### CULTURAL RESOURCE ASSESSMENT SURVEY ADDENDUM PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY

# STATE ROAD (SR) 544 (LUCERNE PARK ROAD) FROM MARTIN LUTHER KING BOULEVARD TO SR 17 POLK COUNTY, FLORIDA

Financial Project ID No.: 440273-1-22-01 Federal Aid Project Number: D119-048-B



Florida Department of Transportation
District One
801 N. Broadway Avenue
Bartow, Florida 33830-3809

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 May 26, 2022, and executed by the Federal Highway Administration and FDOT.

November 2024

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#### 1.0 INTRODUCTION

The Florida Department of Transportation (FDOT), District One is conducting a Project Development and Environmental (PD&E) Study to evaluate alignment and intersection alternatives to State Road (SR) 544 (Lucerne Park Road) (hereafter referred to as SR 544) from Martin Luther King Boulevard to SR 17 in Winter Haven, Polk County, Florida, a length of 7.96 miles. The project is located in Sections 32-33, Township 27 South, Range 27 East; Sections 1-3, 9-12, and 16-17, Township 28 South, Range 26 East; and Sections 4-6, Township 28 South, Range 27 East (United States Geological Survey [USGS] Winter Haven 1959, 2021 and Dundee 1953, 2021). See **Figure 1-1** for project location and PD&E Study limits. The purpose of this project is to address roadway capacity deficiency along SR 544 to accommodate future travel demand as a result of projected population and employment growth in the area. Other goals of the project include enhancing mobility options and multi-modal access, as well as supporting local economic development initiatives. This is a federally funded project.

In order to meet the Purpose and Need for the project, four-lane roadway typical sections were developed and due to the high speeds along SR 544, on-road bicycle lanes were not considered. Therefore, a single 4-lane divided roadway typical section was developed for a majority of the project that includes 12-foot (ft)-wide outside travel lanes and 11-ft wide inside travel lanes separated by a 22-ft raised median as well as 10-ft shared use paths along both sides of the road. However, due to constrained right-of-way (ROW) conditions and potential impacts to existing residences and businesses, additional typical sections were considered at each end of the project corridor.

The objective of the PD&E Study is to evaluate the proposed build alternatives within eight study segments and a No Build alternative was also evaluated. The eight study segments were broken down based on existing land uses and development and include Segment 1 – Martin Luther King Boulevard to North of Avenue Y, Segments 2 through 7 – North of Avenue Y to LaVista Drive, and Segment 8 – LaVista Drive to SR 17. In addition, nine major intersections were evaluated for intersection configuration and type control. Additional ROW will be required along most of the project limits to accommodate the proposed roadway improvements and stormwater ponds. Below is a summary of the preferred alternative for Segments 1 and 8 as well as the Martin Luther King Boulevard intersection which contains the significant properties (see Appendix A). See Section 3.0 for more information regarding the description of each alternative.

The preferred build alternative in Segment 1 is the three-lane typical section with a best fit alignment. It is slightly wider and will have minor ROW impacts (no residential relocations) than the two-lane alternative but will provide additional safety and capacity for turning vehicles with the center turn lane. In addition, the preferred intersection improvement at Martin Luther King Boulevard is to maintain the existing traffic signal but add a new southbound right turn lane at the intersection. Improvements also include realigning the 1<sup>st</sup> Street NW intersection with SR 544 farther away from the Martin Luther King Boulevard intersection. In addition, a mini-roundabout is recommended at Avenue Y. The preferred build alternative in Segment 8 is the reduced four-lane divided roadway with centered widening. This alignment is recommended to minimize residential relocations through this segment of the project but provide access control with the raised median.

As part of the PD&E Study, a Cultural Resource Assessment Survey (CRAS) Report was prepared in July 2023, on behalf of the FDOT, District One, by Archaeological Consultants, Inc. (ACI) of Sarasota, Florida, in association with Ardurra Group, Inc. The objective of the CRAS was to locate and identify any archaeological sites and historic resources located within the project's Area of Potential Effect (APE) and to assess, to the extent possible, their significance as per the criteria of eligibility for listing in the National Register of Historic Places (NRHP). The archaeological APE was defined as the footprint of construction including pond sites.

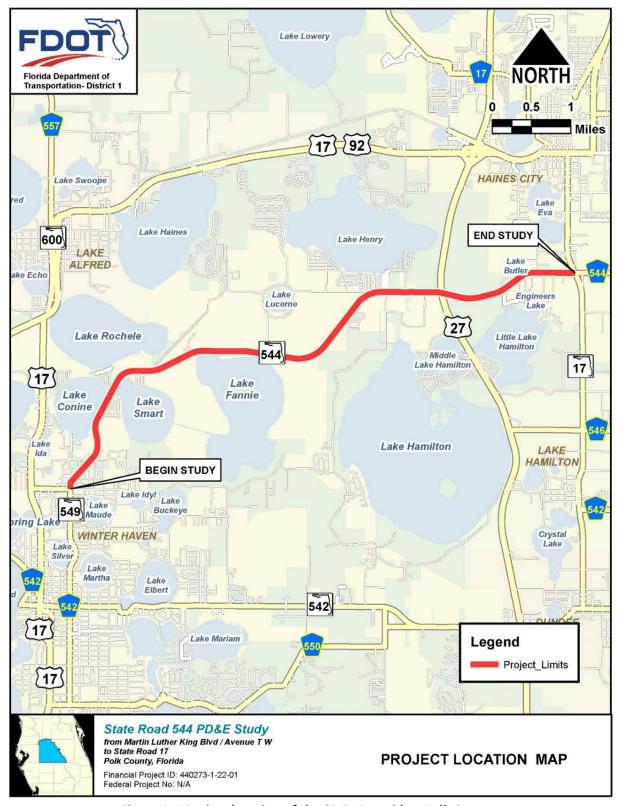


Figure 1-1 Project location of the SR 544 corridor, Polk County.

The historic APE included the footprint of construction and immediately adjacent parcels where resources within 200-ft of the existing ROW were surveyed. In addition, the historic APE included resources within 100-ft of the proposed pond sites.

As a result of the CRAS, five historic resources that are listed, determined eligible, or appear individually eligible for listing in the NRHP were identified within the historic APE. These include a Colonial Revival style building located at 2208 Peninsular Drive (8PO03077), a Craftsman style building located at 128 Scenic Highway (8PO03079), and the Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095) (Figure 1-2). In addition, the Florence Citrus Growers Association Historic District (8PO09983), was found to have insufficient information for evaluating the NRHP eligibility. The State Historic Preservation Officer (SHPO) concurred with the findings on August 21, 2023 (Appendix B).

The purpose of this CRAS Addendum was to include additional historic context in order to determine the eligibility of the entire Florence Citrus Growers Association Historic District (8PO09983) and identify what buildings (if any) contribute to the significance of the district. The historical/architectural APE remained in keeping with the 2023 CRAS; however, because the purpose of this project is research based, a field survey was not conducted. Furthermore, the context within this report is to provide the project's specific determination of effects. As a result of the additional research, 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015) were identified within the Florence Citrus Growers Association Historic District (8PO09983) as contained within the APE (Figure 1-3). The district appears eligible for listing in the NRHP under Criterion A in the areas of Ethnic Heritage (Black) and Industry. The 11 contributing buildings are not individually eligible for listing in the NRHP.

Because there are 17 historic properties that are listed, determined eligible, or appear eligible for listing in the NRHP identified within the historic APE, the FDOT has applied the Criteria of Adverse Effect found in 36 CFR Part 800.5. Based on the proposed undertaking, the findings presented in this CRAS Addendum indicate that the Preferred Alternative within the study Segments 1 and 8 will have **No Adverse Effect** to the Colonial Revival style building (8PO03077), the Craftsman style building (8PO03079), the Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095), and the Florence Citrus Growers Association Historic District (8PO09983) with 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015). No historic properties are located within Segments 2 through 7 from north of Avenue Y to LaVista Drive.

All work was conducted to comply with Section 106 of the *National Historic Preservation Act (NHPA) of 1966* (Public Law 89-665, as amended), as implemented by 36 Code of Federal Regulations [CFR] 800 (*Protection of Historic Properties*, effective August 2004), as well as Chapter 267 and 373, *Florida Statutes (FS)* and Chapter 1A-46, *Florida Administrative Code (FAC)*. All work was performed in accordance with the standards outlined in the *Cultural Resources Management Standards & Operational Manual* (Florida Division of Historical Resources [FDHR] 2003) and the *Project Development and Environment (PD&E) Manual* (FDOT 2023). The purpose of this analysis was to identify the presence of resources listed in or considered eligible for listing in the NRHP per the criteria set forth in 36 CFR Section 60.4 and if applicable, to apply the Criteria of Adverse Effects, as set forth in 36 CFR Part 800.5(a)(1) to the project. Principal Investigators meet the *Secretary of the Interior's Professional Qualification Standards* (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture.

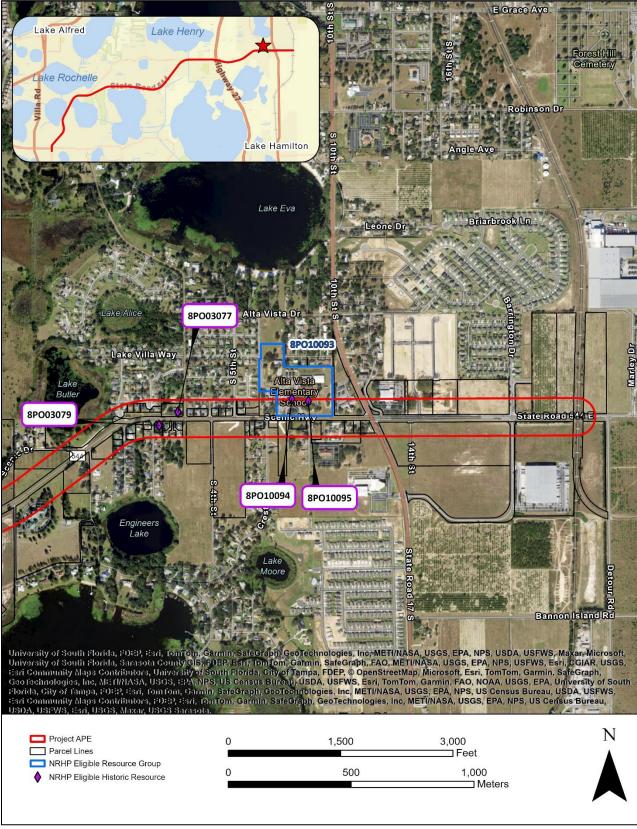


Figure 1-2 Location of the five properties that are listed, determined eligible, or appear individually eligible for listing in the NRHP identified within the APE and received SHPO concurrence in 2023.

