Seaboard Air Line Railway (Shepard Associates 1981: I-43).

By the time the stock market collapsed in 1929, Florida was suffering from an economic depression. Construction activity had halted and industry dramatically declined. Subdivisions platted several years earlier remained empty and buildings stood on lots partially-finished and vacant (Weaver et al. 1996).

Despite the economic hardships of the Depression era, local financiers began a project to create a port in the Fort Lauderdale area. One of the greatest supporters of the port was the developer of the city of Hollywood, J. W. Young. Throughout the early 1920s, Young worked

towards the creation of a deepwater harbor from a body of water originally known as Lake Mabel, but various circumstances including the bust of the real estate market, initially prevented its construction. A special act of the Florida Legislature established the Broward County Port Authority in 1927, and construction of the port was soon underway (Broward County 2001). After several years of financial difficulties, the port was opened in 1929 for use by cargo ships and military vessels. The name “Port Everglades” was chosen, as it represented the port as the “gateway to the rich agricultural area” of Florida (Broward County 2001). In July 1929, the construction of a railroad to the port was underway, and several months later it was decided that storage warehouses were needed on the port property (Eller 1971:17).

Another big event that took place during 1929 was the opening of the Merle Fogg Airport in Fort Lauderdale (known today as the Fort Lauderdale-Hollywood International Airport). Named after the city’s renowned aviator, the Merle Fogg Airport opened in May 1929 with a ceremony attended by over 5,000 people (Nelson 1963:22).

## **5.7 Depression and New Deal Period (1930-1940)**

This era of Florida’s history begins with the stock market crash of 1929. As previously discussed, there were several causes for the economic depression in Florida, including the grossly inflated real estate market, the hurricanes, and fruit fly infestation. During the Great Depression, Florida suffered significantly. Between 1929 and 1933, 148 state and national banks collapsed, more than half of the state’s teachers were owed back pay, and a quarter of the residents were receiving public relief (Miller 1990).

Employment in Hollywood was difficult, if not impossible to find. Many property owners requested of the City of Hollywood that their labor be accepted in lieu of their property taxes, and in August of 1932, the City manager had compiled a list of 73 unemployed men in the city and arranged for two days of work for each man every week (TenEick 1989:327).

As a result of hard economic times, President Franklin D. Roosevelt initiated several national relief programs. Important New Deal–era programs in Florida were the Works Progress Administration (WPA) and the Civilian Conservation Corps (CCC). The WPA provided jobs

for professional workers and laborers, who constructed or improved many roads, public buildings, parks, and airports in Florida. The CCC improved and preserved forests, parks, and agricultural lands (Miller 1990).

The Depression affected most areas of the state's economy. Beef and citrus production declined, manufacturing slowed, and development projects were stopped. Even the railroad industry felt the pressures of the 1930s and had to downsize. In addition, the increasing use of the automobile lessened the demand for travel by rail. Despite the Depression, tourism remained an integral part of the Florida economy during this period. New highways made automobile travel to Florida easy and affordable and more middle-class families were able to vacation in the "Sunshine State" (Miller 1990).

A slow recovery began as the thirties progressed in Broward County (Historic Property Associates 1995:58). In the mid-1930s, Federal loans were secured for several projects in Broward County, including the construction of U.S. 1, from south Dania to the Dade/Broward County line, and the construction of a water softening system at the municipal water plant in 1935 (Kemper 1981:49). Tourism and the hotel business were making a comeback.

In 1935, the first annual Collegiate Aquatic Forum was held at the Fort Lauderdale municipal pool, making Fort Lauderdale a popular college vacation destination (Historic Property Associates 1995:58–59). Agriculture and residential building began in the western suburbs of Hollywood, and several new businesses were started along Hollywood Boulevard (TenEick 1989:335–337,342). Additionally, Port Everglades was evolving into one of Florida's premier ports; it was ranked seventh in the state in imports and exports. At the end of 1934, the port's export commerce increased from 1,850 tons to 10,859 tons in one year (Burghard 1982:74).

Even small communities within Broward County, began feeling the economic impacts of the increased tourism, and some who were still economically based largely on agriculture, began changing their name to let tourists know that the community had a beach front. One such community, Deerfield, changed its name to Deerfield Beach in 1939 to attract tourists (Deerfield Beach Historical Society n.d.). Deerfield Beach had grown to a population of around 1,800 residents by the end of the 1930s.

## 5.8 World War II and the Post War Period (1940-1950)

From the end of the Great Depression until after the close of the post-war era, Florida's history was inextricably bound with World War II and its aftermath. It became one of the nation's major training grounds for the various military branches including the Army, Navy, and Air Force. Prior to this time, tourism had been the state's major industry and it was brought to a halt as tourist and civilian facilities, such as hotels and private homes, were placed into wartime service. The influx of thousands of servicemen and their families increased industrial and agricultural production in Florida, it also introduced these new residents to the warm weather and tropical beauty of Florida.

Wartime activities brought an economic boom to Broward County (Shepard Associates 1981:I-51). Fort Lauderdale felt the conflict in December 1939 when the British cruiser Orion drove the German freighter Arauca into Port Everglades, which opened in 1928. The Arauca remained there for over a year. The 1942 attack of Allied shipping by German U-boats was visible from the shoreline. The area lent itself to military training, and the influx of military personnel brought business to Broward County (Historic Property Associates 1995:58–60). Two military training centers were opened in Hollywood, the United States Naval Air Gunners School and the United States Naval Indoctrination and Training School. Soldiers trained in the schools and on Hollywood's beaches. The Navy also maintained a station in Fort Lauderdale where naval aviators were trained, and the site of the current Broward County Community College was used for military training during the war. Some of the servicemen stationed here returned at the war's end to live permanently (Shepard Associates 1981: I-51).

Port Everglades was used extensively for military operations. The port possessed numerous tanks for petroleum storage and modern equipment used for loading and unloading. Fuel reserved for the defense of the Caribbean Islands and molasses, which would be used later in the production of explosives for the Navy, also were stored at the port. The seaport accommodated an undersea warfare experimental station and a Navy boat service used in the recovery of torpedoes dropped by planes at the Fort Lauderdale Naval Air Station during training (George 1991:6).



The wartime activities of Port Everglades were inextricably connected to those at the Fort Lauderdale Naval Air Station, the area's largest military installation. Fort Lauderdale was considered an ideal location for an air station due to its moderate climate, which allowed for year-round training, and its proximity to the Atlantic Ocean and the Everglades, that provided open areas for training, bombing targets, and ranges. Construction of the more than 1,000-acre naval air station began in 1942; the facility absorbed the City's Merle Fogg Airport. The facility, which could accommodate 3,000 people, included more than 4,000 feet of runways and 217 buildings. By late 1942, the base was complete. During the war, the Fort Lauderdale Naval Air Station was one of two facilities from Illinois to Florida equipped to combat train Navy pilots and crewmen in torpedo bomber planes (George 1991:7, 9). At the conclusion of the war, the facility was abandoned by the military and remained unused for several years.

During this time, railroads profited, since servicemen, military goods and materials needed to be transported. However, airplanes were now becoming the new form of transportation, and Florida became a major airline destination. The highway system was also being expanded at this time. The State Road Department constructed 1,560 miles of highway during the war era (Miller 1990). Although Deerfield remained primarily an agricultural community until the late 1940s, tourists continued to discover and enjoy Deerfield's scenic oceanfront. The growing tourism industry became evident in the changing shoreline as hotels and motels began popping up all along Deerfield's waterfront. The growth was reflected within the community as well with the formation of Deerfield's most influential civic organization, the Lions Club in 1947. The club established parks along the banks of the Hillsboro Canal, cleared the scrub growth and fashioned picnic areas, baseball diamonds and barbecue pits. To raise funds, the club held several chicken and rib barbecues. The fundraiser became so popular it became an annual celebration, known as Founders' Day (Deerfield Beach Historical Society n.d.).

## 5.9 Period Post World War II and Modern Period (1950-current)

Growth in Broward County continued to increase after the end of World War II, as a result of the leftover benefits of a wartime economy and the renewed availability of construction materials and durable goods (Kemper 1981:50, TenEick 1989:407). Servicemen stationed in

the area returned to live, often convincing family and friends to return as well. Tourism to and within Broward County reinvigorated during this time period and increasingly became popular as a tourist destination. By 1955 the yearly influx of tourists added more than 10,000 more temporary residents to the base population of Hollywood alone.

In 1951, Deerfield Beach constructed a picturesque wooden pier, intentionally built low to the water to accommodate fishing practices to better cater to tourists. The pier quickly became a popular tourist attraction and gathering point for townspeople. Deerfield Beach established a Chamber of Commerce in 1953 and construction on the building began soon thereafter on land donated by local developer Robert Sullivan just off Hillsboro Boulevard. Among the many existing hotels and motels along the waterfront, the city constructed its first high-rise on the Beach in 1964 just north of the pier. The structure was built using a 118-foot crane, a new construction type. The structure boasted ground breaking wind-bracing technology and became the first buildings in the state to be entirely computed by IBM (Deerfield Beach Historical Society n.d.).

During these years, the construction of I-95 affected many communities along Florida's east coast. Miles of fractured highway were incorporated into what would become the main vein of Florida's east coast. Construction of I-95 in southern Florida progressed throughout the 1960s (Janus Research 2007:63). In 1967, the Seaboard Air Line Railroad was merged with its competitor the Atlantic Coast Line Railroad to form the Seaboard Coast Line Railroad. A later merger with the Chessie System in the 1980s formed the CSX Corporation. By 1976, most of the highway was complete from the Georgia State Line to Ft. Pierce and from Palm Beach Gardens to Miami, including the portion in Broward County.

As Broward County's population soared toward one million, several developers became overextended or came under criticism because of the close ties between their firms and the cities which they had created. Also, the ever-growing number of newcomers and tourists incited fear that too-rapid growth would create problems. At the beginning of the 1970s, residents began demanding that cities aim for slower growth and lower limits on the number of residences per acre. Gradually, governments began to respond (McGoun 1978).

Growth decreased in 1974, but not as a result of municipal actions. South Florida was hit by the recession sweeping the nation. Unsold properties were a major problem at this time, and at one point, there were an estimated 50,000 unsold condominium apartments in the area (McGoun 1978). By 1976, the building industry witnessed a revival. However, there were still concerns that the uncontrolled growth of the past would be repeated. A new county charter gave the Broward County government broad powers to monitor and improve the quality of life and the environment. The passage of the 1977 Land Use Plan was a major step toward limiting urban sprawl and ensuring that the area's natural, economic, and social resources would be put to their best use (McGoun 1978).

Growth continued and by 1979, Deerfield Beach opened one of the largest retirement communities in South Florida. The property spanned across 800 acres and the 8,508 units sold rapidly to Miami Beach and northeastern retirees. By the 1980s businesses were relocating to Deerfield Beach to cater to the tourists and retiree lifestyles. Deerfield Beach quickly became Surf Central after Island Water Sports opened in 1979 providing surf gear, clothing, boards and surf culture to residents. The franchise expanded to over 26 stores by the mid-1980s.

Development slowly radiated westward during this time. Near the current project APE, development remained minimal until the late 1970s and 1980s. Up until this time, SW 10<sup>th</sup> Street did not extend westward past the project APE and this land was used primarily for mining purposes. SW 10<sup>th</sup> Street was extended to meet Florida's Turnpike during the early 1980s and the surrounding land was converted for residential and apartment development. Figures 6.4.1 through 6.4.3, included in the Historic Map and Aerial Photography section of this report, illustrate the growth over time near the project APE.

## 6 Florida Master Site File Search and Literature Review

---

An archaeological and historical literature and background information search pertinent to the project APE has been performed. This research determined the chronological placement, types, and location patterning of cultural resources within the project area. This included a search of the Florida Master Site File (FMSF), county and local site inventories, unpublished CRM reports, and other pertinent literature.

The FMSF search will serve as a guide to the field investigations by identifying the possible locations of any archaeological sites and historic resources within the project APE and providing expectations regarding the potential historic significance of any such sites. The FMSF serves as an archive and repository of information about Florida's recorded cultural resources. It represents an inventory of resources for which available information exists and describes their condition at a particular point of time. Because the inventory of resources is not all-inclusive on a statewide basis, gaps in data may exist. The FMSF is only as accurate and as comprehensive as the information that has been submitted. Users should be cognizant of the sometimes uneven quality of the information. The FMSF is an important planning tool that assists in identifying potential cultural resources issues and resources that may warrant further investigation and protection. It can be used as a guide but should not be used to determine the FDHR/State Historic Preservation Officer's (SHPO) official position about the significance of a resource.

The work of previous investigators was reviewed in order to gather information about the types of precolonian and early historic period sites that could be expected to occur within the project APE. An extensive search of pertinent literature and records was conducted to determine the locations of previously recorded National Register of Historic Places (National Register)-listed, eligible, and potentially eligible resources within the project APE, as well as any archaeological and historical assessments of other tracts of land within the project APE.

## 6.1 Previously Conducted Cultural Resource Surveys

There has not been a comprehensive CRAS of the project corridor. The FMSF notes eight previously conducted cultural resource surveys which intersected with or were within the project corridor. These surveys are described in Table 6.1.1.

These surveys were conducted between 1984 and 2004 and vary in scope. Early surveys may not meet current legal requirements and professional standards. No subsurface testing was conducted within the current archaeological APE during the previous surveys.

**Table 6.1.1: Previous Surveys Conducted within the Project APE**

FMSF No.	Title	Year	Author(s)
1032	Phase I Archaeological Survey of the Proposed Sawgrass Deerfield Expressway, Broward County, FL	1984	GAI Consultants Inc
1844	CRAS of the Proposed Upgrading of SR869/SW 10 <sup>th</sup> Street from 4-lane Urban Highway to 6-lane Urban Freeway from the FL Turnpike to I-95 in Broward County, FL	1989	Browning, William D., and Melissa G Wiedenfeld
2933	An Archaeological Survey of Broward County, Florida: Phase I	1991	Carr, Robert S., Amy Felmley, and Richard Ferrer
3633	An Archaeological Survey of Northeast Broward County, Florida: Phase II	1993	Archaeological and Historical Conservancy
10293	An Archaeological and Historical Assessment for the Existing Goolsby Boulevard Cellular Tower, Broward County, FL	2004	Environmental Services Inc.
10301	An Archaeological and Historical Assessment for the Existing Goolsby Boulevard Cellular Tower, Broward County, FL	2004	Environmental Services Inc.
12005	Cultural Resource Assessment Survey of the Turnpike Widening South of Atlantic Boulevard to North of the Sawgrass Expressway PD&E Study, Broward County, Florida	2005	Janus Research

FMSF No.	Title	Year	Author(s)
13095	Cultural Resource Assessment Survey of the SR91 Florida's Turnpike Widening- Griffin Road to HEFT (SR 821) and Atlantic Boulevard to West Hillsboro Boulevard, Broward County, Florida	2006	Janus Research

## 6.2 Previously Recorded Archaeological Resources

A search of the FMSF as well as county and local inventories identified no previously recorded archaeological sites or archaeologically sensitive zones within one mile of the archaeological APE.

## 6.3 Previously Recorded Historic Resources

### 6.3.1 Previously Recorded Historic Cemeteries

A search of the FMSF identified no previously recorded cemeteries within or adjacent to the historic resources APE.

### 6.3.2 Previously Recorded Historic Districts

A search of the FMSF as well as county and local inventories identified no previously recorded historic districts within or adjacent to the historic resources APE.

### 6.3.3 Previously Recorded Historic Structures

No previously recorded historic structures were identified within the historic resources APE during the search of the FMSF and county and local inventories.