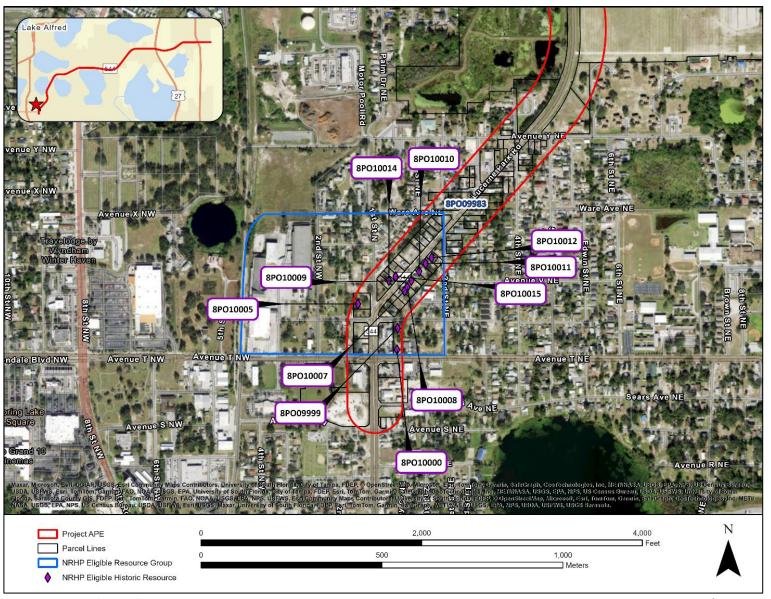


Figure 1-3 Location of the of the 11 contributing resources within the Florence Citrus Growers Association Historic District (8PO09983) as contained within the APE.

#### 2.0 PROJECT DESCRIPTION

The supporting data discussed below was documented in the Preliminary Engineering Report prepared by Ardurra Group, Inc. in September 2023 which has updated language to what was included in the August 2023 CRAS.

This project involves capacity and multi-modal improvements to SR 544 from Martin Luther King Boulevard to SR 17 in Polk County, a length of 7.96 miles. The project corridor traverses three jurisdictions: the City of Winter Haven, Polk County, and Haines City. SR 544 plays an important role in the regional network by providing east-west access for a growing area of east-central Polk County. It links two north-south principal arterials of Polk County (US 17 and US 27), US 27 being part of Florida's Strategic Intermodal System (SIS) and connects the cities of Winter Haven and Haines City, the second and third most populated cities within Polk County, respectively.

SR 544 is classified as a two-lane urban minor arterial from Martin Luther King Boulevard to US 27 and as an urban collector from US 27 to SR 17. The roadway features two twelve-ft travel lanes with center and right turn lanes dispersed throughout the length of the corridor. The roadway also features an open drainage system; however, curbs and gutters exist from Martin Luther King Boulevard to Avenue Y and from La Vista Drive to SR 17 and in other areas where sidewalks are present.

Paved shoulders are present for the majority of the corridor and marked bicycle lanes exist on both sides of the roadway from 0.10 mile west of Brenton Manor Avenue to 0.2 mile east of US 27. The posted speed limit along the corridor ranges from 35 miles per hour to 55 miles per hour. Citrus Connection Route #60 (Winter Haven Northeast) operates along the eastern portion of the project corridor. Existing ROW along SR 544 ranges from 50-ft to 85-ft from Martin Luther King Boulevard to Avenue Y, 90-ft to 163-ft from Avenue Y to LaVista Drive, and 64-ft to 66-ft from LaVista Drive to SR 17.

In addition to widening from two to four lanes, the proposed improvements may include paved shoulders/marked bicycle lanes, sidewalks, and/or a shared-use path to provide safe bicycle and pedestrian mobility and meet objectives of the Polk Transportation Planning Organization (TPO) in transforming this corridor into a Complete Street. Additional ROW may be required depending on the proposed improvements and specific ROW requirements will be determined during this PD&E Study.

#### 2.1 Existing Conditions

Within the study area, SR 544 from Martin Luther King Boulevard to Avenue Y through Florence Villa is an urban roadway with two 12-ft travel lanes, 4-ft paved shoulders, type F curb and gutter, and 6-ft sidewalks on both sides of the road at the back of curb. From Avenue Y to La Vista, SR 544 is a rural section with an open drainage system. The roadway has two 12-ft lanes, and 5-ft paved shoulders. There is no sidewalk in this section. From La Vista Drive to SR 17, SR 544 transitions to a four-lane undivided urban section. It consists of four 12-ft travel lanes, type F curb and gutter, and 5-foot sidewalk on the west side of the roadway only. SR 544 features center and right turn lanes dispersed throughout the length of the corridor at intersections. Existing roadway typical sections are depicted in the following **Figures 2-1 to 2-3**. See **Table 2-1** for the existing ROW width throughout the PD&E Study limits.

The posted speed limit along the corridor ranges from 35 miles per hour in the Florence Villa area to 45 miles per hour from La Vista Drive to east of SR 17. SR 544 is functionally classified as an urban minor arterial from Martin Luther King Boulevard to US 27 and as an urban collector from US 27 to SR 17. Context classifications vary along the corridor as follows:

- Martin Luther King Boulevard to Avenue Y: C4-Urban General
- Avenue Y to Old Lucerne Park Road: C3R-Suburban Residential
- Old Lucerne Park Road to US 27: C3C-Suburban Commercial
- US 27 to SR 17: C3R-Suburban Residential

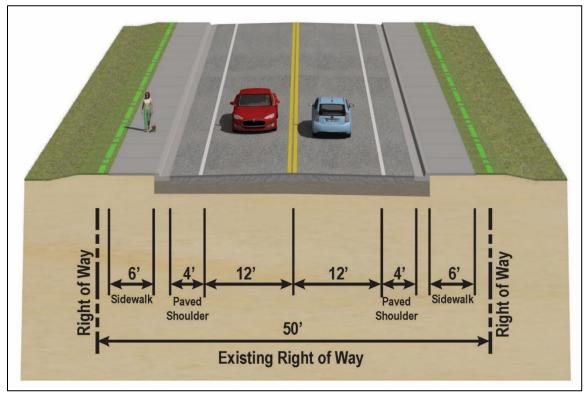


Figure 2-1 Existing Typical Section – Martin Luther King Boulevard to Avenue Y.

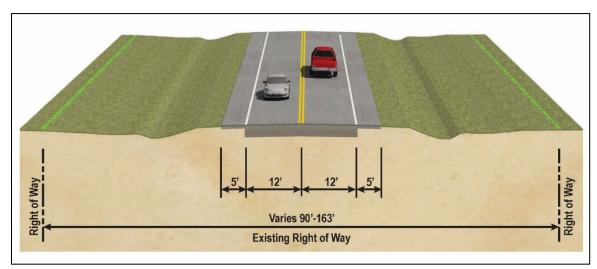


Figure 2-2 Existing Typical Section – Avenue Y to LaVista Drive.

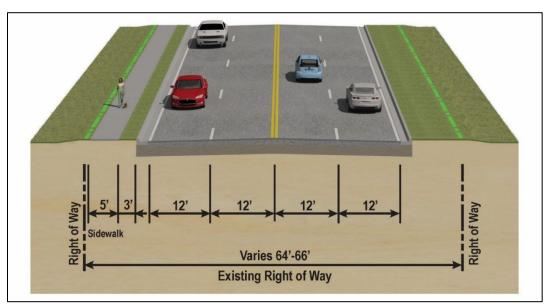


Figure 2-3 Existing Typical Section – LaVista Drive to SR 17.

Table 2-1 Existing Right-of-Way throughout the PD&E Study limits.

Right-of-Way Width	Location	
50 feet to 84 feet	From Martin Luther King Boulevard to Avenue Y	
90 feet to 163 feet	Avenue Y to LaVista Drive	
64 feet to 66 feet	LaVista Drive to US 17	

#### 2.2 Project Purpose & Need

The purpose of this project is to address roadway capacity deficiency along SR 544 from Martin Luther King Boulevard to SR 17 in Polk County to accommodate future travel demand as a result of projected population and employment growth in the area. Other goals of the project include enhancing mobility options and multi-modal access as well as supporting local economic development initiatives.

The Purpose and Need Statement provided in this section of the document is identical to the statement reviewed by participating and cooperating agencies engaged in the Efficient Transportation Decision Making (ETDM) screening of the project (ETDM Project No. 5873).

The purpose and need for the project is based on the following criteria:

### 2.2.1 Capacity/Transportation Demand: Improve Operational Conditions and Accommodate Projected Travel Demand

This project is anticipated to improve traffic operations along SR 544 by increasing operational capacity to meet the projected travel demand as a result of Polk County population and employment growth and increased regional travel in the corridor.

The project segment occurs within two of the eight Polk County planning areas [Central Planning Area and East Planning Area] as depicted in Momentum 2040 [the Polk TPO's Long Range Transportation Plan (LRTP)]. Of the eight planning areas, the East Planning Area is expected to experience the highest increase in population growth between 2010 and 2040 with a 29% increase in single-family dwelling units and a 34% increase in multi-family dwelling units. The Central Planning Area is anticipated to experience the second

highest increase in single family dwelling units (25% increase) during the same time period. Accordingly, the Central Planning Area will experience the highest increase in employment growth between 2010 and 2040 with a 42% increase in industrial employment, 34% increase in commercial employment, and a 32% increase in service employment. Likewise, the East Planning Area will experience the second highest increase in commercial employment (26% increase) and the third highest increase in service employment (21% increase) during the same time period. Countywide employment is expected to increase by 79% between 2010 and 2040. Growth within the project area may be attributed to the numerous developments that have been approved and continue to be approved by the City of Haines City.

The greater SR 544 corridor serves commuters of the area as it provides access to regional transportation facilities [including US 92, US 17, US 27, and SR 17] as well as residential and commercial hubs within central Polk County. The project segment of SR 544 specifically facilitates local commuter traffic between the population and employment centers of Winter Haven and Haines City. Identified as a Secondary Freight Network Highway Corridor by the Polk TPO, SR 544 additionally serves as a freight distribution route as it connects to a SIS Highway Corridor [US 27], Regional Freight Network Highway Corridors as designated by the Polk TPO [US 92, US 27, and SR 17], and another designated Polk TPO Secondary Freight Network Highway Corridor [US 17]. Truck traffic composes between 7.0% and 9.9 % of the total daily traffic present along the project segment of SR 544. As such, this roadway plays an important role in facilitating truck traffic and the distribution of goods to both local and regional destinations.

While the roadway currently operates at an acceptable LOS, conditions are anticipated to deteriorate below established standards if no improvements occur by 2040 as the roadway lacks the capacity to accommodate the projected travel demand. With the proposed improvement, the corridor is expected to continue to operate at acceptable LOS or improved LOS.

#### 2.2.2 Modal Interrelationships: Enhance Mobility Options and Multi-Modal Access

Notable pedestrian and bicycle traffic in the corridor was observed in the field despite the fact that sidewalks and bicycle lanes are intermittent and disconnected along the corridor. In addition, a large transit dependent population is present, composed primarily of minority and low-income populations as well as housing units with no vehicle available. Compared to the demographic characteristics for Polk County, the project analysis area [which consists of United States census block groups within a 500-ft buffer surrounding the project] contains a significantly higher minority population percentage [20.1% higher], a higher percentage of housing units with no vehicle available [1.2% higher], and a notably lower median family income [\$11,246 less]. This indicates a population with a higher propensity to walk, bike, or take transit to access essential services. The need for multi-modal options within the corridor is critical as growth in the area has created a latent demand for increased bicycle and pedestrian activity.

It should be noted that a portion of the project segment [from Ave T to Old Lucerne Park Road] is identified by the Polk TPO as a Future Complete Streets Corridor. A Complete Street is defined as a corridor that is designed to provide safe access and travel for all users [pedestrians, bicyclists, motorists, and transit riders] of all ages and abilities. Some of the treatments proposed as part of the Future Complete Streets Corridor have been applied to a section immediately south/adjacent to the project corridor [from Ave T to Ave O] and to the westernmost/southernmost section of the project segment [Ave T to Ave Y]. These treatments included the reconstruction of driveways to meet Americans with Disabilities Act (ADA) standards, the addition of pedestrian street lighting, and the construction of crosswalks on intersecting minor streets. New or enhanced sidewalks, landscaping, enhanced bus stops, improved signage, as well as a shared use path [Old Dixie Trail - ETDM Project #14328] are some of the additional improvements being considered/evaluated along the project corridor.

Overall, the proposed project is anticipated to meet the mobility needs of the area by alleviating future congestion on the corridor, providing multimodal travel options, and improving east-west access within east-central Polk County. The proposed bicycle and pedestrian facilities are to enhance multi-modal access and connections between community points of interest and to the regional trail network.

#### 2.2.3 SOCIAL DEMANDS AND ECONOMIC DEVELOPMENT: Support Economic Development

One Florida Opportunity Zone [formerly titled Florida Enterprise Zone] borders the northern portion of the project corridor from Old Lucerne Park Road to US 27. This program provides tax incentives for investments in low-income communities. In addition, the easternmost/northernmost section of the project corridor occurs within the Haines City Community Redevelopment Area. Further, the westernmost/ southernmost section of the project [Ave T to Ware Ave] occurs within the Florence Villa Community Redevelopment Area; the Winter Haven Community Redevelopment Agency fosters and promotes community redevelopment activities within this designated district of the City of Winter Haven. Community Redevelopment Areas are recognized as special districts under Florida Statute created to encourage investment within the district through a series of strategic and timely public investments; activities that occur within them are detailed in customized redevelopment plans and include: infrastructure improvements, streetscaping or beautification treatments, affordable housing, recreation and park facility improvements, economic development/redevelopment strategies, transportation improvements, and neighborhood enhancement.

The enhanced roadway operational conditions resulting from the project along with the bicycle and pedestrian facilities proposed for the corridor are intended to provide infrastructure to support commerce and customers as well as modal options to serve the Florida Opportunity Zone and other communities along the corridor. It will also renew the aesthetic appeal of the surrounding area, thereby stimulating economic growth/revitalization and investment in the adjacent communities. As such, the project aligns with the economic development initiatives of the proximate, local communities.

#### 2.3 Noise Study Report (NSR)

A Noise Study Report (NSR) was prepared by Crawford, Murphy & Tilly (CMT) as part of the PD&E Study. The analysis was performed to evaluate highway traffic noise following FDOT procedures that comply with Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772), Procedures for Abatement of Highway Traffic Noise and Construction Noise. The results of this study indicated that traffic noise is predicted to exceed the Noise Abatement Criteria (NAC) within Segments 1 and 8 of the preferred Build Alternative (Appendix C). Within Segment 1, seven of the residential contributing resources (8PO10007 – 8PO10012, and 8PO10014) within the Florence Citrus Growers Association Historic District, as located within the project APE, will have a noise increase between 1.5 dB(A) to 2.1 dB(A). Abatement measures considered as part of the PD&E traffic noise analysis included traffic management, alignment modifications, buffer zones, and noise barriers. Within Segment 8, two residential buildings (8PO03077 and 8PO03079) will have a noise increase of 6.2 dB(A) and 4.8 dB(A), respectively. The Colonial Revival style building located at 2208 Peninsular Drive (8PO03077) is in an area where a noise barrier was considered a reasonable mitigation option. The optimal barrier is 876-ft long and 14-ft tall. At the Craftsman style building located at 128 Scenic Highway (8PO03079) there are no reasonable or feasible mitigation solutions available for the impacted residential buildings in this area. The noise barrier is not considered a feasible abatement measure due to the side streets and access driveways as well as line-of-sight constraints. In addition, the project is not located within a US Environmental Protection Agency [USEPA]-designated Air Quality Maintenance Area or Non-Attainment Area for any of the six pollutants [ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and small particulate matter] specified by the USEPA in National Ambient Air Quality Standards (NAAQS); therefore, the Clean Air Act conformity requirements do not currently apply to this project (FDOT 2019).

#### 3.0 ALTERNATIVES ANALYSIS

In order to meet the Purpose and Need for the project, four-lane roadway typical sections were developed and discussed with FDOT District One's Planning Studio. It was decided that due to the high speeds along SR 544, on-road bicycle lanes would not be considered. Therefore, a single 4-lane divided roadway typical section was developed for a majority of the project that includes 12-ft-wide outside travel lanes and 11-ft wide inside travel lanes separated by a 22-ft raised median. A 10-ft-wide shared-use-path was evaluated along both sides of the road for the project limits. However, due to constrained ROW conditions and potential impacts to existing residences and businesses, additional typical sections were considered at each end of the project corridor. As such, in areas with ROW constraints an 8-ft-wide sidewalk was evaluated.

#### 3.1 No Build Alternative

The 'No-Build' Alternative assumes that no modifications or improvements will be implemented for the mainline of SR 544. The primary advantages of the 'No-Build' Alternative are that it does not directly require any capital or expenditure of state/federal transportation trust funds, and it produces no physical, natural, or social impacts. The 'No-Build' Alternative will not meet the Purpose and Need of the project to enhance mobility and multi-modal access, support local economic development initiatives and improve operational conditions to accommodate projected travel demand.

The 'No-Build' Alternative will remain under consideration throughout the alternatives analysis and evaluation process. Certain advantages and potential disadvantages would be associated with the implementation of the 'No-Build' Alternative. These are listed below:

#### **Advantages**

- No acquisition of ROW
- No design, ROW, or construction costs
- No inconvenience to the traveling public and property owners during construction
- No impacts to utilities
- No impacts to the adjacent natural, physical, and human environment

#### <u>Disadvantages</u>

- It is not consistent with the Polk County TPO Momentum 2040 Long Range Transportation Plan (LRTP), where the widening is identified as cost-feasible 2019-2040.
- Does not improve multi-modal mobility
- Results in reduced levels of service and increased traffic congestion
- The frequency of crashes may rise due to increased congestion
- Emergency vehicle access is degraded
- User costs are increased due to increased congestion

#### 3.2 <u>Transportation Systems Management and Operations (TSM&O) Alternative</u>

Transportation Systems Management & Operations (TSM&O) alternatives involve improvements designed to maximize the utilization and efficiency of the existing facility through improved system and demand management. The various TSM&O options generally include traffic signal and intersection improvements, access management, and transit improvements. Additional through lanes are needed to accommodate the projected traffic volumes along SR 544 in the design year 2045 and to provide an acceptable roadway level

of service which cannot be provided solely through the implementation of TSM&O improvements; however, the TSM&O strategies of access management and intersection improvements are included as part of the 'Build' Alternatives for the corridor.

#### 3.3 <u>Multi-Modal Alternatives</u>

Multimodal alternatives considered as part of this study are consistent with the Polk TPO 2045 Momentum Long Range Transportation Plan (LRTP) Goals, Objectives, and Performance Targets. The inclusion of multimodal alternatives also helps to address the purpose and need for this project by providing enhanced mobility options and access to multimodal facilities.

Multiple Build Alternatives as well as the nine intersection improvements were considered as part of the PD&E are described below.

#### 3.4 **Build Alternatives**

The SR 544 study limits were broken down into eight evaluation segments based on existing land uses and development. The study segments are:

Segment 1 – MLK Boulevard to North of Avenue Y

Segment 2 – North of Avenue Y to east of Lake Conine Canal

Segment 3 – East of Lake Conine Canal to east of Old Lucerne Park Road (west)

Segment 4 – East of Old Lucerne Park Road (west) to east of Lucerne Loop Road

Segment 5 – East of Lucerne Loop Road to west of Lake Hamilton Canal

Segment 6 – West of Lake Hamilton Canal to west of Brenton Manor Drive

Segment 7 – West of Brenton Manor Drive to LaVista Drive

Segment 8 – LaVista Drive to SR 17

#### Segment 1 Build Alternatives

Because Florence Villa is a historic neighborhood with considerable multimodal activity and constrained ROW, different Build alternatives were considered for Segment 1 of the corridor from Martin Luther King Boulevard to north of Avenue Y than for the segments north of Avenue Y. Segment 1 alternatives include the following:

- A new four-lane bypass roadway around the west side of SR 544 between Martin Luther King Boulevard and Avenue Y, in lieu of widening SR 544
- A two-lane undivided roadway with 8-ft median islands at pedestrian crosswalks
- A three-lane roadway with a center two-way left turn lane
- A four-lane undivided roadway
- A five-lane roadway with a center two-way left turn lane

#### **Bypass Roadway**

Through working with the FDOT District One Planning Studio, a four-lane undivided roadway typical section with a minimum 74-ft ROW was used to develop the bypass corridor alignment. This typical section, presented as **Figure 3-1**, includes two through lanes in each direction with 11-ft inside lanes and 12-ft outside lanes. It also includes 8-ft-wide sidewalks located at the back of curb on both sides of the roadway.

A preliminary alignment to the west of Florence Villa was developed that begins at Martin Luther King Boulevard from a point just west of where the Chain of Lakes Trail crosses Martin Luther King Boulevard. It then heads north and begins to curve to the northeast in the area south of Lake Citrus and crosses the Chain of Lakes Trail on a northeastward alignment. It continues through the intersection of Avenue Y, 1<sup>st</sup> Street and Motor Pool Road and then makes a turn to the east through the Lake Conine Restoration Area and connects with SR 544 north of Avenue Y. This alignment is depicted in **Figure 3-2**.

The 4-lane bypass roadway was analyzed by using the District One Regional Planning Model (D1RPM) to forecast design year 2045 daily traffic volumes for three network alternatives. Alternative 1 was a four-lane widening on SR 544 throughout the project limits. Alternative 2 maintained two lanes on SR 544 from Martin Luther King Boulevard to Avenue Y and four lanes on SR 544 north of Avenue Y, without a bypass roadway. Alternative 3 maintained two lanes on SR 544 from Martin Luther King Boulevard to Avenue Y and four lanes on SR 544 north of Avenue Y but included the four-lane bypass roadway.

The modeling analysis demonstrated that with the implementation of a bypass road, design year traffic volumes on a two-lane SR 544 between Martin Luther King Boulevard and Avenue Y resulted in approximately half the volume of this same portion of a four-lane SR 544 without a bypass road. However, when compared to the alternative that maintains a two-lane roadway between Martin Luther King Boulevard and Avenue Y without a western bypass road, the bypass roadway is only projected to reduce the daily volumes by about 5,000 to 7,000 vehicles per day. This suggests that if SR 544 is not widened to four lanes between Martin Luther King Boulevard and Avenue Y, a large percentage of vehicles will find alternative routes, even in the absence of a bypass.