### 6.3.4 Previously Recorded Resource Groups

While the segment of Military Trail within in the current project APE is not historic, portions of Military Trail located outside of the current APE, to the north, have been determined ineligible for listing in the National Register by SHPO in 2016 (Janus Research 2016a, 2016b) and in 2017 (Janus Research 2017a, 2017b). Military Trail was originally established as a native footpath by the Seminole Indians and was expanded in 1838 by the U.S. Army during the Second Seminole War.



During the Second Seminole War, General Jesup ordered Major William Lauderdale to build a military trail from Ft. Jupiter to New River. In 1938, the 223 Tennessee volunteers and the U.S. 3<sup>rd</sup> Artillery Regiment, known as the “construction pioneers,” constructed a 63-mile trail for soldiers and wagons along a pine ridge with a slightly higher elevation than the surrounding marsh. The trail is shown on the 1856 Military Map of the Peninsula of Florida South of Tampa Bay. Its approximate location is also noted on the 1845 GLO map and is labelled as “road to New River”. On the 1859 GLO plat however it is delineated with a dashed line and no label. The associated surveyors’ notes describe the trail as “old road leading from Ft. Jupiter to New River” (Janus Research 2017c). The trail has since been paved and converted into a major thoroughfare that follows the historic trail and is named Military Trail (SR 809) after this historic trail. It is recorded in the Florida Master Site File (FMSF) as 8PB13795.

An analysis of historic aerials revealed no evidence of the original trail within the APE and no physical evidence was identified during the survey. It is likely that any remnants of the trail within the APE were destroyed during the construction of the modern highway and adjacent development.

### **6.3.5 Potential Historic Structures**

A search of the Broward County Property Appraiser identified two parcels within or adjacent to the project APE with historic Actual Year Built dates of 1970 or earlier at 821 South Powerline Road and 3165-3175 SW 10<sup>th</sup> Street (8BD6685). Preliminary GIS data, Broward County Property Appraiser and field reconnaissance have confirmed that the structure at 821 South Powerline Road is no longer extant. No historic bridges cemeteries, or other potentially unrecorded historic resources were identified within the historic resources APE during the background research.

## **6.4 Historic Map and Aerial Photograph Review**

A review of historic aerial photographs from 1953, 1957, 1964, 1968 and 1976 (FDOT, Office of Surveying and Mapping 2016; University of Florida 2016) was conducted to identify any unrecorded historic resources with an actual year build date prior to or in 1970 located within the historic resources APE. The review revealed the presence of one previously unrecorded structure. The structure first appears on the 1968 aerial within the APE at 3165-3175 SW

10<sup>th</sup> Street (8BD6685). The structure has a build date of circa 1965 and is not visible on the 1964 aerials. The 1957 and 1968 aerials are included below to in Figure 6.4.1 and Figure 6.4.2 respectively to further illustrate this development.

An analysis of historic aerials revealed no evidence of the original trail within the APE and no physical evidence was identified during the survey. Review of aerials indicates that within the APE, the modern thoroughfare, Military Trail is not yet extant by 1970, first appearing in 1976 aerials and is, therefore, not included in this survey. It is likely that any remnants of the trail within the APE were destroyed during the construction of the modern highway and adjacent development. The 1976 aerial is included in Figure 6.4.3. The beginnings of Military Trail are visible in the upper right of the image, north of SW 10<sup>th</sup> and just west of the Seaboard Air Line (CSX) Railroad.

## 6.5 Summary of ETDM Comments

The project was assigned a moderate degree of effect by the Florida Department of State (FDOS) and FDOT, District 4. The agencies reported that the project area had not been comprehensively surveyed and therefore should be surveyed as part of this project. It was also noted that the National Register–eligible CSX Railroad (8BD4649) was identified within the project area, however, the APE has since changed, and the CSX Railroad is no longer within the project limits for this segment of the project. Finally, the agencies noted that while archaeological sites are vulnerable to direct effects through ground disturbance and above-ground resources are vulnerable to direct effects from right-of-way acquisition, based on the project plans, it is unlikely there will be direct effects to either archaeological or historical resources.



Figure 6.4.1: 1957 Aerial Photograph





Figure 6.4.2: 1968 Aerial Photograph





Figure 6.4.3: 1976 Aerial Photograph

## 7 Project Research Design and Site Location Models

---

### 7.1 Precontact Archaeological Site Location Model

Four environmental factors are typically employed in predicting site locations: distance to fresh (potable) water, distance to hardwood hammocks, topography, and soil type (soil drainage). Zones of archaeological site potential are designated based on these environmental factors and previous research conducted within the Glades cultural region.

Probability zones along existing roads can be affected by underground utilities and the resulting effects of road construction which often include berms and ditches. Areas that may have originally been moderate or high site potential zones and are directly affected by modern development may decrease in potential due to soil disturbance.

Fresh water is obviously an important resource, as the need for water is universal. This variable would have been of greater importance during the Paleoindian and Early Archaic periods (12,000–5000 BC) when the perched water system was more restricted. Although no large freshwater source of water (such as a lake or river) is nearby, the many sloughs and marshes were present prior to canaling and drainage that would have adequately provided water and aquatic and terrestrial resources for people living in the area.

Hardwood hammocks (hydric, mesic, or xeric) provide a variety of resources that would have been exploited by the aboriginal inhabitants of this region. Often, areas of higher relative elevation correspond with better-drained soils or the presence of hardwood hammocks (xeric and mesic). No hammocks were identified within the archaeological APE during the review of historic plat maps or aerial photographs.

The characteristics of soils have been used successfully by several researchers in the formulation of predictive models for precontact site location. As mentioned previously, most of the soils within the project area are poorly drained and have been disturbed by the construction of roadways and other urban features. The project corridor is relatively flat at an elevation between 10 and 15 feet above sea level.

Based on the background research, most of the project area has low archaeological site potential. Before modern drainage most of the area was within cypress swamp, glades, and low pine flatwoods. Two small areas at the center of the project APE have moderate site potential due to higher elevation near a wetland and location within better drained soils (Appendix D).

## **7.2 Historic Archaeological Site Location Model**

The historic plat maps were also reviewed for evidence of other early settlement. This review of the historic plat maps and surveyor's notes identified no military forts, roads, encampments, battlefields, homesteads, boat ramps, harbors, or historic Native American villages or trails located within the vicinity of the project area. The archaeological APE has low probability for intact historic archaeological sites.

## 8 Survey Methods

---

### 8.1 Archeological Field Methods

The archaeological field survey included a surface inspection that consisted of a visual inspection of exposed ground to look for evidence of archaeological sites. Additionally, a careful surface inspection was undertaken in areas of minimal vegetation and/or upturned soil such as drainage ditches, recent clearings, and animal burrows. Subsurface testing employed conventional shovel testing throughout the investigation. Shovel tests were circular and roughly 20 inches (50 centimeters) in diameter. They were excavated to a minimum depth of 39 inches (1 meter), unless excavation was inhibited by pit slumping due to the influx of water or by subsurface obstructions such as concreted clay or hardpan. All excavated soil was dry screened through ¼-inch hardware cloth suspended from portable wooden frames. Areas of moderate site potential were tested at roughly 164 foot (50 meter) intervals, if possible. Areas of low site potential were tested judgmentally within at least 10 percent of the total archaeological APE designated as having low site potential.

Standard archaeological methods for recording field data was followed throughout the project. The identification number, location, stratigraphic profile, and soil descriptions were recorded for every shovel test excavated. The locations of all tests were plotted on field aerial maps of the project APE and recorded with WAAS-enabled hand-held Global Positioning System (GPS) units (UTM-NAD83).

### 8.2 Architectural Field Methods

An historic resource assessment survey was conducted within the historic resources APE. The historic resource survey used standard field methods to identify and record historic structures. All buildings within the historic APE received a preliminary visual reconnaissance. Any resource with features indicative of 1970 or earlier construction materials, building methods, or architectural styles was noted on aerial photographs and a USGS quadrangle map.

For each historic resource identified in the preliminary assessment, a FMSF form was completed with field data, including notes from site observations and informant interviews. The estimated date of construction, distinctive features, and architectural style were noted.



All buildings, structures, and objects were photographed using a high-resolution digital camera. A log was kept to record the resource's physical location and compass direction of each photograph.

Each historic resource's individual significance was evaluated for its potential eligibility for listing in the National Register. Historic physical integrity was determined from site observations, field data, and photographic documentation.

### **8.3 Certified Local Government Consultation**

In accordance with Chapter 1A-46, attempts were made to contact and interview local informants. Local informants may often provide valuable information which is otherwise not available through official records or library collections. The City of Deerfield Beach is not listed on the May 23, 2018 list of Certified Local Governments (CLG) posted on the FDHR website (FDHR 2018). Mr. Rick Ferrer, Historic Preservation Officer of Broward County, was contacted on June 21, 2018 via email regarding input on the proposed project and information on potential locally significant cultural resources within the project APE. As of the submittal date of this document, a response has not been received.

## 9 Results

### 9.1 Archaeological Survey

No newly or previously recorded archaeological sites were identified within the archaeological APE. Seven shovel tests were excavated within the project area (Appendix D). No cultural material was recovered during the pedestrian survey or subsurface testing. No subsurface testing could be conducted in most of the project area due to the presence of existing pavement, drainage ditches, and buried utilities (Figures 9.1.1 to 9.1.3).

Stratigraphic profiles varied, but a typical shovel test consisted of dark gray sand from 0–25 centimeters below surface (cmbs), yellowish brown sand from 25–55 cmbs, brown sand from 55–100 cmbs (Figure 9.1.4). In some shovel tests, either hardpan, impenetrable clay, or the water table was reached before a 100-cm depth was achieved.



Figure 9.1.1: Drainage Ditch and Marked Utilities East of Powerline Road, Facing West





Figure 9.1.2: Buried Utilities West of SW 30<sup>th</sup> Avenue, Facing West



Figure 9.1.3: Drainage Ditches and Buried Utilities on Powerline Road, Facing North



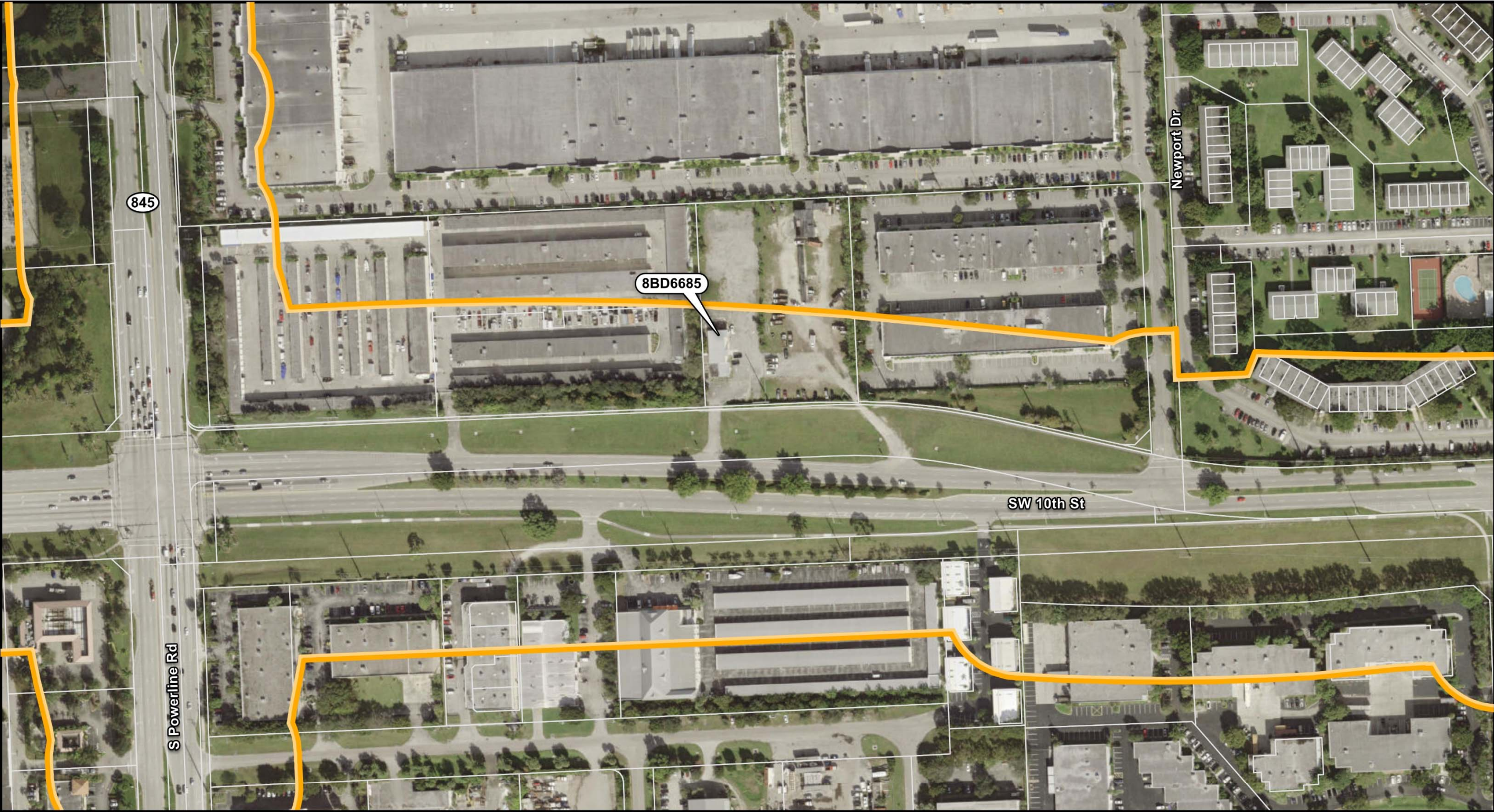


**Figure 9.1.4: Shovel Test 3, Facing North**

## 9.2 Architectural Survey



The historic resources survey resulted in the identification of one newly identified historic structure. This structure, located at 3165-3175 SW 10<sup>th</sup> Street, Deerfield Beach, Florida (8BD6685) is of Masonry Vernacular style construction. The structure lacks historical associations and physical integrity; therefore, it is considered National Register–ineligible. A brief summary and evaluation of the resource is provided below along with an illustration of its location within the APE (Figure 9.2.1). The newly created FMSF form is included in Appendix C.






**Figure 9.2.1: Identified Historic Resource**

SR 869/SW 10th Street Connector  
PD&E Study from Florida's  
Turnpike/Sawgrass Expressway to  
I-95 (FM No. 439891-1-22-02,  
ETDM No. 14291)

-  Historic Resources APE
-  Newly Recorded Historic Resource

**Broward County**

0 250 Feet







**Figure 9.2.2: 3165-3175 SW 10<sup>th</sup> Street (8BD6685), Facing West**

### **8BD6685     3165-3175 SW 10<sup>th</sup> Street**

This Masonry Vernacular storage building is located at 3165-3175 SW 10<sup>th</sup> Street between Powerline Road and SW 30<sup>th</sup> Avenue in Section 3 of Township 48 South, Range 42 East on the West Dixie Bend (1962 [PR] 1983) USGS quadrangle map in Broward County, Florida (Figure 9.2.2) The rectangular one-story building was constructed circa 1965 and currently seems to be used as a storage facility. The structure is of continuous concrete block construction that is painted and covered in part with stucco. There are three east-facing large rolling metal garage doors along the original portion of the structure. Two of these garage doors have concrete awning overhangs. The original portion of the structure is covered in replaced metal roofing. A 1970s addition has been added to the southern façade. The addition has a gable roof covered in asphalt and has two enclosed garage doors along the southern end. The parcel has two outbuildings to the northeast of the main structure. The southern-most outbuilding is a long rectangular carport with a flat, tar-and-gravel roof while the northern outbuilding is of concrete block construction with similar roof. This structure seems to have been used for storage purposes but is currently vacant. (Outbuilding images included in FMSF form found in Appendix C). Due to the commonness of this style in South Florida and the lack of historical significance, this building is considered ineligible for listing in the National Register.