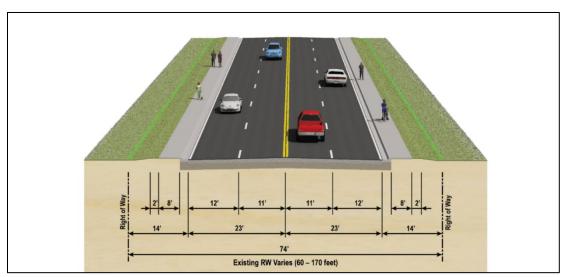


Figure 3-1 Four-Lane Undivided Typical Section.

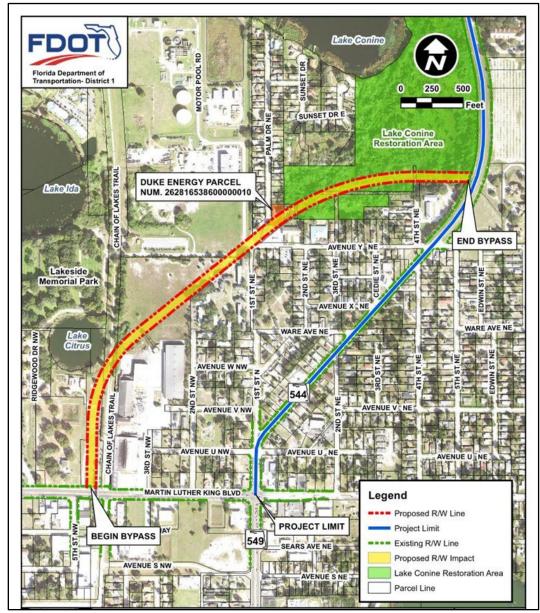


Figure 3-2 Preliminary alignment showing the proposed Bypass option to skirt the historic minority neighborhood of Florence Villa.

Advantages of the bypass roadway include removal of some traffic from SR 544 through the Florence Villa neighborhood and removal of some truck traffic from SR 544 through the Florence Villa neighborhood.

Disadvantages of the bypass roadway are:

- Impacts to eight parcels, including:
  - a. Lake Conine Treatment Wetland Restoration Park
  - b. New Bethel Missionary Baptist Church
  - c. Duke Energy parcel
  - d. TIITF/State of Florida property (adjacent to the Chain of Lakes Trail)
  - e. Chain of Lakes Trail (TIITF)
- Residential / neighborhood impacts
- Impacts at the Chain of Lakes Trail crossing

 Creation of a new bypass roadway intersection at Martin Luther King Boulevard that would not meet minimum signal spacing criteria due to its proximity to the SR 544/Martin Luther King Boulevard intersection

A priority of this study is minimizing impacts to the historic Florence Villa neighborhood. For this reason, SR 544 through Florence Villa is considered constrained, and the Bypass Road alternative west of SR 544 was eliminated from further consideration. Since the need for additional roadway capacity remains, the new roadway identified in the Polk TPO Momentum 2045 LRTP as the Willowbrook Connector, an unfunded need, must be pursued. This new roadway is proposed to connect SR 544 and Martin Luther King Boulevard in a north-south alignment between Lake Smart and Lake Fannie near the Willowbrook Golf Course. This roadway will relieve traffic congestion on SR 544 between Old Lucerne Park Road (west) and Martin Luther King Boulevard, including through the Florence Villa neighborhood.

#### Two-lane undivided roadway with 8-foot median islands at pedestrian crosswalks

Due to the significant number of crashes that have occurred over the last six years between Martin Luther King Boulevard and Avenue Y, including designation by the Polk TPO as a High Crash Corridor, improving the overall safety of this area for all users (vehicles, bicyclists, pedestrians, and transit riders) is of the utmost importance. Minimizing ROW impacts to the historic Florence Villa neighborhood is also a priority. Therefore, an alternative which maintains a two-lane undivided roadway between Martin Luther King Boulevard and Avenue Y with two 12-ft lanes and 8-ft median islands at pedestrian crosswalks was evaluated.

While the two-lane undivided roadway alternative does not meet the stated project need and purpose related to capacity and transportation demand, it does enhance mobility options and multimodal access. The 8-ft median islands at crosswalk locations are intended to provide horizontal deflection to slow speeds through Florence Villa in addition to providing pedestrian refuge. Eight-ft-wide sidewalks located at the back of curb are included on both sides of the roadway. This typical section requires between 54- and 62-ft of ROW. The two-lane undivided roadway typical section is presented as **Figure 3-3.** 

Further justification for consideration of maintaining a two-lane roadway between Martin Luther King Boulevard and north of Avenue Y is this area's inclusion in the City of Winter Haven's Transportation Concurrency Exception Area (TCEA), as mapped in the Transportation Element of the City of Winter Haven 2025 Comprehensive Plan. The purpose of the TCEA is to promote urban infill and redevelopment and downtown revitalization and to exempt new development or redevelopment from meeting transportation level of service standards.

In addition, the new roadway identified in the Polk TPO Momentum 2045 LRTP as the Willowbrook Connector will relieve traffic congestion on SR 544 between Old Lucerne Park Road (west) and Martin Luther King Boulevard, including through the Florence Villa neighborhood, once funded and constructed.

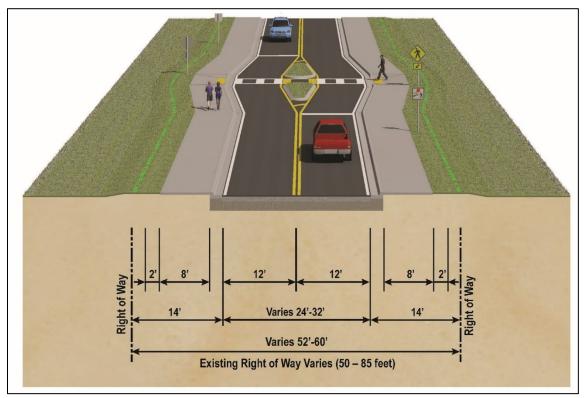


Figure 3-3 Two-Lane Undivided with Median Islands Typical.

#### Three-lane roadway with center two-way left turn lane

A three-lane alternative between Martin Luther King Boulevard and Avenue Y was evaluated. This alternative includes two 11-ft wide travel lanes with a 12-ft-wide center two-way left turn lane. This alternative also includes an 8-ft-wide sidewalk along the north side of the roadway, a 10-ft-wide shared-use-path on the south side, and raised median refuge areas at the mid-block crosswalk locations. This typical section, depicted in **Figure 3-4**, requires 64-ft of ROW.

One of the benefits of this alternative is that the center two-way left turn lane provides an opportunity for vehicles turning left to move out of the flow of through vehicles, reducing braking and congestion for through vehicles and reducing rear-end crashes. This is supported by Polk TPO's Lucerne Park Road Complete Streets Action Plan which identified a pattern of high rates of rear-end crashes not at signalized intersections and suggested construction of a continuous left turn lane for turning vehicles to pull out of traffic flow as an applicable countermeasure.

This alternative provides some increase in capacity due to the introduction of the center turn lane but does not fully meet the stated purpose and need related to capacity and transportation demand. It does, however, enhance mobility options and multimodal access through the addition of the wide sidewalks on both sides of the roadway.

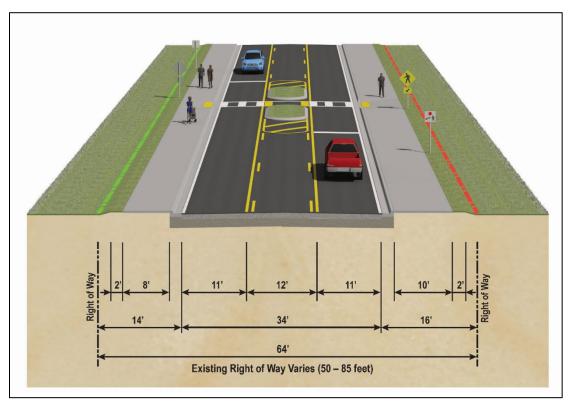


Figure 3-4 Three Lane Typical with Center Two-Way Left Turn Lane.

#### Four-lane Undivided Roadway

A four-lane undivided roadway was considered to accommodate the projected design year 2045 traffic volumes. The typical section is the same as that evaluated for the bypass roadway alternative, as shown in **Figure 3-5**. It includes two through lanes in each direction with 11-ft inside lanes and 12-ft outside lanes. It also includes 8-ft-wide sidewalks located at the back of curb on both sides of the roadway.

While this alternative meets the stated purpose and need to accommodate design year traffic demand, it requires pedestrians to cross 46-ft of travel lanes without any median refuge. In addition, no turn lanes are provided which would likely result in a high frequency of rear-end crashes. And lastly, this alternative would result in significant impacts to property through the Florence Villa community due to the minimum 74-ft of ROW required. For these reasons, this alternative was eliminated from further consideration.

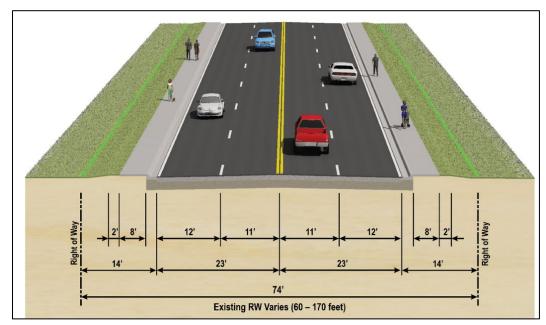


Figure 3-5 Four Lane Undivided Typical.

#### Five-lane Roadway with Center Two-lane Left Turn Lane

A five-lane roadway was also considered to accommodate the projected design year 2045 traffic volumes. This alternative includes two 11-ft inside through lanes, two 12-ft outside through lanes, and a 12-ft center two-way left turn lane. It also includes 8-ft-wide sidewalks located at the back of curb on both sides of the roadway. The typical section for this alternative is shown in **Figure 3-6**.

The advantages of this alternative are that it provides the vehicular capacity to accommodate design year 2045 traffic volumes, it allows for turning vehicles to move out of the flow of through traffic, and pedestrian refuge islands could be constructed within the center two-way left turn lane at crosswalk locations. However, it also has the greatest impact to property through the Florence Villa neighborhood due to the 112-ft ROW required. This alternative was eliminated from further consideration to minimize property impacts to Florence Villa.

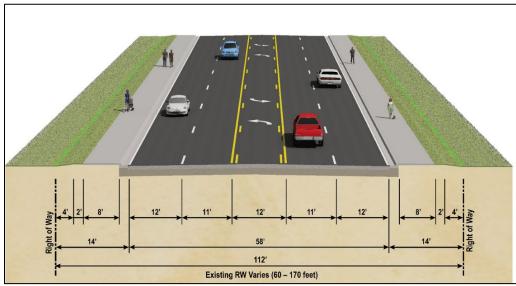


Figure 3-6 Five-Lane Roadway with Center Two-Way Left Turn Lane Typical.

#### Segments 2-7 Build Alternatives

Between Avenue Y and LaVista Drive, build alternatives included different alignments with the same four-lane divided roadway. The typical section, depicted in **Figure 3-7**, includes two 11-ft inside through lanes, two 12-ft outside through lanes, and a 22-ft median. It also includes 10-ft shared-use paths on both sides of the roadway. This alternative requires a minimum of 112-ft of ROW.

The four-lane divided roadway alternative meets the purpose and need for the project by providing the roadway capacity to meet design year 2045 projected traffic volumes. It enhances mobility options and multi-modal access by providing shared-use paths on both sides of the roadway that can be used by both people walking and biking. It also supports economic development by providing the roadway capacity needed to support development and redevelopment.

For Segments 2, 3, 4, 5, 6, and 7 two alternatives have been evaluated. They are a left side widening and a right-side widening.

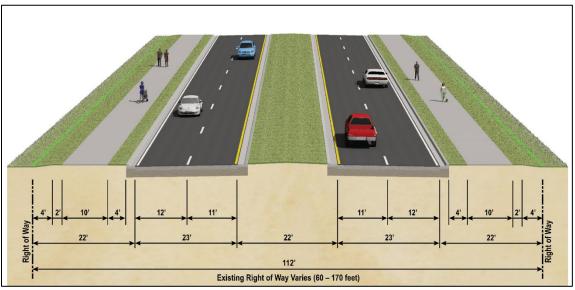


Figure 3-7 Four Lane Divided Typical.

#### Segment 8 Build Alternatives

For Segment 8, from LaVista Drive to SR 17, five alternatives have been evaluated. They are a left side widening, a right-side widening, and a centered widening, using the full four-lane divided typical section (**Figure 3-7**) plus an option to only add 8-ft-wide sidewalks to the existing road (**Figure 3-8**), and a minimized four-lane divided typical section with centered widening (**Figure 3-9**).

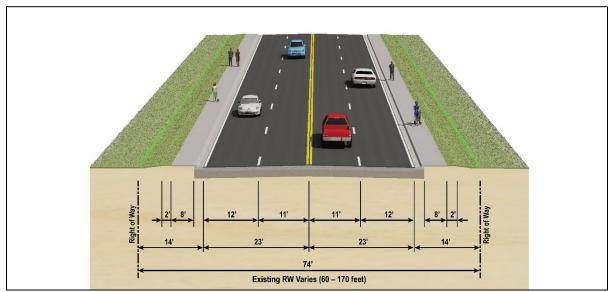


Figure 3-8. Four-Lane Typical with 8-ft Sidewalks.

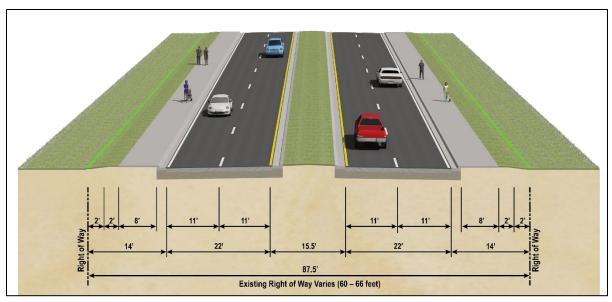


Figure 3-9. Minimized Four-Lane Divided Typical with 8-ft Sidewalks.

#### **Intersection Build Alternatives**

Each of the nine major intersections was evaluated for intersection configuration and type of control. This evaluation is documented in detail in the Intersection Control Evaluation (ICE) Technical Memoranda for the SR 544 PD&E study. An overview of the types evaluated, and recommendations for each intersection are summarized below.

#### Martin Luther King Boulevard Intersection

Martin Luther King Boulevard is currently a signalized intersection. Improvements being considered involve adding lanes to the north leg of the existing signalized intersection. This concept also includes a realignment of 1<sup>st</sup> Street to SR 544 through a city-owned parcel to move the northbound left turn lane onto 1<sup>st</sup> Street from SR 544 farther north.

The recommended ICE improvements for the Martin Luther King Boulevard intersection includes the following:

- Provide an exclusive southbound right-turn lane on SR 544 just south of Avenue U;
- Increase the length of the existing southbound left-turn lane on SR 544;
- Convert the access at the Avenue U intersection to right-in/right-out only; and
- Realign the southern end of 1st Street NW to create a new T-intersection on SR 544 in the vicinity of Avenue V.

The ICE Tech memo also recommended that the Polk TPO amend their adopted 2045 LRTP to designate the portion of SR 544 from Martin Luther King Boulevard to Avenue Y as a constrained corridor and seek to develop a financially feasible new north/south corridor connecting SR 544 and Martin Luther King Boulevard to reduce the future traffic volumes on this constrained corridor.

#### Avenue Y Intersection

Several alternatives were evaluated for the Avenue Y intersection. These include a single lane roundabout, a two-lane roundabout, a signalized intersection with single through lanes northbound and southbound, a signalized intersection with two through lanes northbound and southbound, a 65-ft diameter miniroundabout, and a 90-ft diameter mini-roundabout. The two-lane roundabout and the signalized intersection with two through lanes northbound and southbound were evaluated to address the need for capacity. Other alternatives were developed to address the need to improve safety over the need for capacity.

The ICE Tech Memo recommended the implementation of a roundabout at the Avenue Y intersection to help vehicles transition from the 45 mph design speed/target speed proposed for SR 544 north of Avenue Y to the 35 mph design speed/target speed proposed for SR 544 south of Avenue Y. This speed control measure should increase the safety of the pedestrians and bicyclists that are crossing SR 544 at this location. A one-lane roundabout is projected to have the lowest number of fatal and injury crashes and the highest opening year and design year Safe System for Intersections (SSI) scores of all the alternatives evaluated. Given the large number of pedestrians and bicyclists utilizing the portion of SR 544 south of Avenue Y, improving the overall safety of this area for all users (vehicles, bicyclists and pedestrians) is extremely important.

Other important considerations are maintaining the integrity of the Florence Villa community and avoiding any potential Environmental Justice (EJ) issues by minimizing the impacts to this lower income minority neighborhood. Consequently, a 90-ft Inscribed Circle Diameter (ICD) mini-roundabout is recommended for the Avenue Y intersection.

#### Old Lucerne Park Road (West) Intersection

This intersection is currently unsignalized with stop signs on the minor street approaches. A signal and a roundabout were evaluated for the Old Lucerne Park Road (west) intersection. However, due to potential residential impacts, the realignment of Old Lucerne Park Road (west) to align with Vista Del Lago Drive was evaluated and a signal and roundabout were considered at this new four-leg intersection.

The ICE Tech Memo recommended the implementation of a two-lane roundabout is expected to help facilitate speed control in this area. Reduced vehicle speeds should provide additional safety benefits for the older driving population accessing SR 544 from the 55+ Lucerne Lakeside Mobile Home Park, as well as the westbound vehicles approaching the horizontal curve at Lake Rochelle Estates. The roundabout is also projected to have the lowest opening year and design year SSI scores of all the alternatives analyzed and is

expected to result in very low design year peak hour vehicle delays. Consequently, the PD&E study is recommending a roundabout for the Old Lucerne Park Road (west end) intersection. The PD&E study is also recommending a realignment of the southern portion of this roadway to connect directly across from Vista del Lago Drive. This realignment will eliminate the need for any residential relocations.

#### Lucerne Loop Road Intersection

This intersection which serves as access to the Walmart distribution center is currently unsignalized with a stop sign on the minor street approach and an overhead flashing beacon. A signal, a roundabout, and a continuous green T intersection concept were evaluated for this intersection.

The ICE Tech Memo recommended the implementation of a roundabout at the Lucerne Loop Road intersection. Although a roundabout would result in larger ROW impacts, it would also provide positive speed control and result in fewer fatal and injury crashes compared to a conventional signalized intersection. The current posted speed limit in this area is 55 mph; however, the proposed SR 544 typical section is based on a 45 mph design/target speed. A roundabout will help to facilitate slower vehicle speeds east and west of this intersection. A roundabout is also projected to have a much higher SSI score compared to a conventional signalized intersection. The opening year and design year SSI scores for the roundabout are 87 and 75, respectively. The opening year and design year SSI scores for a conventional signalized intersection are 74 and 49, respectively. Consequently, a roundabout is recommended for the Lucerne Loop Road intersection at this time.

#### Old Lucerne Park Road (East) Intersection

This intersection is currently unsignalized with a stop sign on the minor street approach. A signal and a roundabout were evaluated for the Old Lucerne Park Road (east) intersection.

A Stage 2 ICE Tech Memo was completed for the Old Lucerne Park Road (east) intersection. The ICE Tech Memo recommended the implementation of a roundabout at the SR 544/Old Lucerne Park Road (east) intersection. A roundabout would provide positive speed control and result in a lower number of fatal and injury crashes as compared to a conventional signalized intersection. Although the current posted speed limit in the vicinity of this intersection is 50 mph, the proposed SR 544 typical section and horizontal alignment is based on a 45 mph target speed. A roundabout would help to facilitate slower vehicle speeds east and west of this intersection. A roundabout is estimated to have significantly higher SSI scores as compared to a conventional signalized intersection. Compared to the conventional signalized intersection, the roundabout has a B/C ratio equal to 3.96 and a NPV equal to \$7,774,263. Consequently, a two-lane roundabout is the recommended intersection control strategy for the Old Lucerne Park Road (east) intersection.

#### Lake Hamilton Road Intersection

This intersection is currently unsignalized with stop signs on the minor street approaches. Several concepts were considered at this location since two mobile home park entrance roads on the north side of SR 544 do not align with Lake Hamilton Road. The signalized intersection concept includes realignment and connection of the mobile home park entrance roads at a single location at Lake Hamilton Road. Other alternatives considered a directional median opening at Lake Hamilton Road with downstream U-turns and a traffic signal that does not allow through movements in the north-south direction (signalized R-cut).

The ICE Tech Memo recommended the signalized Thru-Cut intersection for the SR 544/Lake Hamilton Drive intersection for the PD&E phase only. This intersection control strategy eliminates the north/south through movements across the intersection, eliminates the need for trucks to make U-turn movements east and

west of the intersection, avoids the situation where truck U-turn movements would be co-located with outbound left-turn movements made from the Hidden Cove 55+ residential community, and minimizes the total U-turn volumes. This control strategy also eliminates the need to acquire ROW in the northwest quadrant of the Hide-A-Way Lane intersection and has the second highest SSI scores of the four signalized alternatives. It should be noted that a Benefit/Cost (B/C) analysis and a Net Present Value (NPV) analysis will be conducted during the Stage 2 final design ICE analysis. This analysis will be conducted for a conventional signalized intersection, a signalized Thru-Cut intersection and a signalized RCUT intersection.