## 10 Conclusions and Recommendations

---

The objective of the CRAS for SR 869 State Road 869 / SW 10th Street Connector Project Development and Environment (PD&E) Study, Broward County, Florida was to identify cultural resources within the project APE and assess their eligibility for listing in the National Register according to the criteria set forth in 36 CFR Section 60.4. This CRAS also addresses ETDM agency comments requiring a comprehensive survey of the project area documenting all cultural resources and assessing their National Register eligibility.

No newly or previously recorded archaeological sites were identified within the archaeological area of potential effect (APE). Seven shovel tests were excavated within the archaeological APE. No cultural material was recovered. No subsurface testing could be conducted in most of the project area due to the presence of existing pavement, drainage ditches, and buried utilities.

The historic resources survey resulted in the identification of one newly identified historic structure. This structure, located at 3165-3175 SW 10<sup>th</sup> Street, Deerfield Beach, Florida is of Masonry Vernacular style construction. The structure lacks historical associations and physical integrity; therefore, it is considered National Register–ineligible.

### 10.1 Unanticipated Finds

Although unlikely, should construction activities uncover any unanticipated archaeological finds, it is recommended that activity in the immediate area be stopped until an evaluation by a professional archaeologist. If human remains are found during construction or maintenance activities, Chapter 872.05 of the Florida Statutes will apply and FDOT's Standard Specifications for Road and Bridge Construction require that all construction cease. Chapter 872.05 states that, when human remains are encountered, all activity that might disturb the remains shall cease and may not resume until authorized by the District Medical Examiner or the State Archaeologist. The District Medical Examiner has jurisdiction if the remains are less than 75 years old or if the remains are involved in a criminal investigation. The State Archaeologist has jurisdiction if the remains are 75 years of age or more.

## 10.2 Curation

Original site file forms (Appendix C), survey log sheet (Appendix E), and photographs are curated at the FMSF in Tallahassee, along with a copy of this report. Field notes and other pertinent project records are temporarily stored at Janus Research until their transfer to the FDOT storage facilities.



## 11 References Cited

---

Andrews, R. L., J. M. Adovasio, B. Humphrey, D.C. Hyland, J.S. Gardner, and D.G. Harding, (with J. S. Illingworth and D.E. Strong)

2002 Conservation and Analysis of Textile and Related Perishable Artifacts. In Windover: Multidisciplinary Investigations of an Early Archaic Florida Cemetery, edited by Glen Doran, pp. 121-165. University Press of Florida, Gainesville.

Austin, Robert J.

1996 Prehistoric Chert Procurement and Mobility Strategies on the Lake Wales Ridge. The Florida Anthropologist 49(4):218-221.

1997 The Economics of Lithic-Resource Use in South-Central Florida. Unpublished Ph.D. dissertation, University of Florida, Gainesville.

Brooks, H. K.

1984 Lake Okeechobee. In Environments of South Florida: Present and Past II (2d ed.), edited by P. J. Gleason, pp. 38-68. Miami Geological Society, Coral Gables.

Broward County Board of County Commissioners

2001 Welcome to the Official Site of Broward County, Florida. 13 March 2001. Found online at: <http://www.co.broward.fl.us>.

Broward County Department of Urban Planning and Redevelopment, Planning Services Division

2005 "Broward-by-the-Numbers." Number 41, December 2005. Electronic document on the population of unincorporated Broward County and portion annexed into incorporated communities in the early 2000s. Accessed online on October 30, 2017 at: <http://www.broward.org/Planning/FormsPublications/Documents/bbtn41.pdf>

Brown, Canter, Jr.

1991 Florida's Peace River Frontier. University of Central Florida Press, Orlando.

Buker, George S.

- 1975 Sun, Sand and Water: A History of the Jacksonville District, U.S. Army Corps of Engineers, 1821–1975. Found online at: <http://www.saj.usace.army.mil/history/>.

Bullen, Ripley P.

- 1954 Further Notes on the Battery Point Site, Bayport, Hernando County, Florida. *The Florida Anthropologist* 7: 103–108.
- 1955 Stratigraphic Tests at Bluffton, Volusia County, Florida. *Florida Anthropologists* 8:1–16.
- 1972 The Orange Period of Peninsular Florida. In *Fiber-tempered Pottery in Southeastern United States and Northern Colombia: Its Origins, Context, and Significance*, edited by R. P. Bullen and J. B. Stoltman, pp.9–33. Florida Anthropological Society Publications 6, Gainesville.

Bullen, R. P., A. K. Bullen, and C. J. Clausen

- 1968 The Cato Site Near Sebastian Inlet, Florida. *The Florida Anthropologist* 21:14–16.

Burghard, August

- 1982 *The Panoramic Half Century in Florida: Land of Matters Unforgot*. Manatee Press, Fort Lauderdale.

Cabeza de Vaca, Alvar Nuñez

- 1542 La Relación que dio Alvar Nuñez Cabeza de Vaca de lo Acaescido en las Indias...Zamora, 1542. Reproduced in *Colección de Libros y documentos referentes a la Historia de America*. Madrid, 1906.

Carbone, V. A.

- 1983 Late Quaternary Environments in Florida and the Southeast. *The Florida Anthropologist* 26(1-2):3–17.

Carr, Robert S.

- 1986 Preliminary Report on Excavations at the Cutler Fossil Site in Southern Florida. Paper presented at the 38th annual meeting of the Florida Anthropological Society, Gainesville.
- 2002 The Archaeology of Everglades Tree Islands. In Tree Islands of the Everglades, edited by Fred H. Sklar and Arnold Van der Valk, pp. 187-206. Kluwer Academic Publishers, Boston.

Carr, Robert S., Joe Davis, and Bill Steele

- 1994 A Phase I Archaeological Survey of the Blockbuster Parcel, Broward County, Florida. AHC Technical Report #104. Archaeological and Historical Conservancy, Miami. Manuscript on file, Florida Division of Historical Resources, Tallahassee.

Carr, Robert S., Amy Felmley, Richard Ferrer, Willard S. Steele, and Jorge Zamanillo

- 1991 An Archaeological Survey of Broward County, Florida: Phase One. AHC Technical Report #34. Archaeological and Historical Conservancy, Miami. Manuscript on file, Florida Division of Historical Resources, Tallahassee.

Cushing, Frank H.

- 1896 Exploration of Ancient Key Dwellers' Remains on the Gulf Coast of Florida. Proceedings: American Philosophical Society Volume 35 (153):329-448.

Daniel, I. Randolph, and Michael Wisenbaker

- 1987 Harney Flats: A Florida Paleo-Indian Site. Baywood Press, Farmingdale, New York.

Davis, Joe, and Robert S. Carr

- 1993 An Archaeological and Historical Assessment of the Weston Increment III Area, Phase II, Broward County, FL. AHC Technical Report #79, Archaeological and Historical Conservancy, Miami. Manuscript on file, Florida Division of Historical Resources, Tallahassee.

## Deerfield Beach Historical Society

n.d. History. Accessed electronically July 5, 2018. <http://www.deerfield-beach.com/548/History>

2018 Making History. 52 Deerfield Moments. Accessed electronically June 21, 2018. <http://www.deerfieldbeachhistoricalsociety.com/52moments/>

## Dickel, David N.

2002 Analysis of Mortuary Patterns. In *Windover: Multidisciplinary Investigations of an Early Archaic Florida Cemetery*, edited by Glen H. Doran, pp. 73–96. University Press of Florida, Gainesville.

## Dickel, David N., and Glen H. Doran

2002 An Environmental and Chronological Overview of the Region. In *Windover: Multidisciplinary Investigations of an Early Archaic Florida Cemetery*, edited by Glen H. Doran, pp. 39–58. University Press of Florida, Gainesville.

## Dunbar, James S., Michael K. Faught, and S. David Webb

1988 An Underwater Paleo-Indian Site in Northwestern Florida. *The Florida Anthropologist* 41:442–453.

## Dunbar, James, and Ben I. Waller.

1983 A Distribution Analysis of the Clovis/Suwannee Paleoindian Sites of Florida—A Geographic Approach. *The Florida Anthropologist* 36(1-2):18–30.

## Eller, Warren

1971 Port Everglades Florida.

## Florida Department of Environmental Protection (FDEP)

1870a Plat Map for Township 48 South, Range 42 East. Division of State Lands, Board of Trustees Land Document System. Electronic document, [http://labins.org/survey\\_data/landrecords/landrecords.cfm](http://labins.org/survey_data/landrecords/landrecords.cfm), accessed August 25, 2016.

1870b Surveyor's Notes for Township 48 South, Range 42 East. Electronic document, [http://labins.org/survey\\_data/landrecords/landrecords.cfm](http://labins.org/survey_data/landrecords/landrecords.cfm), accessed August 25, 2016.



n.d. Tract Book Records. Land Document Search. Electronic document, <http://tlhdslweb.dep.state.fl.us/>, accessed June 22, 2018.

Florida Division of Historical Resources (FDHR).

2018 Florida Certified Local Governments (As of June 21, 2018). Electronic document, <http://dos.myflorida.com/historical/preservation/certified-local-governments/>, accessed June 21, 2018.

Florida Department of Transportation (FDOT), Surveying and Mapping Office

2016 Aerial Photography Archive. Electronic documents, <https://fdotewp1.dot.state.fl.us/AerialPhotoLookUpSystem/>, accessed August 25, 2016.

Fradkin, A.

1976 The Wightman Site: A Study of Prehistoric Culture and Environment on Sanibel Island, Lee County, Florida. M.A. Thesis, Department of Anthropology, University of Florida, Gainesville.

Gaby, Donald C.

1993 The Miami River and Its Tributaries. The Historical Association of South Florida, Miami, Florida.

Gannon, Michael V.

1965 The Cross in the Sand: The Early Catholic Church in Florida 1513–1870. University of Florida Press, Gainesville.

George, Paul S.

1991 Submarines and Soldiers: Fort Lauderdale and World War II. Broward Legacy, Volume 14, Numbers 1–2.

Goggin, John M.

1939 A Ceramic Sequence for South Florida. New Mexico Anthropologist 3:35–40.

1950 Cultural Occupation at Goodland Point, Florida. The Florida Anthropologist 2:65–91.

n.d. The Archaeology of the Glades Area, Southern Florida. [Written about 1949, with additions in subsequent years into the 1950s.] Typescript. Manuscript on file, Florida Museum of Natural History, Gainesville.

Goodyear, Albert C., Sam B. Upchurch, and Mark J. Brooks

1980 Turtlecrawl Point: An Inundated Early Holocene Archaeological Site on the West Coast of Florida. In Southeastern Geological Society Guidebook 22, edited by S. B. Upchurch, pp. 24–33. Tallahassee.

Goodyear, Albert C., and Lyman O. Warren

1972 Further Observations on the Submarine Oyster Shell Deposits of Tampa Bay. The Florida Anthropologist 25(2, part 1):52–66.

Griffin, John W.

1988 The Archaeology of Everglades National Park: A Synthesis. Contract CX 5000-5-0049. SEAC.

2002 Archaeology of the Everglades. University Press of Florida, Gainesville.

Griffin, J. W., S. B. Richardson, M. Pohl, C. D. MacMurray, C. M. Scarry, S. K. Fish, E. S. Wing, L. J. Loucks, and M. K. Welch

1982 Excavations at the Granada Site: Archaeology and History of the Granada Site, Volume I. Florida Division of Archives, History and Records Management, Tallahassee.

Grismer, Karl

1949 The Story of Ft. Myers. St. Petersburg Printing Co., St. Petersburg.

Hetherington, Alma

1980 The River of the Long Water. The Mickler House Publishers, Chuluota, Florida.

Historic Property Associates

1995 Architectural & Historical Survey of Fort Lauderdale: Original Town Limits. November, 1995.

## Janus Research

- 2016a Cultural Resources Desktop Analysis for Palm Beach County's Safe Routes to School Local Agency Program (LAP) Project, Palm Beach County, Florida. Manuscript on file at the Florida Division of Historic Resources, Tallahassee, Florida.
- 2016b CRAS for SR 9/I-95 at Central Boulevard Interchange PD&E. Manuscript on file at the Florida Division of Historic Resources, Tallahassee, Florida.
- 2017a Cultural Resource Desktop Analysis and Field Review for the Installation of Emergency Signal for the Woodbine Fire Station. Manuscript on file at the Florida Division of Historic Resources, Tallahassee, Florida.
- 2017b CRAS Reevaluation of SR 9/I-95 at SR 808/Glades Road. Manuscript on file at the Florida Division of Historic Resources, Tallahassee, Florida.
- 2017c Site file for Military Trail (8PB13795). On file at the Florida Division of Historic Resources, Tallahassee, Florida.

## Kemper, Marilyn

- 1981 Broward County Comprehensive Survey: Phase I: Historic Broward County Preservation Board. On file Division of Historical Resources, Tallahassee.

## Lane, Ed

- 1980 Environmental Geology Series West Palm Beach Sheet. Florida Bureau of Geology Map Series No. 100, Tallahassee.

## Lane, E. M., S. Knapp and T. Scott

- 1980 Environmental Geology Series: Fort Pierce Sheet. Florida Bureau of Geology Map Series No. 80, Tallahassee.

## Laxson, D. D.

- 1966 The Turner River Jungle Gardens Site, Collier County, Florida. The Florida Anthropologist 19:125-140.

## Lee, Arthur R., and John Beriault (with Walter Buschelman and Jean Belknap)

- 1993 A Small Site—Mulberry Midden, 8Cr697—Contributes to Knowledge of Transitional Period. The Florida Anthropologist 46:43-52.

Lee, Arthur R., John G. Beriault, Jean Belknap, Walter M. Buschelman, John W. Thompson, and Carl B. Johnson

1998 Heineken Hammock, 8CR231: A Late Archaic Corridor Site in Collier County. *The Florida Anthropologist* 51(4):223-239.

McGoun, Bill

1978 A History of Broward County. *Broward Legacy*, Volume 2, Numbers 3–4.

McMichael, Alan

1982 A Cultural Resource Assessment of Horrs Island, Collier County, Florida. Miscellaneous Project Report Series Number 15. Department of Anthropology, Florida State Museum, Gainesville.

Mahon, John K.

1967 History of the Second Seminole War. University of Florida Press, Gainesville.

Masson, Marilyn A., Robert S. Carr, and Debra S. Goldman

1988 The Taylor's Head Site (8BD74): Sampling a Prehistoric Midden on an Everglades Tree Island. *The Florida Anthropologist* 41(3):336-350.

Milanich, Jerald T.

1978 The Western Timucua: Patterns of Acculturation and Change. In *Tacachale: Essays on the Indians of Florida and Southeastern Georgia during the Historic Period*, pp. 59–88. The University Presses of Florida, Gainesville.

1994 Archaeology of Precolumbian Florida. University Presses of Florida, Gainesville.

Milanich, Jerald T., Jefferson Chapman, Ann S. Cordell, Stephen Hale, and Rochelle A. Marrinan

1984 Prehistoric Development of Calusa Society in Southwest Florida: Excavations on Useppa Island. In *Perspectives on Gulf Coast Prehistory*, edited by David D. Davis, pp. 258–314. Gainesville: University of Florida Press/FMNH.



Miller, James J. (compiler)

1990 State of Florida Draft Comprehensive Historic Preservation Plan. Manuscript on file, Florida Division of Historical Resources, Tallahassee.

Mowers, Bert, and Wilma B. Williams

1972 The Peace Camp Site, Broward County, Florida. *The Florida Anthropologist* 25:1-20.

Murphy, Larry E., and Linda Scott Cummings

1990 8SL17: Natural Site-Formation Processes of a Multiple Component Underwater Site in Florida. Southwest Cultural Resources Center Professional Papers No. 39,

Nance, Ellwood C.

1962 The East Coast of Florida, A History, Volume I. The Southern Publishing Company, Delray Beach.

Neill, Wilfred T.

1958 A Stratified Early Site at Silver Springs, Florida. *The Florida Anthropologist* 12:33-52.

Nelson, Martha

1963 Weed Patch to 161,867 Landings. *Miami Herald*, 27 January 1963.

Parks, Arva Moore

1982 Archaeology and History of the Granada Site, Volume II, Where the River Found the Bay: Historical Study of the Granada Site, Miami, Florida. Florida Department of State, Division of Archives, History and Records Management, Tallahassee.

Pepe, James P.

2000 An Archaeological Survey of St. Lucie County, Florida. AHC Technical Report #280. Archaeological and Historical Conservancy, Miami. Copies available from Florida Division of Historical Resources, Tallahassee.

Pepe, James P., and Alison Elgart

2006 Strombus Celt Caches in Southern Florida: A Functional Interpretation. Paper presented at the 58th Annual Meeting of the Florida Anthropological Society, Stuart.

Pepe, James, and Linda Jester

1995 An Archaeological Survey and Assessment of the Mt. Elizabeth Site, 8Mt30, Martin County, Florida. AHC Technical Report #126, Miami.

Purdy, Barbara Ann

1981 Florida's Prehistoric Stone Tool Technology. University of Florida Press, Gainesville.

Purdy, Barbara A., and Laurie M. Beach

1980 The Chipped Stone Tool Industry of Florida's Preceramic Archaic. Archaeology of Eastern North America 8:105–124.

Ruppe, Reynold J.

1980 The Archaeology of Drowned Terrestrial Sites: A Preliminary Report. Florida Bureau of Historic Sites and Properties Bulletin 6:35–45.

Russo, Michael

1991 Archaic Sedentism on the Florida Coast: A Case Study from Horr's Island. Ph.D. dissertation, University of Florida, Gainesville.

Russo, Michael, and Gregory Heide

2002 The Joseph Reed Shell Ring. The Florida Anthropologist 55(2):55–87.

Schwadron, Margo

2006 Everglades Tree Islands Prehistory: Archaeological Evidence for Regional Holocene Variability and Early Human Settlement. Antiquity 80(310). Electronic document, <http://antiquity.ac.uk/projgall/schwadron/index.html>.

Scott, Thomas M.

1978 Environmental Geology Series: Orlando Sheet. Florida Bureau of Geology Map Series No. 85, Tallahassee.

Sears, William H.

1956 The Turner River Site, Collier County, Florida. *The Florida Anthropologist* 9:47–60.

1982 Fort Center: An Archaeological Site in the Lake Okeechobee Basin. Ripley P. Bullen Monographs in Anthropology and History No. 4. University Presses of Florida, Gainesville.

Shepard Associates

1981 An Architectural Survey of the City of Hollywood, Florida. In Broward County Comprehensive Survey: Phase I pp. II:ii–II:140.

Tebeau, Charlton W.

1971 A History of Florida. University of Miami Press, Miami.

TenEick, Virginia Elliot

1989 History of Hollywood (1920 to 1950), Reprinted. Published by Patricia M. Smith and Florida Classics Library, Port Solerno, Florida. Originally published in 1966 by the City of Hollywood, Florida.

Tischendorf, A. P.

1954 Florida and the British Investor: 1880–1914. *Florida Historical Quarterly* 33(2):120–129.

United States Department of Agriculture (USDA)

1984 Soil Survey of Broward County, Florida, Eastern Part. United States Department of Agriculture/Natural Resources Conservation Service.

University of Florida, George A. Smathers Libraries

2016 Aerial Photography: Florida Collection. University of Florida Digital Collections. Electronic documents, <http://ufdc.ufl.edu/aerials>, accessed October 24, 2016.

Upchurch, Sam B., Richard N. Strom, and Mark G. Nuckels

1982 Methods of Provenance Determination of Florida Cherts. Manuscript on file, Florida Division of Historical Resources, Tallahassee.

Van Beck, J. C., and L. M. Van Beck

1965 The Marco Midden, Marco Island, Florida. *The Florida Anthropologist* 18:1–20.

Waller, Benjamin I., and James Dunbar

1977 Distribution of Paleo Indian Projectiles in Florida. *The Florida Anthropologist* 30:79–80.

Watts, William A.

1969 A Pollen Diagram from Mud Lake, Marion County, North-central Florida. *Geological Society of America, Bulletin* 80:631–642.

1971 Post-Glacial and Interglacial Vegetation History of Southern Georgia and Central Florida. *Ecology* 52:676–689.

1975 A Late Quaternary Record of Vegetation from Lake Anne, South-Central Florida. *Geology* 3:344–346.

1980 Late Quaternary Vegetation History at White Pond on the Inner Coastal Plain of South Carolina. *Quaternary Research* 13:187–199.

1983 Vegetational History of the Eastern United States 25,000 to 10,000 Years Ago. In *Late Quaternary Environments of the United States*, edited by H. E. Wright, Jr., Vol. 1, pp. 294–310. University of Minnesota Press, Minneapolis.

Watts, William A., and Barbara C. S. Hansen

1988 Environments of Florida in the Late Wisconsin and Holocene. In *Wet Site Archaeology*, edited by Barbara A. Purdy, pg. 307–323. The Telford Press, Caldwell, New Jersey.

Watts, W. A., and M. Stuiver

1980 Late Wisconsin Climate of Northern Florida and the Origin of Species Rich Deciduous Forest. *Science* 210:325–327.



Weaver, Paul L. III, Historic Property Associates, Inc., and Pappas Associates, Inc.

1996 Model Guidelines for Design Review: A Guide for Developing Standards for Historic Rehabilitation on Florida Communities. Florida Department of State, Division of Historic Resources, Tallahassee.

Webb, S. David

1990 Historical Biogeography. In *Ecosystems of Florida*, edited by Ronald L. Myers and John J. Ewel, pp. 70-100. University of Central Florida Press, Orlando.

Wheeler, Ryan J.

1994 Cultural Resources Survey and Assessment of the Proposed Farr Prison Site, Okeechobee County, Florida. Environmental Management Systems, Inc. Submitted to Richard T. Creech, Inc. Manuscript on file, Florida Division of Historical Resources, Tallahassee.

2004 Southern Florida Sites associated with the Tequesta and their Ancestors: National Historic Landmark/National Register of Historic Places Theme Study, Florida Division of Historical Resources, Tallahassee.

Wheeler, Ryan J., Wm. Jerald Kennedy, and James P. Pepe

2002 The Archaeology of Coastal Palm Beach County. *The Florida Anthropologist* 55(3-4):119-156.

White, William A.

1970 The Geomorphology of the Florida Peninsula. Geological Bulletin No. 51, Bureau of Geology, State of Florida Department of Natural Resources.

Widmer, Randolph J.

1988 The Evolution of the Calusa, A Non-Agricultural Chiefdom on the Southwest Florida Coast. University of Alabama Press, Tuscaloosa.

Wright, H. E., Jr.

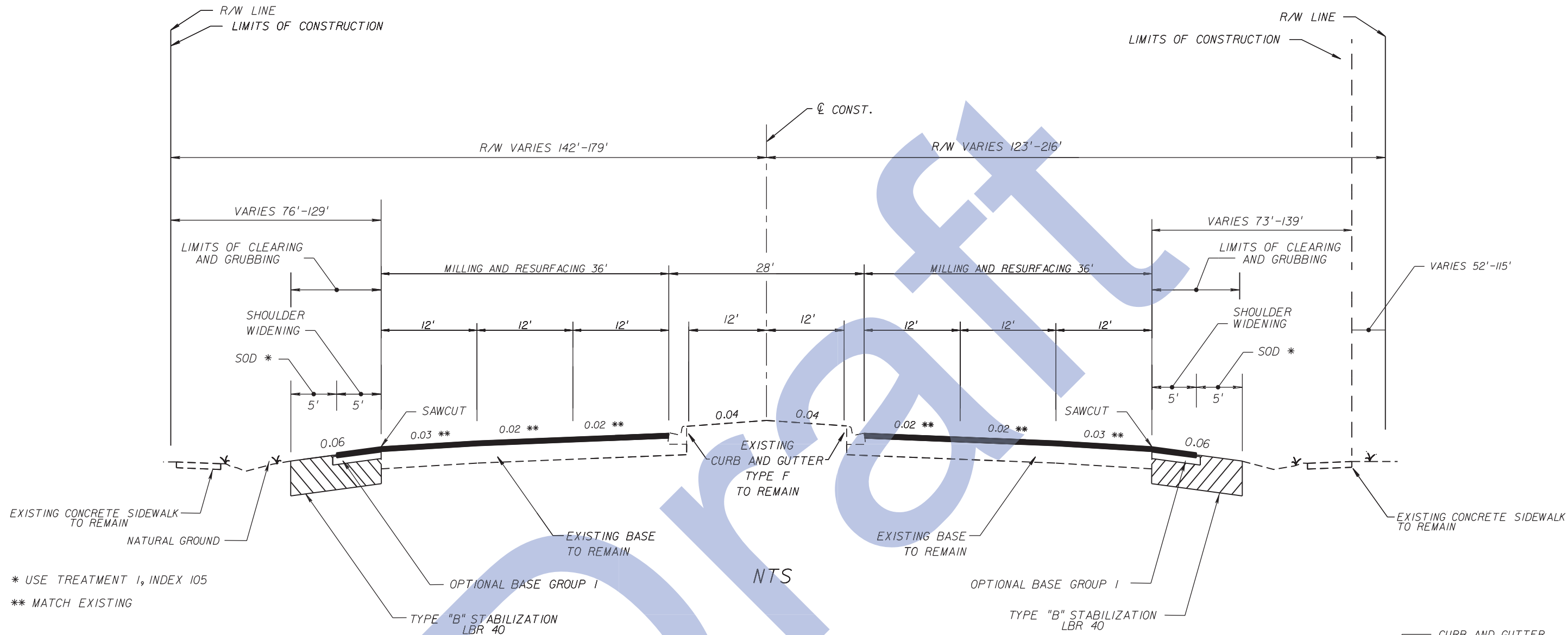
1981 Vegetation East of the Rocky Mountains 18,000 Years Ago. *Quaternary Research* 15(2):113-125.

Wright, Leitch J.

1986 Creeks and Seminoles, Destruction and Regeneration of the Muscogulgee People.

University of Nebraska Press, Lincoln.

## Appendix A: Existing Typical Sections



\* USE TREATMENT 1, INDEX 105  
\*\* MATCH EXISTING

**TRAFFIC DATA**

CURRENT YEAR = 2009 AADT = 40500  
ESTIMATED OPENING YEAR = 2014 AADT = 47000  
ESTIMATED DESIGN YEAR = 2034 AADT = 58300  
K = 8.63% D = 55.75% T = 5.15% (24 HOUR)  
DESIGN HOUR T = 1%  
DESIGN SPEED = 45 MPH

**MILLING**

MILL EXISTING ASPHALT PAVEMENT (1" AVG. DEPTH)

**RESURFACING**

FRICTION COURSE FC-9.5 (TRAFFIC C)(1") (RUBBER)

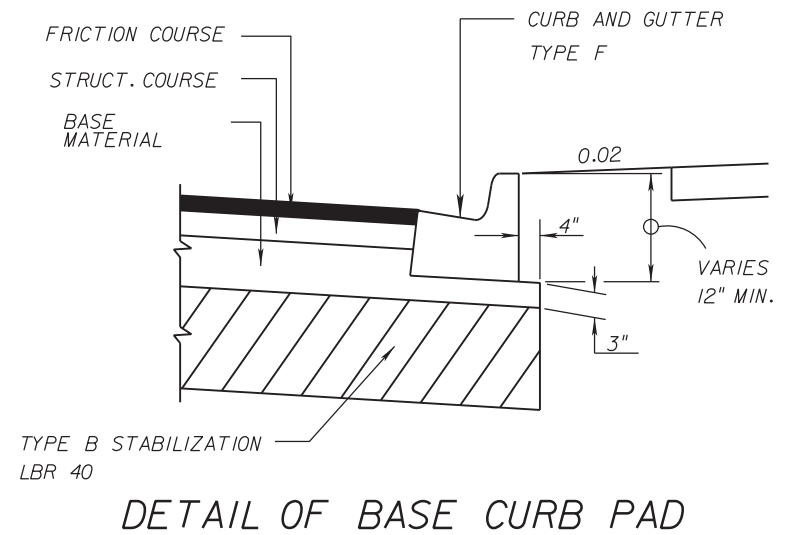
**SHOULDER WIDENING**

OPTIONAL BASE GROUP I (TYPE B-12.5)  
FRICTION COURSE FC-9.5 (TRAFFIC C)(1") (RUBBER)

**ROADWAY WIDENING**

OPTIONAL BASE GROUP I5 (TYPE B-12.5)  
SP (TRAFFIC C)(2")  
FRICTION COURSE FC-9.5 (TRAFFIC C)(1") (RUBBER)

**TYPICAL SECTION**  
**SR 869 (S.W. 10th STREET)**  
**STA. 99+00.00 TO STA. 118+00.00**

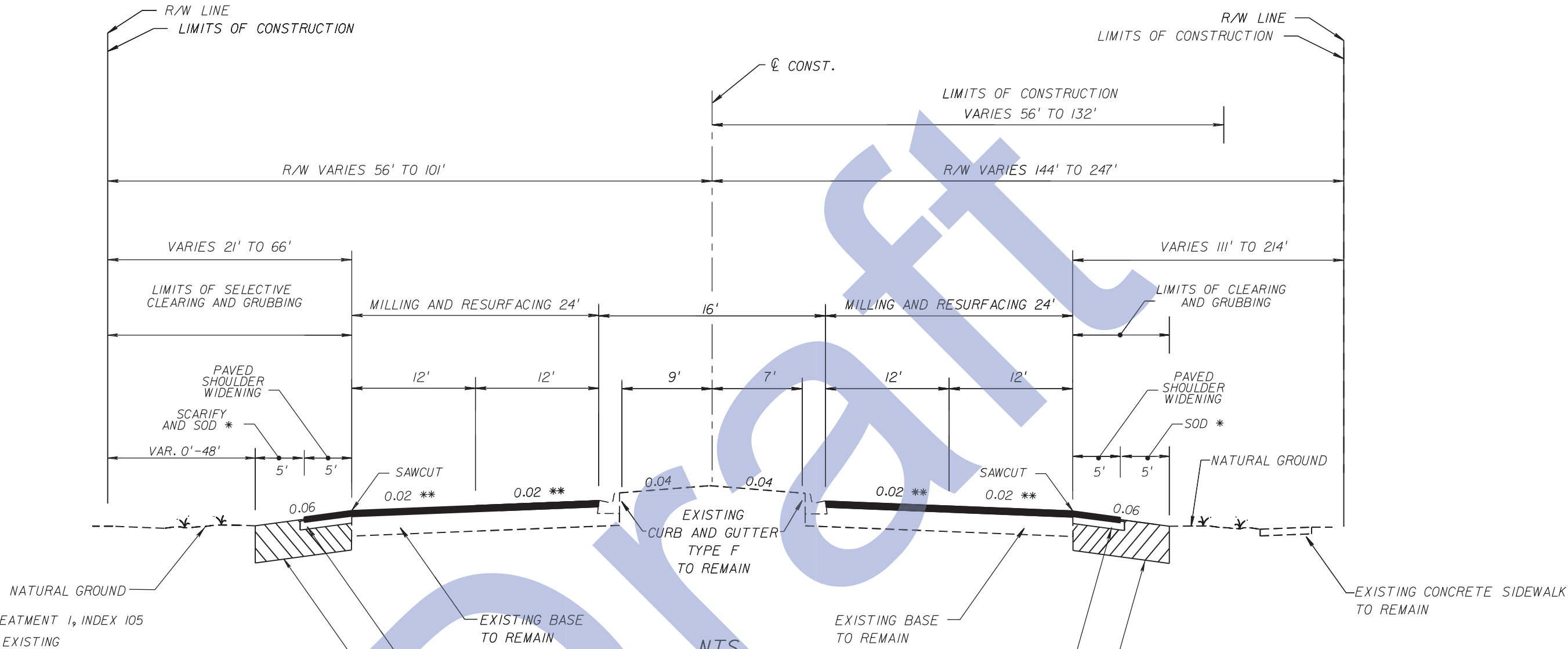


R E V I S I O N S				ENGINEER OF RECORD  SCOTT PETERSON, P.E. P.E. NO. 52740 3400 WEST COMMERCIAL BLVD FORT LAUDERDALE, FL 33309	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TYPICAL SECTIONS	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		4
					869	BROWARD	424665-1-52-01		

TYPICAL SECTIONS

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.