The recommended PD&E improvement concept also includes a reconfiguration of the inbound and outbound access for the Fairview Village and Lakeside Ranch mobile home communities. The two separate entrance/exit roadways providing access to these residential communities are combined to provide one single entrance/exit. This single access point eliminates the two existing access points that are separated by a distance of approximately 110-ft. This will eliminate the need for eastbound SR 544 vehicles and northbound Lake Hamilton Drive vehicles that are destined for Lakeside Ranch to travel approximately 0.25 miles to the east of Lake Hamilton Drive and make a U-turn. This will also eliminate the need for southbound vehicles exiting Lakeside Ranch to cross two lanes on westbound SR 544 in approximately 50-ft to turn left onto Lake Hamilton Drive or make a U-turn to head east on SR 544.

#### Brenton Manor Avenue /US 27 Intersection

The Brenton Manor Avenue intersection is currently unsignalized with a stop sign on the Brenton Manor Avenue approach. Alternatives evaluated include a signal and a roundabout. The US 27 intersection is currently signalized. Alternatives evaluated for the US 27 intersection include a signal, a quadrant roadway in the northwest quadrant, and a SPUI.

Due to the proximity of the Brenton Manor Avenue intersection to US 27 and the need to accommodate the anticipated queues between the two intersections, the alternatives evaluated for this intersection were dependent upon the alternatives for the US 27 intersection.

The ICE Tech Memo recommended intersection control strategy for the recommended a SPUI for the US 27 intersection and a roundabout for the Brenton Manor Avenue Intersection. This recommendation is based on the following:

- The SPUI + roundabout alternative is expected to result in 103 fewer fatal and injury crashes as compared to the NWQR alternative.
- The SPUI + roundabout alternative is also projected to have lower vehicle delays than the NWQR and would not cause any delay for the through vehicles on US 27.
- The implementation of a SPUI at the SR 544/US 27 intersection would enhance the functionality of this SIS corridor and help to promote the efficient movement of freight within this portion of Polk County.

It is also recommended that a Stage 2 ICE analysis be conducted for these two intersections using updated information when the final design phase of the project is initiated.

#### SR 17 Intersection

The SR 17 intersection is currently signalized. This intersection was evaluated for a signal and a roundabout. Of particular concern for this intersection is the avoidance or minimization of any impacts to the US post office located in the northeast quadrant of the intersection. The alignment of SR 544 east of SR 17 requires widening to the south to avoid post office impacts. Both alternatives eliminate the eastbound left turn lane into the post office and instead create a U-turn further east.

The ICE Tech Memo recommended intersection control strategy for the SR 17 intersection is a signalized intersection. The roundabout alternative has larger ROW impacts than the signalized intersection and would result in several residential relocations. Since the signalized intersection is projected to have a lower number of injury and fatal crashes, will require a smaller amount of additional ROW, and will not require any widening on the east leg of the intersection (i.e., CR 544), it is the recommended intersection control strategy for the SR 17 intersection.

#### 3.5 Selection of the Preferred Alternative

Selection of the preferred alternative included the avoidance and minimization of impacts, project costs, input received from the public at the Alternatives Public Meeting held on February 8, 2022, and input received from local stakeholders. An Evaluation Matrix was used to compare each alternative in detail including the No-Build Alternative (See **Appendix A**).

The preferred alternative for Segment 1, from Martin Luther King Boulevard to north of Avenue Y, is the three-lane typical section with a best fit alignment. This alternative is slightly higher in cost than the two-lane best fit alignment but improves traffic operations over the two-lane alternative. At the Martin Luther King Boulevard intersection, an exclusive southbound right turn lane is proposed to be added to this signalized intersection. A mini-roundabout is proposed at the Avenue Y intersection as this option has a lower cost than a traffic signal and fewer impacts than a traditional roundabout or traffic signal.

In Segment 2, from north of Avenue Y to east of the Lake Conine Canal, the south side widening is the preferred alternative because it does not impact the Lake Conine Wetlands Restoration Park or the Lake Conine boat ramp and has a lower overall cost than the north side widening alternative.

In Segment 3, from east of the Lake Conine Canal to east of Vista Del Lago, the north side widening alternative is the preferred alternative as it involves no relocations compared to seven residential relocations for the south side widening alternative. It also has a lower overall cost than the south side widening alternative. The preferred option for the Old Lucerne Park Road (west end) intersection is the realignment of the road to the east to align with Vista Del Lago Drive with a roundabout. The roundabout will provide positive speed control and will result in a lower number of fatal and injury crashes when compared to a signalized intersection.

In Segment 4, from east of Vista Del Lago to east of Lucerne Loop Road, the north side widening alternative is the preferred alternative. It has a lower overall cost when compared to the south side widening alternative and does not impact the Duke Osprey transmission line that the south side widening alternative does. A roundabout is proposed at the Lucerne Loop Road intersection because it will provide positive speed control and will result in a lower number of fatal and injury crashes when compared to a signalized intersection.

In Segment 5, from east of Lucerne Loop Road to west of Old Lucerne Park Road (east end), the north side widening alternative is the preferred alternative. It has a lower cost than the south side widening alternative and will not impact the Duke Osprey transmission line. A roundabout is the preferred alternative at the Old Lucerne Park Road intersection because it will provide positive speed control, will have a lower number of fatal and injury crashes, and will accommodate U-turn movements better than the signalized intersection alternative.

In Segment 6, from east of Old Lucerne Park Road (east end) to west of Brenton Manor Avenue, the preferred alternative is the north side widening alignment. It will involve one residential and one business

relocation where the south side widening alignment involves eight business relocations. The north side widening alternative has an overall lower cost than the south side widening alternative and will not impact the Duke Osprey transmission like the south side widening alternative will. At the Lake Hamilton Drive intersection, a traffic signal is proposed and will include the realignment of Sunrise Drive to connect to East Street at Lake Hamilton Drive.

In Segment 7, from west of Brenton Manor Avenue to LaVista Drive, the preferred alternative involves widening to the north side of the road west of US 27 and to the south side of the road east of US 27, primarily to avoid impacts to the Duke Osprey transmission line. A single point urban interchange is proposed at the US 27 intersection with a roundabout at the Brenton Manor Avenue intersection. The single point urban interchange has a higher initial cost than the quadrant roadway concept, but significantly lower number of fatal and injury crashes, resulting in a lower overall predicted lifecycle cost.

In Segment 8, from LaVista Drive to SR 17, the preferred alternative is the reduced 4 lane divided urban roadway with a centered alignment. This option provides a balance in cost and impacts while providing a median for pedestrian refuge and allowing for an access management plan without resulting in any residential or business relocations. The intersection with SR 17 is recommended to remain signalized and no improvements are proposed on the north, south or east legs of the intersection.

#### 3.6 **Preferred Alternative**

The objective of the PD&E study is to evaluate alternatives that will address the Purpose and Need and to identify related environmental impacts. As described above, multiple alternatives were developed for consideration, including Build and No-Build Alternatives. Based on an evaluation of the proposed alternatives, FDOT District One has selected the following as the preferred alternative for each roadway segment and intersection.

Segment 1 – Martin Luther King Boulevard to North of Avenue Y

The preferred typical section in Segment 1 is the three-lane typical section with a best fit alignment. It is slightly wider and will have minor ROW impacts (no residential relocations) than the two-lane alternative but will provide additional safety and capacity for turning vehicles with the center turn lane. **Figure 3-10** illustrates this typical section.

The preferred improvement at the Martin Luther King Boulevard intersection is to maintain the existing traffic signal but add a new southbound right turn lane from SR 544 onto Martin Luther King Boulevard and extend the southbound left turn lane. The segment of 1<sup>st</sup> Street NW will be removed between Avenue U NW and Avenue V NW and will be realigned with SR 544. A concrete median will be added on SR 544 from Martin Luther King Boulevard to the new segment of 1<sup>st</sup> Street NW along with a median at Avenue Y NE creating a right-in/right-out with the option to make a U-turn movement at the realigned 1<sup>st</sup> Street NW.

The single-lane, mini-roundabout with the 90-ft inscribed diameter is recommended at Avenue Y. This concept will minimize impacts to the residences, businesses and church located at this intersection while providing an opportunity for an entrance feature to the historic Florence Villa neighborhood and speed control for vehicles entering the neighborhood. The SR 544 and 4<sup>th</sup> Street NE intersection will also be realigned to improve sight distance and meet design criteria standards for the roundabout.

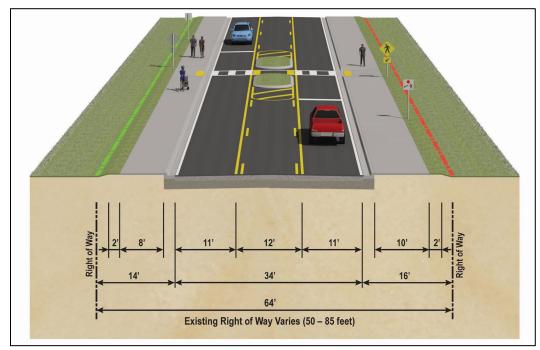


Figure 3-10 Segment 1 Preferred Typical Section from Martin Luther King Boulevard to North of Avenue Y.

#### Segment 2 – North of Avenue Y to East of Lake Conine Canal

The four-lane divided roadway is proposed with widening to the south side of the road. This alignment is recommended to avoid impacts to the Lake Conine Wetland Restoration Area and due to the proximity of the road to Lake Conine and wetlands along the lake. **Figure 3-11** illustrates the proposed four-lane divided roadway typical section for Segments 2 through 7.

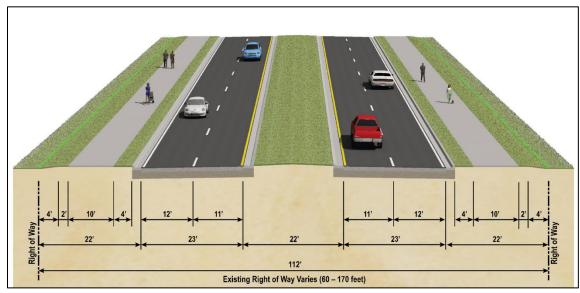


Figure 3-11 Segments 2 - 7 Preferred Typical Section from North of Avenue Y to LaVista Drive.

Segment 3 – East of Lake Conine Canal to East of Old Lucerne Park Road (west end)

The four-lane divided roadway is proposed with widening to the north side of the road. This alignment is recommended to avoid impacts to existing residential developments on the south side of SR 544 and due to the proximity of the road to Lake Smart and wetlands along the lake.

The preferred improvement at the Old Lucerne Park Road (west end) intersection is to realign Old Lucerne Park Road (west end) to align with Vista Del Lago Drive. The preferred alternative proposes to close the existing northeast leg of Old Lucerne Park Road and realign the roadway at Vista Del Lago Drive with a two-lane roundabout. The roundabout will help with speed control along SR 544 and improve safety when compared to the traffic signal option.

Segment 4 - East of Old Lucerne Park Road (west end) to East of Lucerne Loop Road

The four-lane divided roadway is proposed with centered widening. The existing road ROW can accommodate the proposed four-lane divided roadway in this segment.

The preferred improvement at the Lucerne Loop Road intersection is a two-lane roundabout with continuous eastbound movement along SR 544. It will help with speed control along SR 544 and improve safety when compared to the traffic signal option.