\* USE TREATMENT 1, INDEX 105  
\*\* MATCH EXISTING

TRAFFIC DATA

CURRENT YEAR = 2009 AADT = 40500  
ESTIMATED OPENING YEAR = 2014 AADT = 47000  
ESTIMATED DESIGN YEAR = 2034 AADT = 58300  
K = 8.63% D = 55.75% T = 5.15% (24 HOUR)  
DESIGN HOUR T = 1%  
DESIGN SPEED = 45 MPH

MILLING

MILL EXISTING ASPHALT PAVEMENT (1" AVG. DEPTH)

RESURFACING

FRICTION COURSE FC-9.5 (TRAFFIC C) (1") (RUBBER)

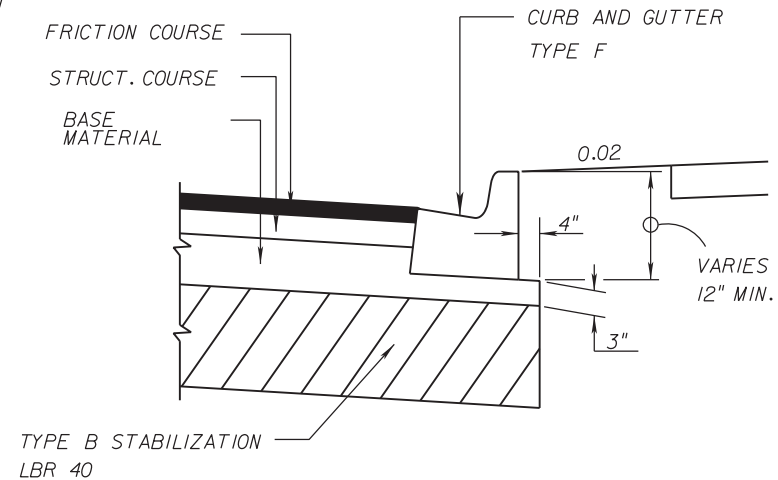
SHOULDER WIDENING

OPTIONAL BASE GROUP 1 (TYPE B-12.5)  
FRICTION COURSE FC-9.5 (TRAFFIC C) (1") (RUBBER)

ROADWAY WIDENING

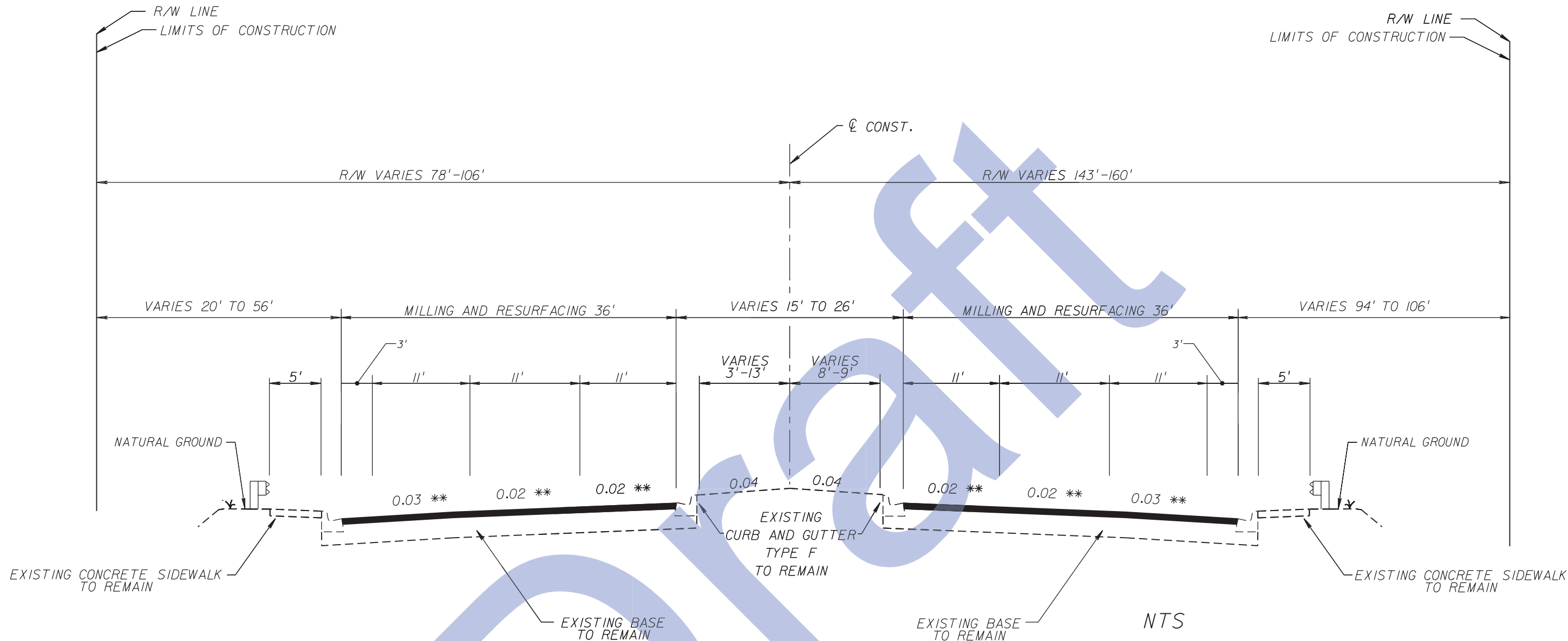
OPTIONAL BASE GROUP 15 (TYPE B-12.5)  
SP (TRAFFIC C) (2")  
FRICTION COURSE FC-9.5 (TRAFFIC C) (1") (RUBBER)

TYPICAL SECTION  
SR 869 (S.W. 10th STREET)  
STA. 118+00.00 TO STA. 175+00.00



DETAIL OF BASE CURB PAD

R E V I S I O N S				E N G I N E E R   O F   R E C O R D	S T A T E   O F   F L O R I D A			S H E E T N O .	
D A T E	D E S C R I P T I O N	D A T E	D E S C R I P T I O N	D E P A R T M E N T   O F   T R A N S P O R T A T I O N					
				R O A D   N O .	C O U N T Y	F I N A N C I A L   P R O J E C T   I D			
				S C O T T   P E T E R S O N ,   P . E . P . E .   N O .   5 2 7 4 0 3 4 0 0   W E S T   C O M M E R C I A L   B L V D F O R T   L A U D E R D A L E ,   F L   3 3 3 0 9	8 6 9	B R O W A R D	4 2 4 6 6 5 - 1 - 5 2 - 0 1	T Y P I C A L   S E C T I O N S	5



**TRAFFIC DATA**

CURRENT YEAR = 2009 AADT = 40500  
ESTIMATED OPENING YEAR = 2014 AADT = 47000  
ESTIMATED DESIGN YEAR = 2034 AADT = 58300  
K = 8.63% D = 55.75% T = 5.15% (24 HOUR)  
DESIGN HOUR T = 1%  
DESIGN SPEED = 45 MPH

**MILLING**

MILL EXISTING ASPHALT PAVEMENT (1" AVG. DEPTH)

**RESURFACING**

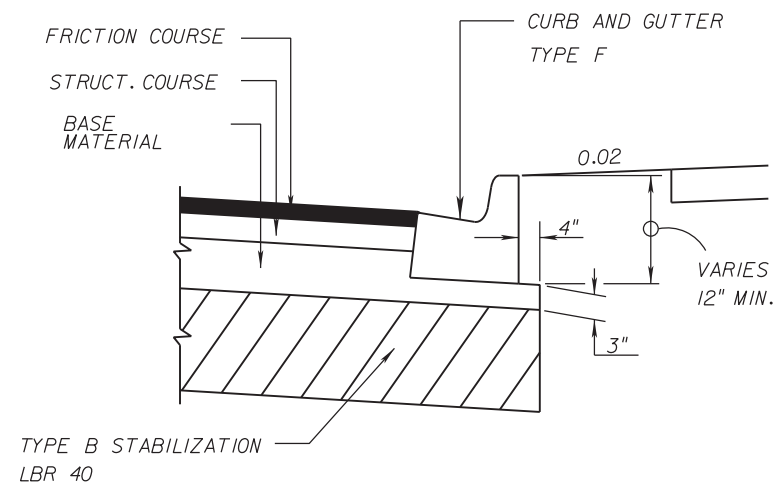
FRICTION COURSE FC-9.5 (TRAFFIC C)(1") (RUBBER)

**ROADWAY WIDENING**

OPTIONAL BASE GROUP 15 (TYPE B-12.5)  
SP (TRAFFIC C)(2")  
FRICTION COURSE FC-9.5 (TRAFFIC C)(1") (RUBBER)

**TYPICAL SECTION**  
**SR 869 (S.W. 10th STREET)**  
**STA. 175+00.00 TO STA. 195+60.00**

NTS



**DETAIL OF BASE CURB PAD**

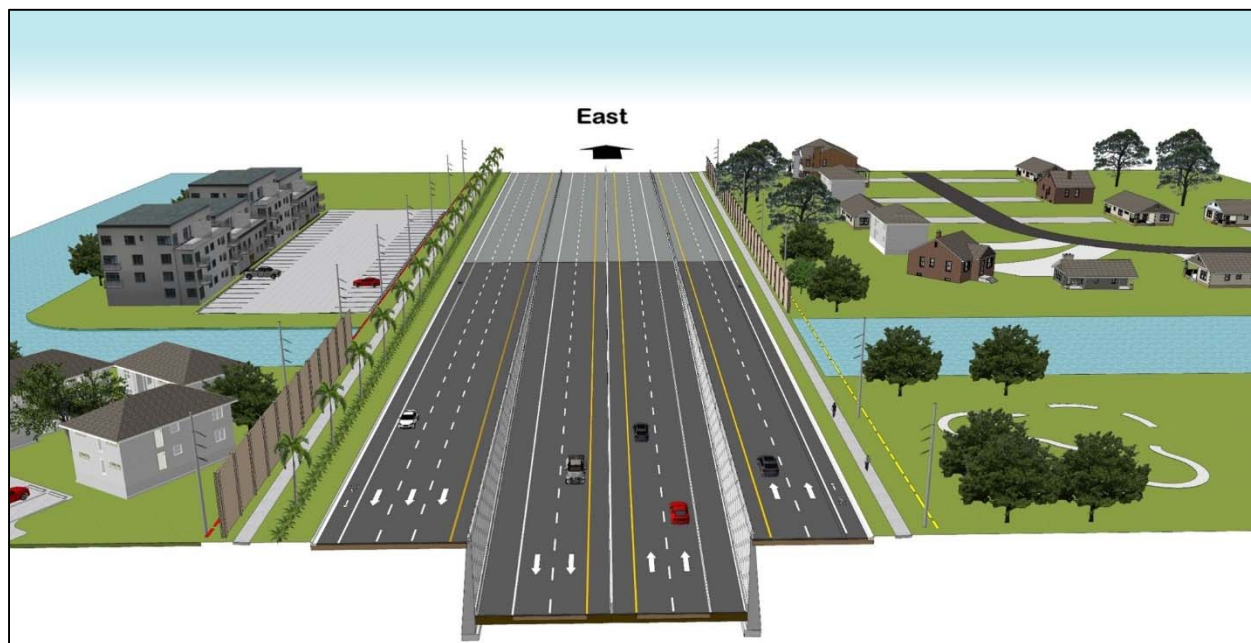
R E V I S I O N S				ENGINEER OF RECORD  SCOTT PETERSON, P.E. P.E. NO. 52740 3400 WEST COMMERCIAL BLVD FORT LAUDERDALE, FL 33309	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TYPICAL SECTIONS	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		6
					869	BROWARD	424665-1-52-01		

**TYPICAL SECTIONS**

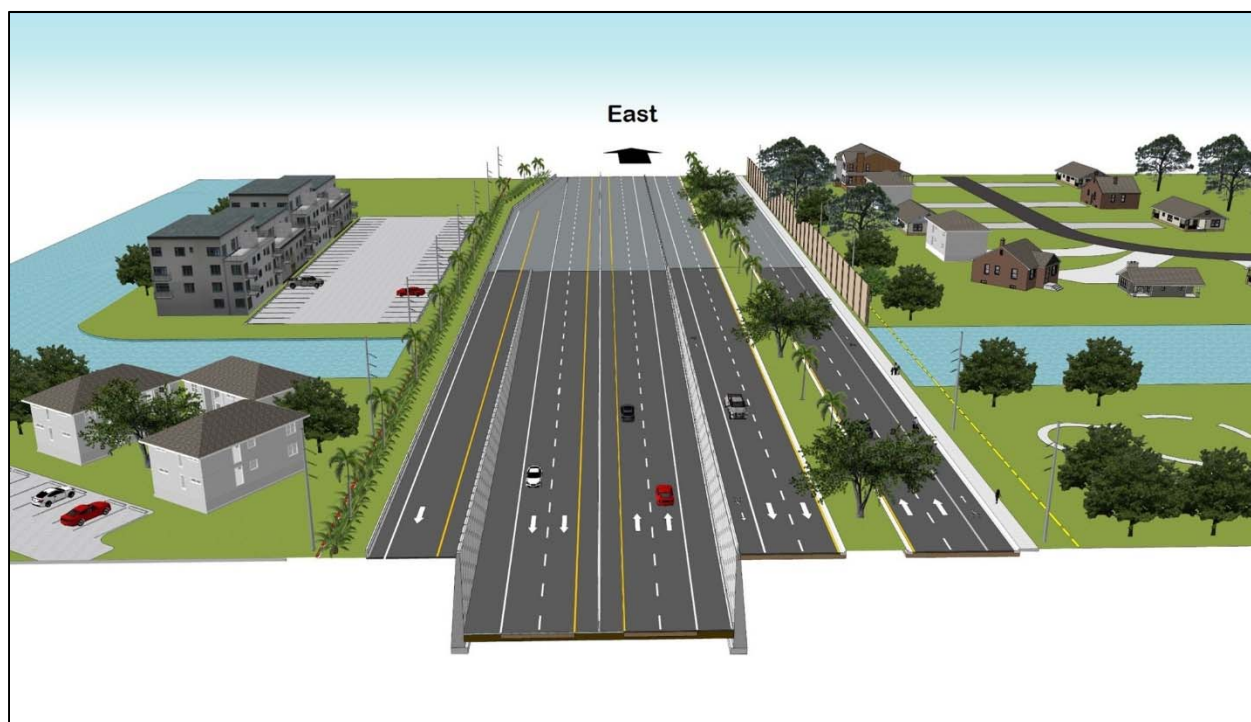
NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

## Appendix B:

### Proposed Typical Sections



Center Alignment



North Alignment



## Appendix C:

### Florida Master Site File Form

☒ Original  
☐ Update



# HISTORICAL STRUCTURE FORM

## FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **BD06685**  
 Field Date 5-14-18  
 Form Date 5-30-18  
 Recorder # 1

Shaded Fields represent the minimum acceptable level of documentation.  
 Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 3165-3175 SW 10th Street Multiple Listing (DHR only) \_\_\_\_\_  
 Survey Project Name SR 869 SW 10th St from Powerline Rd-Military Tr Survey # (DHR only) \_\_\_\_\_  
 National Register Category (please check one) ☒ building ☐ structure ☐ district ☐ site ☐ object  
 Ownership: ☒ private-profit ☐ private-nonprofit ☐ private-individual ☐ private-nonspecific ☐ city ☐ county ☐ state ☐ federal ☐ Native American ☐ foreign ☐ unknown

### LOCATION & MAPPING

Street Number 3165-3175 Direction SW Street Name 10th Street Type Street Suffix Direction \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Cross Streets (nearest / between) N side btwn Powerline Rd and SW 30th Ave  
 USGS 7.5 Map Name WEST DIXIE BEND USGS Date 1983 Plat or Other Map \_\_\_\_\_  
 City / Town (within 3 miles) Deerfield Beach In City Limits? ☒ yes ☐ no ☐ unknown County Broward  
 Township 48S Range 42E Section 3 ¼ section: ☐ NW ☐ SW ☐ SE ☐ NE Irregular-name: \_\_\_\_\_  
 Tax Parcel # 484203250010 Landgrant \_\_\_\_\_  
 Subdivision Name \_\_\_\_\_ Block \_\_\_\_\_ Lot \_\_\_\_\_  
 UTM Coordinates: Zone ☐ 16 ☒ 17 Easting 584936 Northing 2909741  
 Other Coordinates: X: \_\_\_\_\_ Y: \_\_\_\_\_ Coordinate System & Datum \_\_\_\_\_  
 Name of Public Tract (e.g., park) \_\_\_\_\_

### HISTORY

Construction Year: 1965 ☒ approximately ☐ year listed or earlier ☐ year listed or later  
 Original Use Storage building From (year): 1965 To (year): \_\_\_\_\_  
 Current Use Storage building From (year): \_\_\_\_\_ To (year): 2018  
 Other Use \_\_\_\_\_ From (year): \_\_\_\_\_ To (year): \_\_\_\_\_  
 Moves: ☐ yes ☒ no ☐ unknown Date: \_\_\_\_\_ Original address \_\_\_\_\_  
 Alterations: ☒ yes ☐ no ☐ unknown Date: various Nature repl roof; ext refinished; encl garages  
 Additions: ☒ yes ☐ no ☐ unknown Date: 1970s Nature S side add  
 Architect (last name first): \_\_\_\_\_ Builder (last name first): \_\_\_\_\_  
 Ownership History (especially original owner, dates, profession, etc.) \_\_\_\_\_

Is the Resource Affected by a Local Preservation Ordinance? ☐ yes ☒ no ☐ unknown Describe \_\_\_\_\_

### DESCRIPTION

Style Masonry Vernacular Exterior Plan \_\_\_\_\_ Number of Stories 1  
 Exterior Fabric(s) 1. Concrete block 2. Stucco 3. \_\_\_\_\_  
 Roof Type(s) 1. Flat 2. Gable 3. \_\_\_\_\_  
 Roof Material(s) 1. Tar & gravel 2. Composition roll 3. \_\_\_\_\_  
 Roof secondary strucs. (dormers etc.) 1. \_\_\_\_\_ 2. \_\_\_\_\_  
 Windows (types, materials, etc.) S-facing single fixed window  
 Distinguishing Architectural Features (exterior or interior ornaments) roof vents, E-facing concrete ledges/overhangs over large rolling garage doors  
 Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) Long N and S-facing CB carport w/ flat tar and gravel roof to the NE; CB storage space w/ carport to NE w/ tar-and-gravel flat roof

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date _____	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

## DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. \_\_\_\_\_ 2. \_\_\_\_\_  
 Structural System(s): 1. Concrete block 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 Foundation Type(s): 1. Continuous 2. \_\_\_\_\_  
 Foundation Material(s): 1. Concrete Block 2. \_\_\_\_\_  
 Main Entrance (stylistic details) Three large rolling garage bays on E side

Porch Descriptions (types, locations, roof types, etc.) None observed

Condition (overall resource condition): ☐ excellent ☒ good ☐ fair ☐ deteriorated ☐ ruinous

Narrative Description of Resource This Masonry Vernacular storage property has some alterations and additions. There are two outbuildings on the parcel that are very deteriorated and seem to be neglected or abandoned.

Archaeological Remains \_\_\_\_\_ ☐ Check if Archaeological Form Completed

## RESEARCH METHODS (check all that apply)

☒ FMSF record search (sites/surveys) ☐ library research ☐ building permits ☐ Sanborn maps  
☐ FL State Archives/photo collection ☐ city directory ☐ occupant/owner interview ☐ plat maps  
☒ property appraiser / tax records ☐ newspaper files ☐ neighbor interview ☐ Public Lands Survey (DEP)  
☒ cultural resource survey (CRAS) ☐ historic photos ☐ interior inspection ☐ HABS/HAER record search  
☒ other methods (describe) Historic Aerials

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) \_\_\_\_\_

## OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? ☐ yes ☒ no ☐ insufficient information  
 Appears to meet the criteria for National Register listing as part of a district? ☐ yes ☒ no ☐ insufficient information  
 Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This storage building has a common style for South Florida. Due to several alterations and a lack of historical significance, the building is considered ineligible for listing in the National Register.

Area(s) of Historical Significance (see *National Register Bulletin 15*, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)

1. \_\_\_\_\_ 3. \_\_\_\_\_ 5. \_\_\_\_\_  
 2. \_\_\_\_\_ 4. \_\_\_\_\_ 6. \_\_\_\_\_

## DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

1) Document type Field notes Maintaining organization \_\_\_\_\_  
 Document description \_\_\_\_\_ File or accession #'s \_\_\_\_\_  
 2) Document type Field maps Maintaining organization \_\_\_\_\_  
 Document description \_\_\_\_\_ File or accession #'s \_\_\_\_\_

## RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research  
 Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com  
 (address / phone / fax / e-mail)

## Required Attachments

① USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED

② LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)

③ PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE

If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable).  
 Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