Segment 5 – East of Lucerne Loop Road to East of Lake Hamilton Canal

The four-lane divided roadway is proposed with widening to the north side of the road. This alignment is recommended to avoid impacts to the Lake Region Lakes Management District boat ramp on the south side of the road and also to avoid impacts to the proposed Duke Energy transmission easement/poles on the south side of the road.

The preferred improvement at the Old Lucerne Park Road (east end) intersection is a three-legged roundabout. It will help with speed control SR 544 and increase safety when compared to the traffic signal option at this skewed intersection.

Segment 6 – East of Lake Hamilton Canal to West of Brenton Manor Avenue

The four-lane divided roadway is proposed with widening to the north side of the road. This alignment is recommended to avoid impacts to the Duke Energy transmission easement/poles and existing commercial development on the south side of the road.

The signalized thru-cut alternative is recommended at the Lake Hamiliton Drive intersection. This option includes realigning the two internal roads for the developments on the north side of SR 544 so that they intersect SR 544 in a single location (north leg of the intersection).

Segment 7 – West of Brenton Manor Avenue to LaVista Drive

The four-lane divided roadway is proposed with widening to the north side of the road west of US 27 and to the south side of the road east of US 27. This alignment is recommended to avoid impacts to Duke Energy transmission easement/poles that switch from the south side of the road to the north side of the road through the US 27 intersection.

The preferred intersection improvement at Brenton Manor Avenue is a three-legged roundabout. This intersection concept is paired with the recommended single point urban interchange at US 27.

The single point urban interchange is the recommended improvement at the US 27 intersection due to the

lower predicted life cycle crash costs with this concept compared to the northwest quadrant roadway with three signalized intersections.

#### US 27 (four-legged intersection) Intersection Improvement

The proposed Preferred Alternative would bridge the north and southbound travel lanes along US 27 crossing over SR 544. At grade north and south bound lanes will be included for access to businesses and east/west travel along SR 544. In addition, travel lanes and left turn lanes will be added to the at-grade SR 544 east and west bound lanes.

#### Segment 8 – LaVista Drive to SR 17

The reduced four-lane divided roadway is proposed with centered widening through this segment. This alignment is recommended to minimize residential relocations through this segment of the project but provide access control with the raised median. **Figure 3-12** illustrates this typical section.

SR 17 will remain a four-legged intersection with a traffic signal. The preferred concept for the SR 17 intersection is to the west leg of the intersection. A left turn lane will be added to SR 544 for northbound movements onto SR 17. A striped traffic separator will be added between the northbound left turn lane and the eastbound travel lane

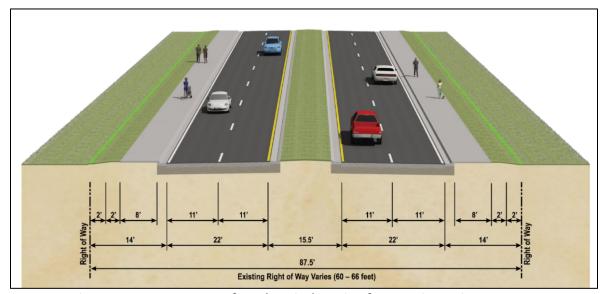


Figure 3-12 Segment 8 Preferred Typical Section from LaVista Drive to SR 17.

#### 4.0 CULTURAL SETTING

A historic context for the project area is included in the CRAS Report prepared for the PD&E Study (ACI 2023) and is not repeated here. A brief summary of relevant historical trends in the Winter Haven area follows. In addition, because the Florence Citrus Growers Association Historic District (8PO09983) was found to have insufficient information during the CRAS, additional historic context is provided below.

In 1884, the community of Florence Villa was settled, as well as Winter Haven approximately 1.5 miles to the south. The community of Florence Villa, originally called Wahneta, was settled by Frederick W. Inman and his wife Florence Jewett Inman, for whom it was named, in 1904. Inman experimented with the agricultural potential of the area, including a citrus grove on 100 acres of his large property. Inman and his wife constructed a large residence on Spring Lake in which they eventually developed into the Florence Villa Hotel, welcoming guests such as Henry B. Plant (Johnston 1997). The community of Florence Villa, which thrived in its early years due to the citrus and hospitality businesses of the Inmans, was incorporated in 1917 and in 1923 merged with the city of Winter Haven (Gernert Jr. 2014).

By the mid-twentieth century, however, the whole community of Florence Villa was a segregated Black neighborhood of the Winter Haven area (Vickers 2010). An area of Florence Villa, referred to as "Boggy Bottom," is located along Avenue Y NE and bordered by Lake Conine (Maxwell 1987). Pughsville, located south of Winter Haven, was also a segregated Black neighborhood of the city (Cribb 1961). Unlike Florence Villa, Pughsville began as a Black community that was established following the emancipation of slaves in 1865 (Ferguson 2017). The Pughsville community included a school, grocery stores, restaurants, and social halls from the early twentieth century until the 1960s; however, the community no longer exists due to new development (Ferguson 2017). A historical marker commemorating the historic Pughsville community is located on Avenue O SE immediately east of US 17.

The central portion of Winter Haven was well-established with residential and commercial development by the early 1940s, but the majority of the area within the SR 544 corridor was rural with undeveloped wetland and citrus groves (USDA 1941a, b). Development within the corridor at this time was limited to the Florence Villa community southwest of the intersection of SR 544 and Martin Luther King Boulevard and minimal residential development to the east near SR 544 and US 17. By 1952, residential development in Florence Villa and the eastern terminus of the APE had expanded but the area remained dominated by agricultural land and the adjacent lakes (USDA 1952 a,b).

In 1961, the Polk County School Board introduced plans for the county's first climate-controlled school in Mulberry (Dobert 1961). Plans were not limited to one school, however, as a total of three were planned for opening in time for the 1962-1963 school year — Kingsford Elementary in Mulberry, Lake Elbert Elementary in Winter Haven, and Alta Vista Elementary in Haines City (Tampa Tribune 1961a). The approval of these schools set the precedent for future school construction in Polk County, ending the nearly yearlong controversy, with two additional "compact, full air-conditioned" elementary schools approved and planned for construction in 1962 (Orlando Sentinel 1961). To decrease construction costs and improve the efficiency of the air-conditioning, a compact version of the "finger-type" school design was utilized at Alta Vista, as well as Lake Elbert and Kingsford (Tampa Tribune 1961b). This school design was prominent throughout the United States following World War II. In order to accommodate the post- World War II (WWII) "baby boom" and building boom, school design became more lightweight in construction compared to previous multistory, grand brick buildings. The popular "finger plan" often had an E-shaped footprint with rows of classrooms (the "fingers") along covered, open air corridors separated by grassy courts (ICON Architecture, Inc. 2003). With this design, classrooms were provided direct access to the school grounds with entrances along covered walkways, as well as maximum circulation of fresh air and natural light (Baker 2012). In

addition, the segmented design allowed for the schools to be expanded as needed without significantly altering the design of the campus – an important feature during a time of increasing population growth.

By 1968, development within the corridor had expanded again, including additional residential and commercial buildings, mobile home parks, the Alta Vista Elementary School, and the construction of the Willow Brook Golf Course (USDA 1968). Development along the corridor remained steady over the next few decades with additional mobile home parks being constructed by the 1980s, multi-family residential developments from the 1980s into the 1990s, and industrial development within the central portion of the SR 544 corridor by the late 1990s (FDOT 1980a, 1980b; Google Earth 2023). Since the early 2000s, changes throughout the corridor have been limited to the occasional demolition and construction of residential and commercial buildings along the corridor and newly constructed subdivisions (Google Earth 2023).

#### 4.1 Florence Villa Additional Research

The following history includes a variety of similar-sounding names. For the sake of clarity, the town (which was later incorporated into the City of Winter Haven as a neighborhood) will be discussed as "Florence Villa", the agricultural business will be referred to as the "Florence Villa Fruit Company" (FVFC), and the local cooperative will be referred to as the "Florence Villa Citrus Growers Association" (FVCGA) with the understanding that multiple names have been used throughout the years to describe each and that some terms were used to refer to both the company and the local cooperative.

Frederick Inman became a pioneer of the citrus industry, which was prominent in the economy of the Winter Haven area. It was reported that by 1891, Inman had 40 private acres and 136 acres "for other parties" (Courier Informant 1891). As his small operation grew, Inman hired Dan Laramore, a Black man, to manage his citrus fields as his first field foreman. Laramore was a talented horticulturist who had learned Japanese farming techniques after living in California for some time to escape the intense racial segregation of the South (Johnson III 2010). Between 1881 and 1885, many Black settlers were entering into the citrus industry across the state, a trend which continued into the 20<sup>th</sup> Century (Johnson III 2010). During the late 1800s, Florence Inman's sister, Mary B. Jewett, purchased and subdivided land bounded by Avenue T to the north, Avenue O to the south, and 1<sup>st</sup> Street and 8<sup>th</sup> Street to the east and west. This area was intended as an African American community (Kelly 2005).

By the mid-1890s, new families were moving into the area, swelling the size of the community for the first time (Polk County History Center & Genealogical Library Archives [PCHC] Archives 1897). Inman heavily diversified his crops, growing tomatoes, pineapples, oranges, peaches, melons, grapefruit, tangerines, and apples, many of which were considered delicacies at the turn of the nineteenth century. Much of his success was also attributed to his chosen location. In 1901, Inman had approximately 175 acres exclusively for "bearing trees" (Courier Informant 1901; PCHC Archives 1900).

In 1908, the Florence Citrus League was established (Lakeland Ledger 1959). The following year, the Florida Citrus Exchange (FCE) was established by Fred W. Inman, Sidney Curtis Inman, and John H. Ross along with other local citrus growers. Inman was a leader in the establishment of the Florida Citrus Exchange, serving on the statewide organizational committee and as the Florida Citrus Exchange's first president. According to the 1911 *Proceedings of the Florida State Horticultural Society*:

The theory of the organization [was], that the grower manages his own affairs, by first coming together in various communities organizing associations electing representatives who organize sub-exchanges, who in turn elect their representatives who constitute the Board of Directors of the central organization (Burton 1911).

This organization also hoped to standardize and regulate the statewide citrus packing and marketing system to ensure high-quality products. By improving the state's reputation, the organizers hoped to increase profitability for all growers (Burton 1911; Padgett 2018). Following its establishment, many localized exchanges were created to help maximize regional benefits and bolster the statewide effort. This included the Florence Citrus Growers Association also established by Inman in 1909 which was convened in the first FVFC plant, located at 303 Avenue T NW immediately west of the railroad tracks (Johnston 1997). However, larger companies refrained from joining out of concern that greater cooperation between citrus companies would lead to a drop in their individual profit margin (Padgett 2018). Ultimately, as the political and financial power of the statewide cooperative grew, many citrus giants begrudgingly joined. Because the Haines City CGA was also established in 1909, it is not currently possible to determine if the FVCGA is Florida's oldest CGA as some have suggested, but it is undoubtedly one of the state's first (Lakeland Ledger 1959, Kelly 2009).