PHOTOGRAPH



PHOTOGRAPH

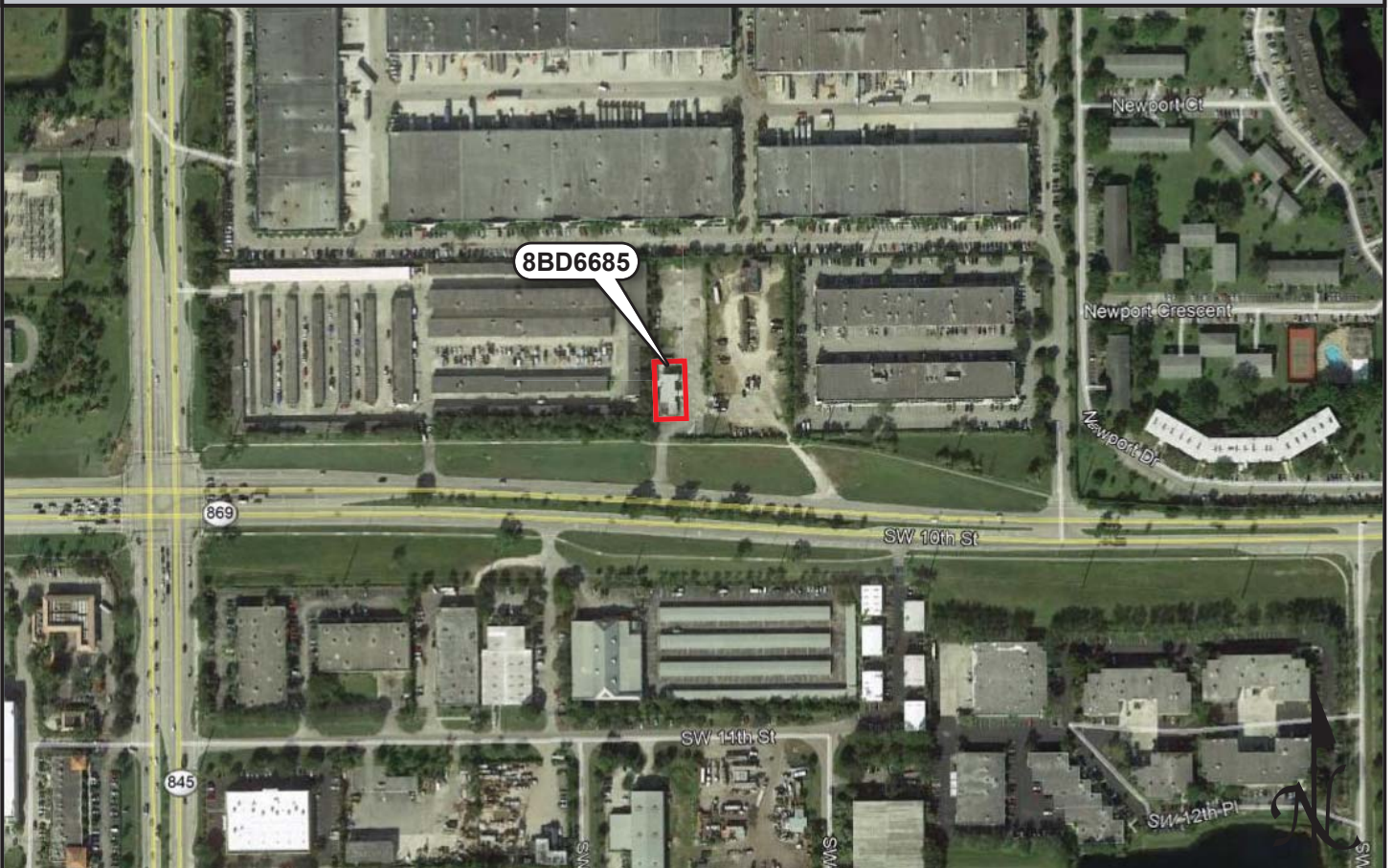




PHOTOGRAPH

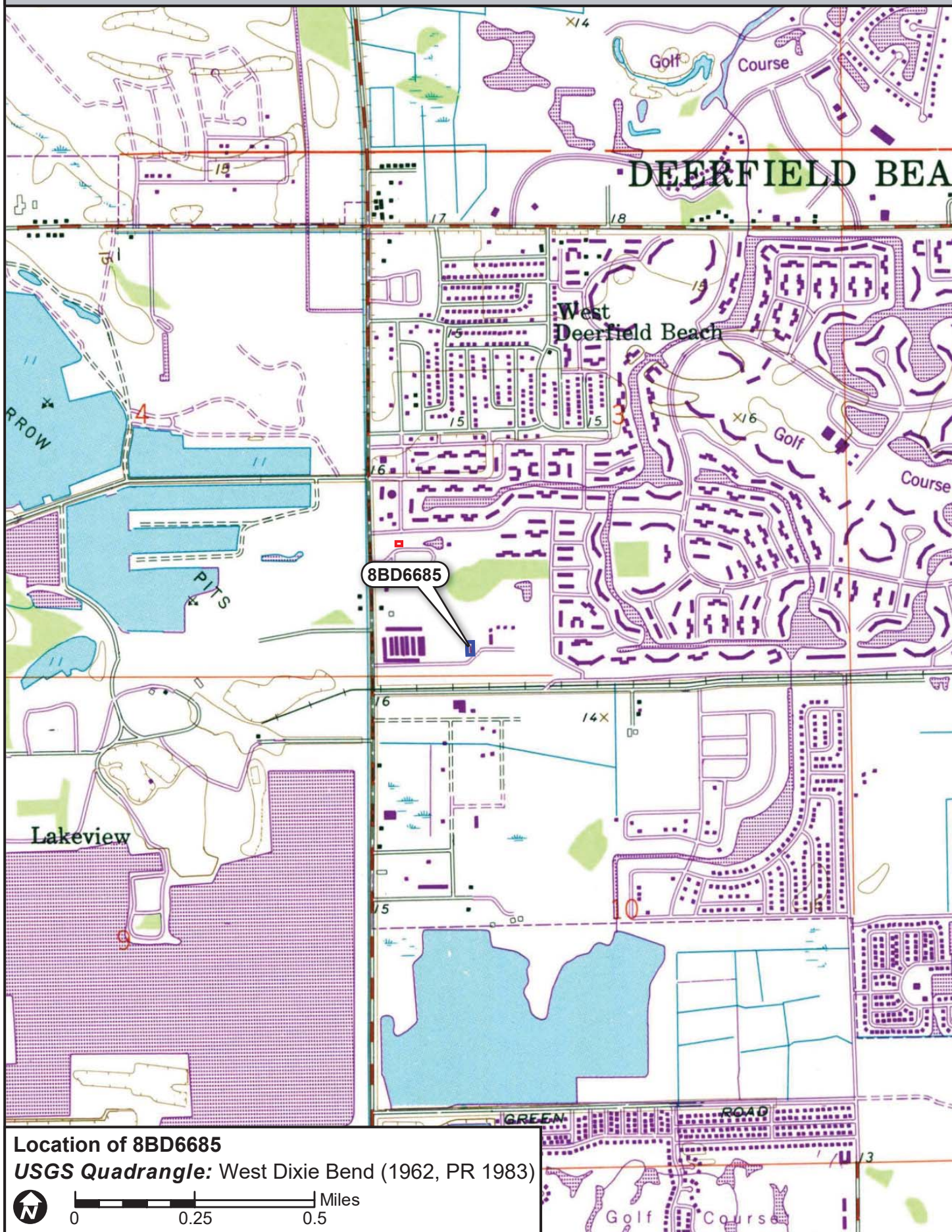


SKETCH MAP



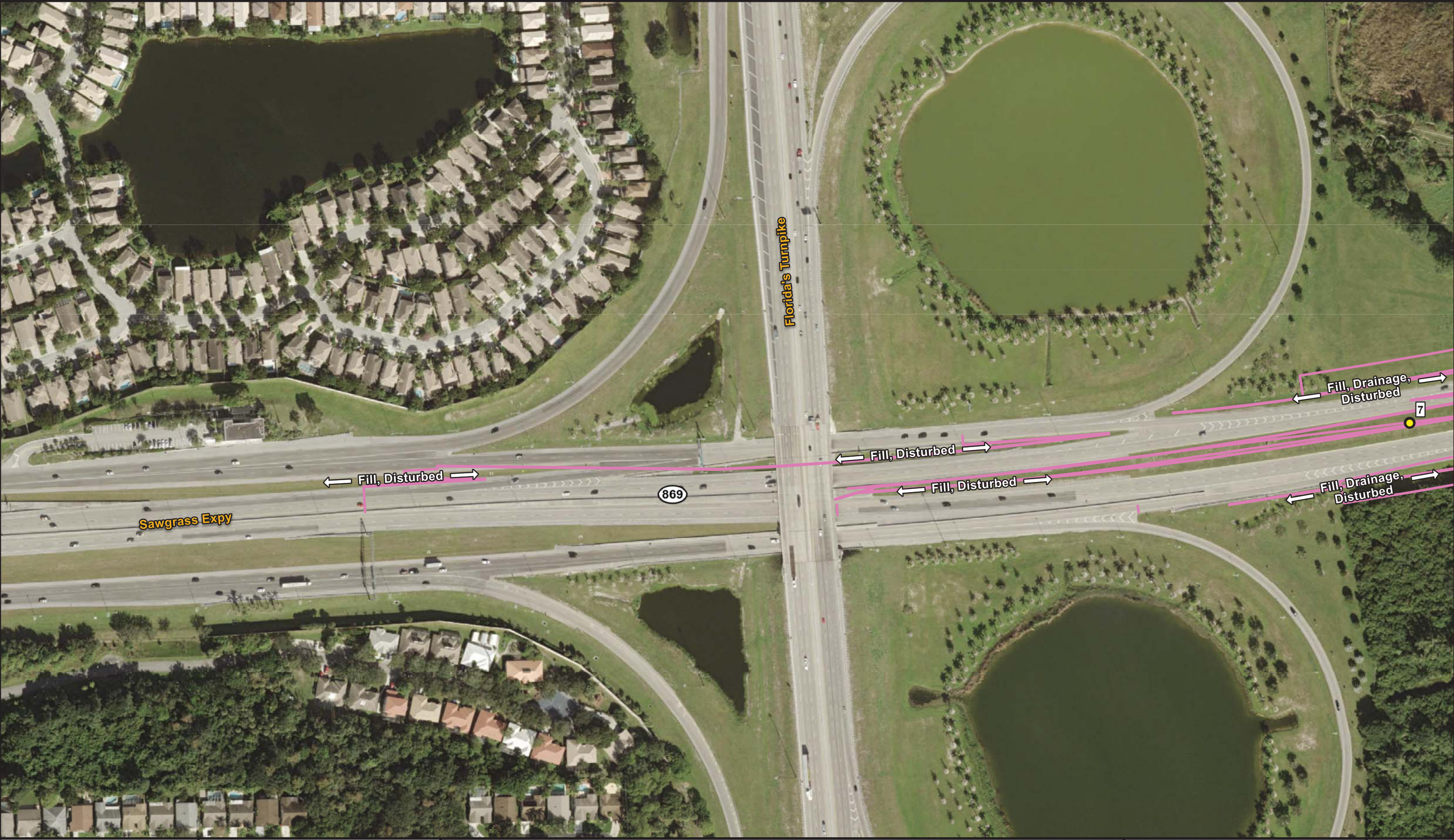


USGS QUADRANGLE MAP



## Appendix D: Shovel Test Maps





<p><b>Shovel Test Map</b></p>	<p>SR 869/SW 10th Street from FL Turnpike to Military Trail PD&amp;E (FM No. 439891-1-22-01, ETDM No. 14291)</p>	<p>— Archaeological APE □ Moderate Probability Zone ● Negative Shovel Test</p>	<p>Broward County</p> <p>0 50 100 Meters</p>	<p><b>Map 1</b></p>
-------------------------------	--	--	--	-------------------------

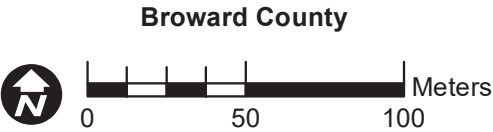




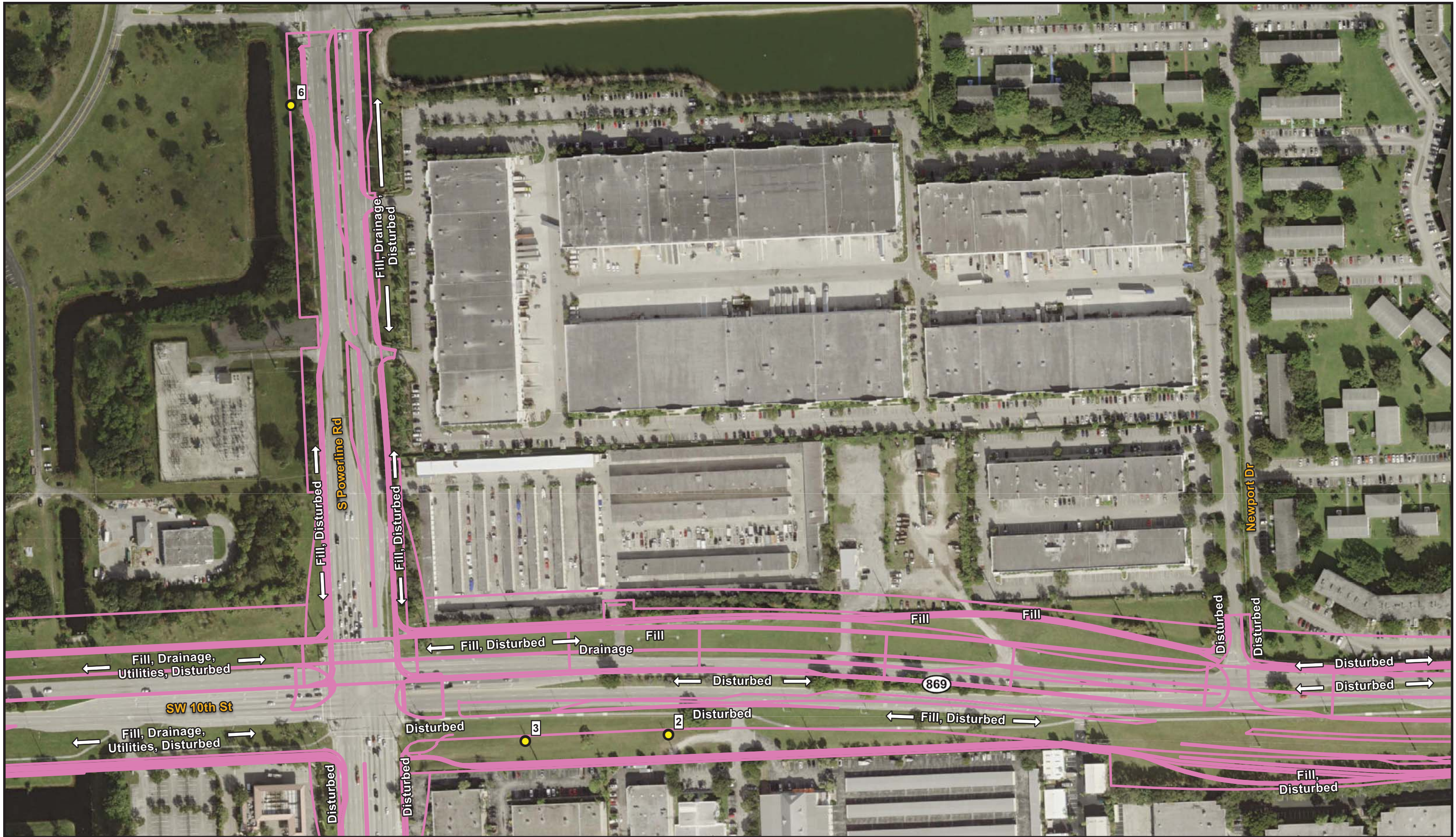
Shovel Test Map

SR 869/SW 10th Street from  
FL Turnpike to Military Trail PD&E  
(FM No. 439891-1-22-01,  
ETDM No. 14291)

- Archaeological APE
- Moderate Probability Zone
- Negative Shovel Test



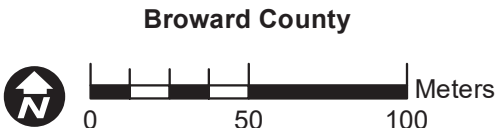




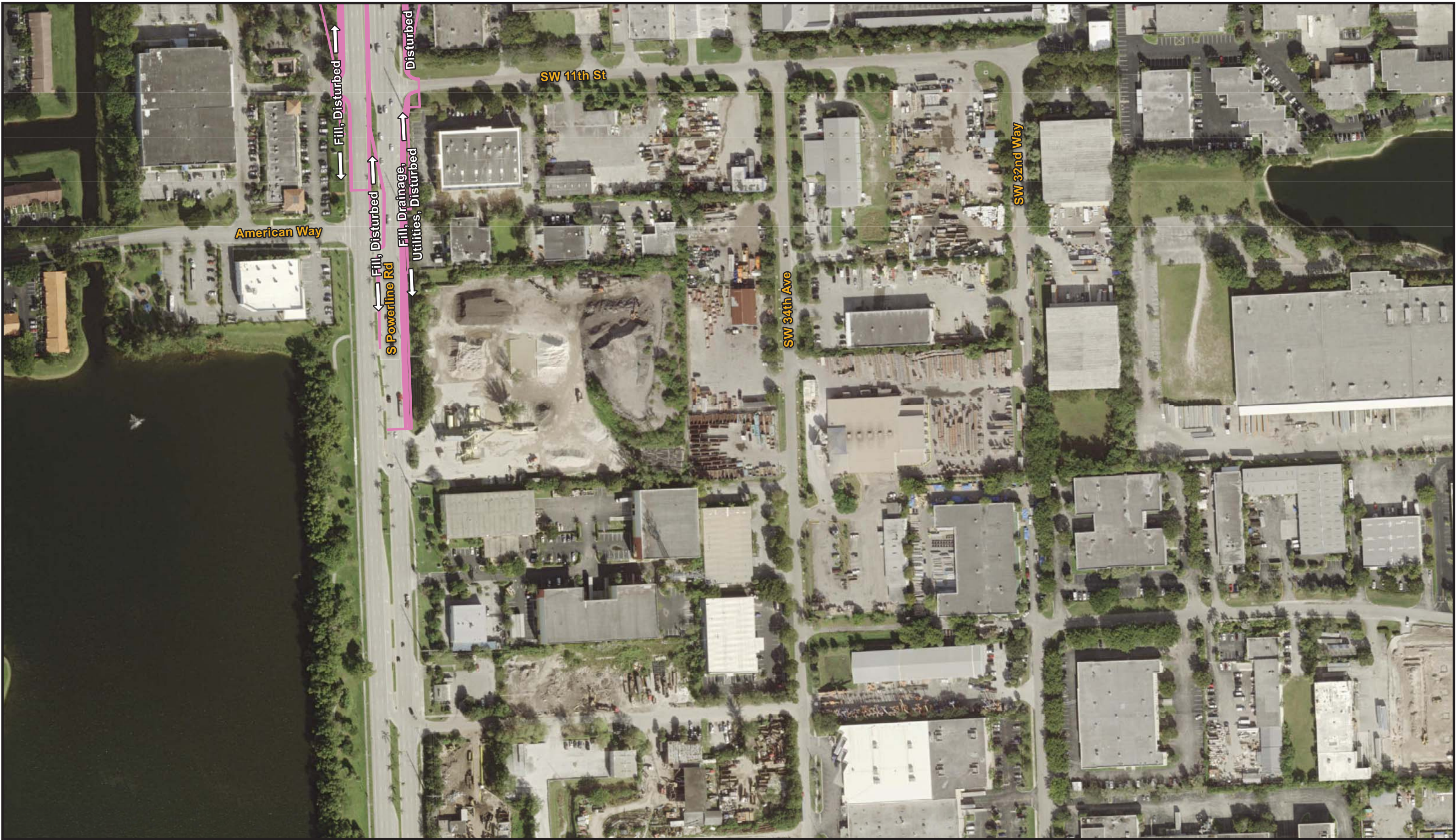
Shovel Test Map

SR 869/SW 10th Street from  
FL Turnpike to Military Trail PD&E  
(FM No. 439891-1-22-01,  
ETDM No. 14291)

- Archaeological APE
- Moderate Probability Zone
- Negative Shovel Test



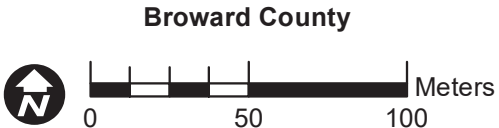




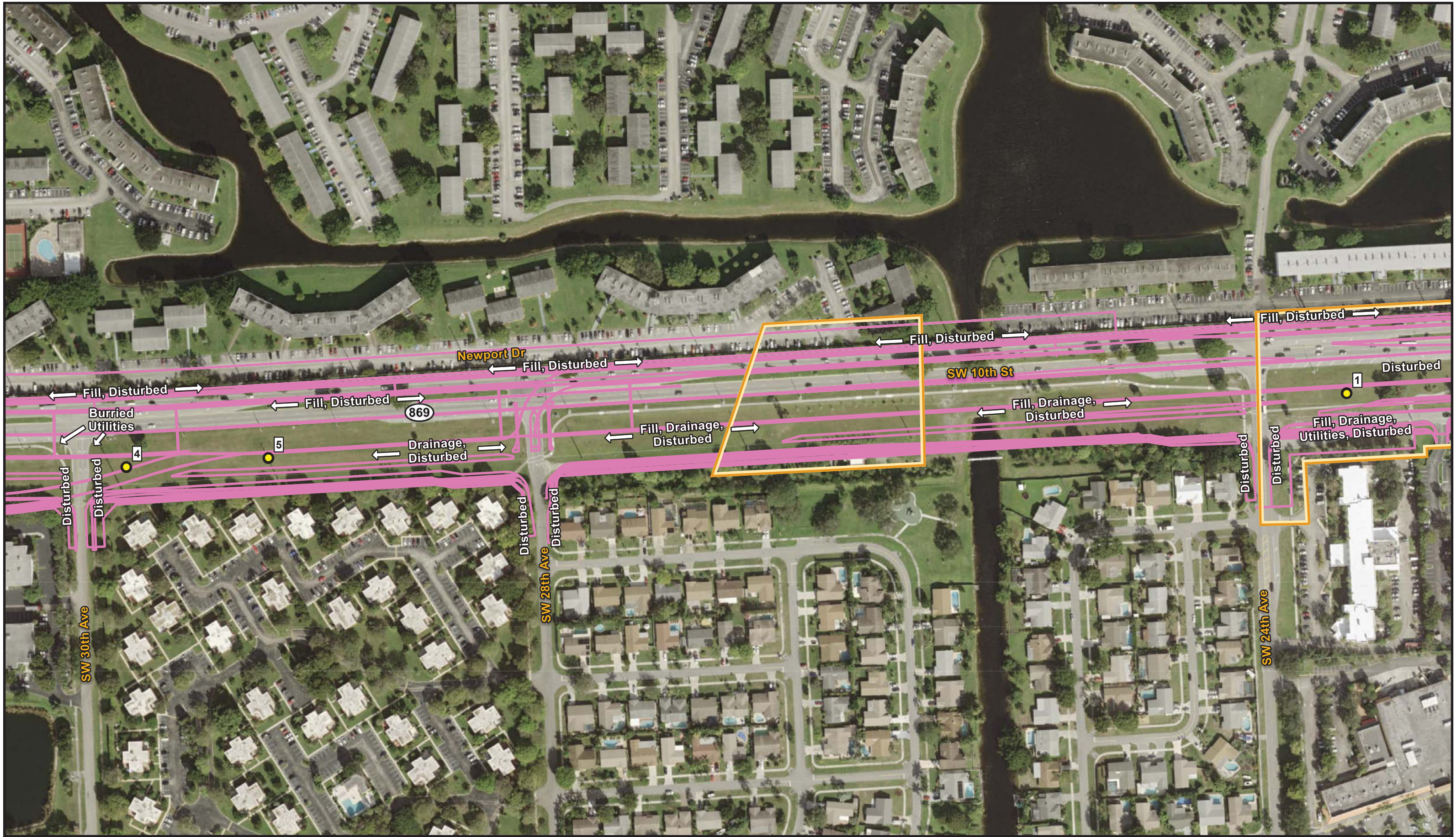
Shovel Test Map

SR 869/SW 10th Street from  
FL Turnpike to Military Trail PD&E  
(FM No. 439891-1-22-01,  
ETDM No. 14291)

- Archaeological APE
- Moderate Probability Zone
- Negative Shovel Test



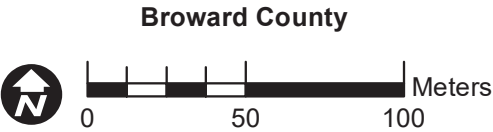




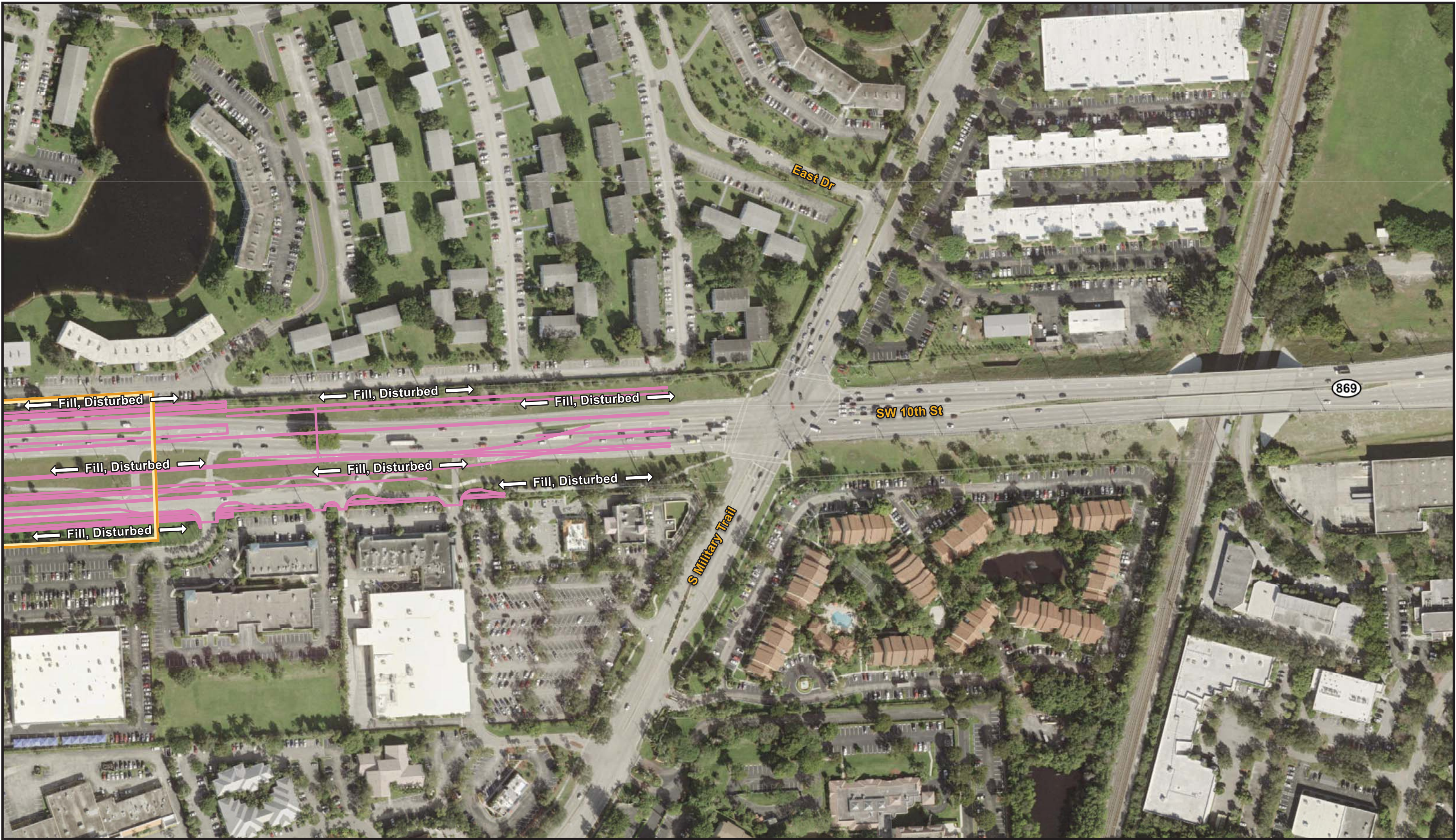
Shovel Test Map

SR 869/SW 10th Street from  
FL Turnpike to Military Trail PD&E  
(FM No. 439891-1-22-01,  
ETDM No. 14291)

- Archaeological APE
- Moderate Probability Zone
- Negative Shovel Test



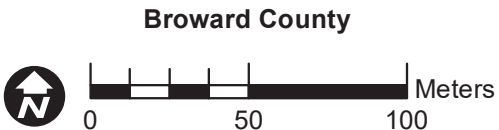




Shovel Test Map

SR 869/SW 10th Street from  
FL Turnpike to Military Trail PD&E  
(FM No. 439891-1-22-01,  
ETDM No. 14291)

- Archaeological APE
- Moderate Probability Zone
- Negative Shovel Test





## Appendix E: Survey Log

Ent D (FMSF only) \_\_\_\_\_



# Survey Log Sheet

Florida Master Site File  
Version 4.1 1/07

Survey # (FMSF only) \_\_\_\_\_

Consult *Guide to the Survey Log Sheet* for detailed instructions.

## Identification and Bibliographic Information

Survey Project (name and project phase) CRAS SW 10th Street

Report Title (exactly as on title page) Cultural Resource Assessment Survey State Road 869/SW 10th Street  
Connector Project Development and Environment (PD&E) Study

Report Authors (as on title page, last names first) 1. Janus Research  
2. \_\_\_\_\_

3. \_\_\_\_\_  
4. \_\_\_\_\_

Publication Date (year) 2018 Total Number of Pages in Report (count text, figures, tables, not site forms) 92

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)  
Janus Research, 1107 N. Ward Street, Tampa FL 33607

Supervisors of Fieldwork (even if same as author) Names Pepe, James P., Streelman, Amy Groover

Affiliation of Fieldworkers: Organization Janus Research City Tampa

Key Words/Phrases (Don't use county name, or common words like *archaeology, structure, survey, architecture, etc.*)

1. SW 10th Street 3. Powerline Road 5. \_\_\_\_\_ 7. \_\_\_\_\_  
2. SR 869 4. Military Trail 6. \_\_\_\_\_ 8. \_\_\_\_\_

Survey Sponsors (corporation, government unit, organization or person directly funding fieldwork)

Name \_\_\_\_\_ Organization Florida Dept of Transportation - District 4

Address/Phone/E-mail 3400 West Commercial Blvd., Fort Lauderdale, Florida, 33309

Recorder of Log Sheet Janus Research Date Log Sheet Completed 6-27-2018

Is this survey or project a continuation of a previous project? ☒ No ☐ Yes: Previous survey #s (FMSF only)

## Mapping

Counties (List each one in which field survey was done; attach additional sheet if necessary)

1. Broward 3. \_\_\_\_\_ 5. \_\_\_\_\_  
2. \_\_\_\_\_ 4. \_\_\_\_\_ 6. \_\_\_\_\_

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)

1. Name WEST DIXIE BEND Year 1983 4. Name \_\_\_\_\_ Year \_\_\_\_\_  
2. Name \_\_\_\_\_ Year \_\_\_\_\_ 5. Name \_\_\_\_\_ Year \_\_\_\_\_  
3. Name \_\_\_\_\_ Year \_\_\_\_\_ 6. Name \_\_\_\_\_ Year \_\_\_\_\_

## Description of Survey Area

Dates for Fieldwork: Start 5-31-2018 End 5-31-2018 Total Area Surveyed (fill in one) \_\_\_\_\_ hectares 101 acres

Number of Distinct Tracts or Areas Surveyed 1

If Corridor (fill in one for each) Width: \_\_\_\_\_ meters \_\_\_\_\_ feet Length: \_\_\_\_\_ kilometers \_\_\_\_\_ miles



## Research and Field Methods

Types of Survey (check all that apply): ☒ archaeological ☒ architectural ☐ historical/archival ☐ underwater  
☐ damage assessment ☐ monitoring report ☐ other(describe): \_\_\_\_\_

Scope/Intensity/Procedures Pedestrian survey; 7 judgmental shovel tests

## Preliminary Methods (check as many as apply to the project as a whole)

☐ Florida Archives (Gray Building) ☐ library research- *local public* ☐ local property or tax records ☐ other historic maps  
☐ Florida Photo Archives (Gray Building) ☐ library-special collection - *nonlocal* ☐ newspaper files ☒ soils maps or data  
☒ Site File property search ☒ Public Lands Survey (maps at DEP) ☐ literature search ☐ windshield survey  
☒ Site File survey search ☐ local informant(s) ☐ Sanborn Insurance maps ☒ aerial photography  
☒ other (describe): Janus Library

## Archaeological Methods (check as many as apply to the project as a whole)

☐ Check here if **NO** archaeological methods were used.

<input type="checkbox"/> surface collection, controlled	<input type="checkbox"/> shovel test-other screen size	<input type="checkbox"/> block excavation (at least 2x2 m)
<input type="checkbox"/> surface collection, <u>un</u> controlled	<input type="checkbox"/> water screen	<input type="checkbox"/> soil resistivity
<input checked="" type="checkbox"/> shovel test-1/4" screen	<input type="checkbox"/> posthole tests	<input type="checkbox"/> magnetometer
<input type="checkbox"/> shovel test-1/8" screen	<input type="checkbox"/> auger tests	<input type="checkbox"/> side scan sonar
<input type="checkbox"/> shovel test 1/16" screen	<input type="checkbox"/> coring	<input checked="" type="checkbox"/> pedestrian survey
<input type="checkbox"/> shovel test-unscreened	<input type="checkbox"/> test excavation (at least 1x2 m)	<input type="checkbox"/> unknown
<input type="checkbox"/> other (describe): _____		

## Historical/Architectural Methods (check as many as apply to the project as a whole)

☐ Check here if **NO** historical/architectural methods were used.

<input type="checkbox"/> building permits	<input type="checkbox"/> demolition permits	<input checked="" type="checkbox"/> neighbor interview	<input type="checkbox"/> subdivision maps
<input type="checkbox"/> commercial permits	<input type="checkbox"/> exposed ground inspected	<input type="checkbox"/> occupant interview	<input type="checkbox"/> tax records
<input type="checkbox"/> interior documentation	<input checked="" type="checkbox"/> local property records	<input type="checkbox"/> occupation permits	<input type="checkbox"/> unknown
<input checked="" type="checkbox"/> other (describe): <u>aerial photography</u>			

## Survey Results (cultural resources recorded)

Site Significance Evaluated? ☒ Yes ☐ No

Count of Previously Recorded Sites 0 Count of Newly Recorded Sites 1

Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8". Attach additional pages if necessary.) \_\_\_\_\_

Newly Recorded Site #'s (Are all originals and not updates? List site #'s without "8". Attach additional pages if necessary.) BD6685

Site Forms Used: ☐ Site File Paper Form ☒ Site File Electronic Recording Form

**\*\*\*REQUIRED: ATTACH PLOT OF SURVEY AREA ON PHOTOCOPY OF USGS 1:24,000 MAP(S)\*\*\***

## SHPO USE ONLY

## SHPO USE ONLY

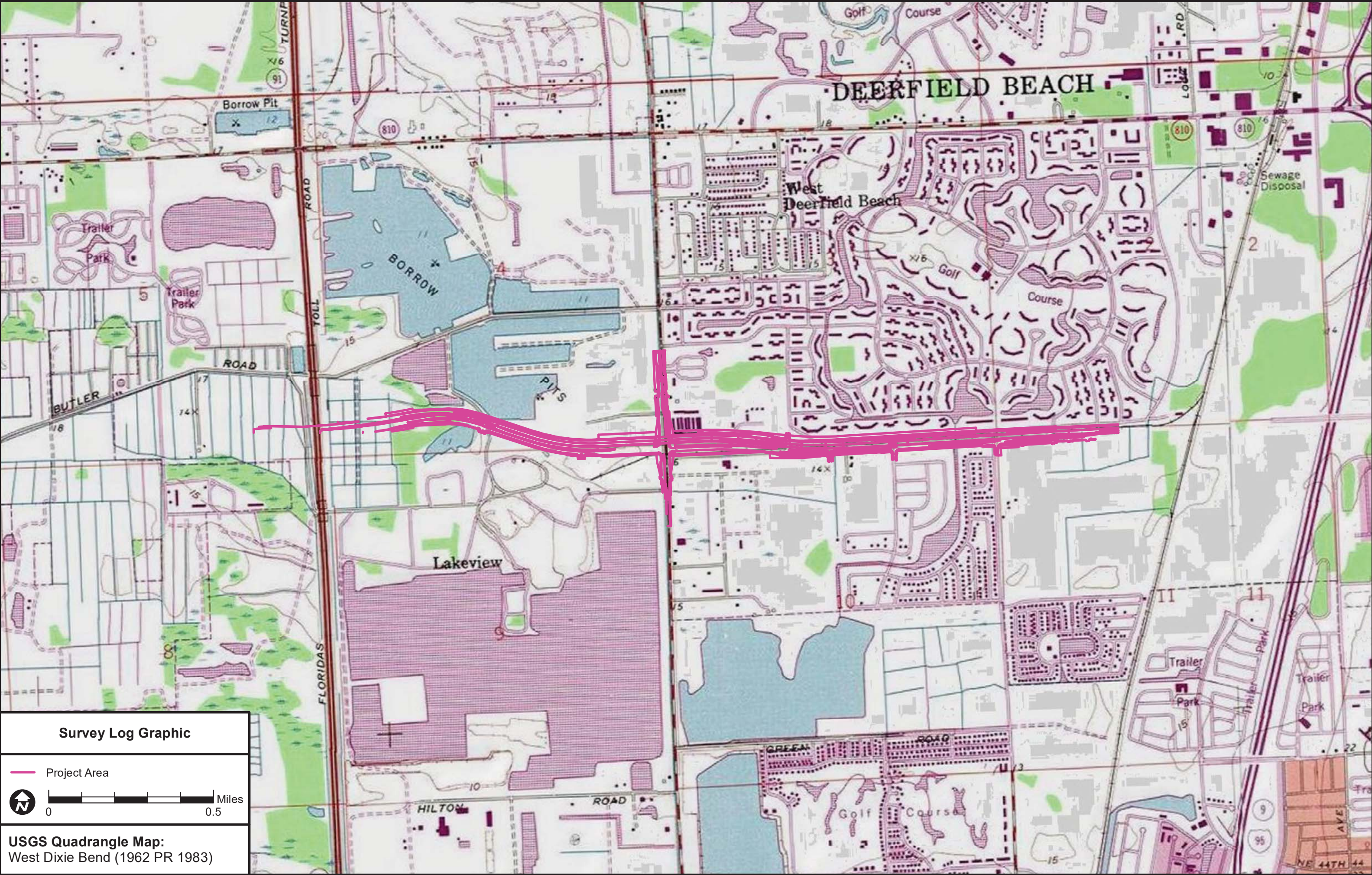
## SHPO USE ONLY

Origin of Report: ☐ 872 ☐ CARL ☐ UW ☐ 1A32 # \_\_\_\_\_ ☐ Academic ☐ Contract ☐ Avocational  
☐ Grant Project # \_\_\_\_\_ ☐ Compliance Review: CRAT # \_\_\_\_\_

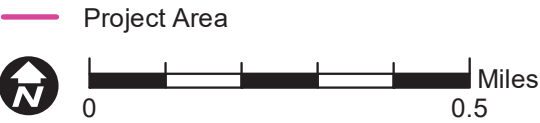
Type of Document: ☐ Archaeological Survey ☐ Historical/Architectural Survey ☐ Marine Survey ☐ Cell Tower CRAS ☐ Monitoring Report  
☐ Overview ☐ Excavation Report ☐ Multi-Site Excavation Report ☐ Structure Detailed Report ☐ Library, Hist. or Archival Doc  
☐ MPS ☐ MRA ☐ TG ☐ Other: \_\_\_\_\_

Document Destination: \_\_\_\_\_ Plotability: \_\_\_\_\_





Survey Log Graphic



USGS Quadrangle Map:  
West Dixie Bend (1962 PR 1983)