In 1910, Inman fell suddenly ill and passed away (The Weekly Tribune 1910). Hoping to continue his legacy, Inman's sister-in-law Mary B. Jewett, Eugene Holtsinger, and R. Gunsby formed the FVFC in 1911 (PCHC 1911). Based on available information, this act was largely to formalize and expand the operation, given the fact that the FVFC was mentioned in newspapers as early as January 1908, but no articles of incorporation could be located before 1911 (The Weekly Tribune 1908). The town of Florence Villa was incorporated in 1917 and in 1923 it was merged with the city of Winter Haven (Gernert Jr. 2014).

As the popularity of the FVFC, Florence Villa Hotel, and the circa (ca.) 1924 Villa Golf Course grew, the need for workers boomed. Many of the employees hired after the mid-1920s appear to have been Black due to the fact that the community of Florence Villa had largely become a segregated Black neighborhood of Winter Haven (Vickers 2010). According to one local, the living conditions were far inferior to her White counterparts living in Winter Haven, with no paved roads or "decent places to live, just some huts up on First Street" (Johnson III 2010).

Since Inman's arrival in the 1880s, the area along SR 544 had been largely vacant. In 1920, the land was formally platted, and by the mid-1920s a few residences and businesses had been constructed mostly along Buckeye Road (later Avenue T and present-day Martin Luther King Boulevard) (Polk County 1920; Sanborn Insurance Company 1924) (**Figure 4-1**). The original wood frame packing house constructed on Avenue T (now Martin Luther King Boulevard), west of the railroad tracks was supplemented by a large masonry building constructed in 1930 on the east side of the railroad tracks. The new masonry building was one of the largest buildings constructed in Winter Haven during the Great Depression (Faux 2024). In 1942, the Florence Villa Hotel was sold to G.L. Ayers who began dismantling and parsing out the building for salvage (Winter Haven Herald 1942). This largely brought an end to the tourism economy in Florence Villa and caused the agricultural economy to move to the forefront.

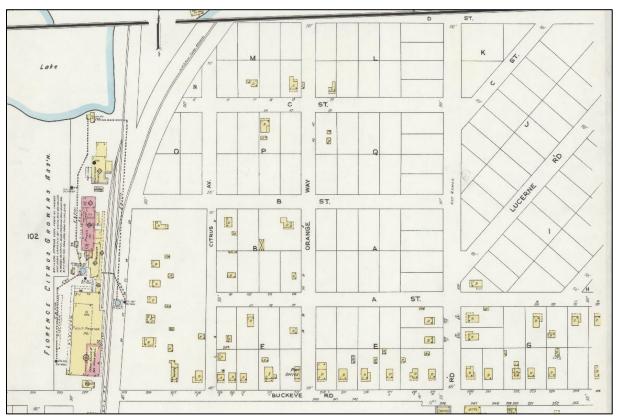


Figure 4-1 View of the general area in 1924 before the construction of the new plant in ca. 1930 (Sanborn Insurance Company 1924).

By ca. 1941, development within the vicinity of the FVCGA packing house had become more dense through the infill of formerly vacant lots; however, it remained concentrated between what is now Martin Luther King Boulevard and Avenue U and along 2<sup>nd</sup> Street (USDA 1941a). Light development had occurred along the north side of SR 544 by this time, but the south side of the road remained undeveloped. With the increased capacity and strong financial profits, the facility was expanded in 1949 and 1953 by the addition of a concentrate factory and a cold storage facility, respectively. The overall facility, which included a frozen orange juice plant, fresh fruit packing house, warehouse, and icehouse, was sold to General Foods-Birdseye Corporation (GFBC) in 1959 (Johnston 1997). Shortly after the transfer of ownership, the GFBC determined that the business had outgrown the plant and decided to move its operation elsewhere (Lakeland Ledger 1959). By 1959, residential development had spread to both the north and south sides of SR 544 within the subdivision (USGS 1952) (Figure 4-2).

Beginning in the early 1960s, the expansion of 1<sup>st</sup> Avenue, urban renewal, and general development led to the demolition of many buildings in the Florence Villa neighborhood (Houts 1979). As more duplexes and apartment buildings were constructed, early twentieth century buildings within the Black community were slowly demolished (Cribb 1961). Since 1990, several companies under the parent company "Belvedere Vodka" have used the historic FVCGA plant for distilling alcohol (Faux 2024).

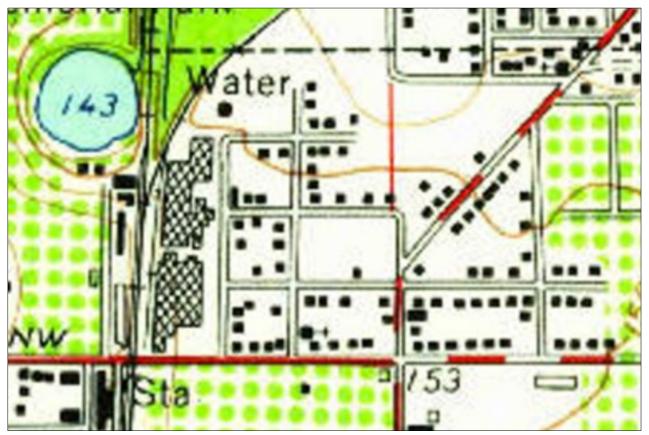


Figure 4-2 A 1959 topographic map depicting the increase in development along the south side of SR 544 (USGS 1959). Most of the development between the plant and SR 544 occurred by 1941.

# 5.0 SURVEY METHODOLOGY

A narrative and table summarizing the initial background research results as well as the Florida Master Site File (FMSF) search results for the project is included in the CRAS Report prepared for the PD&E Study and is not repeated here (ACI 2023). The focus of the additional research was to ascertain enough information to determine the eligibility of the entire Florence Citrus Growers Association Historic District (8PO09983) and identify what buildings (if any) contribute to the significance of the district. Research focused on information available within the FMSF digital database, online research, published books and articles, unpublished manuscripts, newspaper articles, as well as various deeds and plats found online at the Polk County Clerk of the Circuit Court and Comptroller. In February 2024, a public records request was made to the City of Winter Haven and the Museum of Winter Haven History was also contacted. Archival research at the Polk County History Center & Genealogical Library Archives (PCHC Archives) in Bartow, Florida was conducted on February 28, 2024. In addition, a review of relevant historic USGS quadrangle maps, historic aerial photographs, Polk County Sanborn Maps, and the Polk County Property Appraiser's data were also reviewed (Faux 2024). No archaeological research or survey was undertaken for the addendum and this work did not include a historical/architectural field survey.

# **6.0 SIGNIFICANT HISTORIC PROPERTIES**

Based on the results of the 2023 CRAS and additional research for the Florence Citrus Growers Association Historic District, 17 historic properties within the project APE are listed, determined eligible, or appear individually eligible for listing in the NRHP. These significant historic properties include a Colonial Revival style building located at 2208 Peninsular Drive (8PO03077), a Craftsman style building located at 128 Scenic Highway (8PO03079), the Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095), and the Florence Citrus Growers Association Historic District (8PO09983) with 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015). The CRAS included extensive physical descriptions, and historical information related to these significant properties and some of the information is not repeated here (ACI 2023). A summary of the history and importance of these significant properties follows. A copy of the FMSF forms are contained in **Appendix D**.

# 6.1 Colonial Revival style building at 2208 Peninsular Drive (8PO03077)



Photo 6-1 2208 Peninsular Drive (8PO03077), looking west.

The Colonial Revival style building at 2208 Peninsular Drive was constructed in ca. 1915 (**Photo 6-1**). The 2.5-story, irregular plan building rests on a rusticated concrete pier foundation and has a wood frame structural system clad in weatherboard. The complex roof line comprised of a primary hip roof with hip dormers, hip extensions, and half-hip porches is covered with composition shingles. A brick chimney is located within the slope of the primary hip roof on the west elevation. Distinguishing architectural features include wide, overhanging eaves with boxed rafter tails, corner pilasters, wooden trim around the windows and doors, and wooden foundation lattice. Alterations include replacement roofing and the segment of enclosed porch on the south elevation. A non-historic detached garage is located to the northwest of the building. Overall, the building has minimal material alterations, and the enclosed segment of the wrap-around porch does not significantly detract from

the overall design and massing of the residence. The SHPO determined 8PO03077 individually eligible for listing in the NRHP under Criterion C in the area of Architecture as a minimally altered example of a Colonial Revival style residence in Haines City.

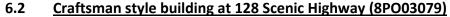




Photo 6-2 128 Scenic Highway (8PO03079), looking south.

The Craftsman style building at 128 Scenic Highway was constructed in ca. 1925 (**Photo 6-2**). The two-story, irregular plan building rests on a continuous brick foundation and has a wood frame structural system clad in novelty siding. The clipped gable roofs are covered with composition shingles, as well as the gable roof porte-cochere. A brick chimney is located on the eave end of the west elevation. Distinguishing architectural features include overhanging eaves with exposed rafter tails, wooden brackets, wood trim around the windows and doors, rectangular gable vents, and wood porch supports on brick piers. A gable roof porte-cochere is located on the east elevation of the building with a second story room located above the driveway. Alterations include replacement roofing. A historic detached garage is located to the south of the building but is not visible from the public ROW. Overall, the resource has not been significantly altered and appears to retain most of the original materials and character defining features. The SHPO determined 8PO03079 individually eligible for listing in the NRHP under Criterion C in the area of Architecture as a minimally altered example of a Craftsman style residence in Haines City.

# 6.3 Alta Vista Elementary School (8PO10093)



Figure 6-1 Location of the Alta Vista Elementary School (8PO10093) and two contributing resources (8PO10094 and 8PO10095) within the APE.

Alta Vista Elementary School is a building complex resource group located at 801 Scenic Highway S (**Figure 6-1**). Alta Vista Elementary School was one of three air-conditioned elementary schools opened in Polk County in 1962 (Tampa Tribune 1962). Within the boundaries of the resource group, as contained within the APE, there are two contributing resources. These include two International style buildings (8PO10094 & 8PO10095), constructed in ca. 1962 (**Photo 6-3**).

In 1961, the Polk County School Board introduced plans for the county's first climate-controlled school in Mulberry (Dobert 1961). The plans included two other schools – Kingsford Elementary in Mulberry, Lake Elbert Elementary in Winter Haven and Alta Vista Elementary in Haines City - for opening in the 1962-1963 school year (Tampa Tribune 1961a). The proposition led to significant controversy amongst the public as it was feared the costs would be high, therefore increasing taxes, and at the time there was little evidence that climate-controlled environments were more conducive to learning. Following the nearly yearlong controversy, the approval of these schools set the precedent for future school construction in Polk County, and two additional "compact, full air-conditioned" elementary schools were approved and planned for construction in 1962 (Orlando Sentinel 1961).



Photo 6-3 801 Scenic Highway S/Alta Vista Elementary School (8PO10093; 8PO10094 and 8PO10095), looking northeast.

Alta Vista Elementary was the first set to be completed in February 1962 at an approximate cost of \$255,000 (Orlando Sentinel 1961). The original design was equipped to handle 360 elementary students with a total of 12 classrooms, office space, and a cafetorium (a combined cafeteria and auditorium space) and could be expanded with an additional 12 classrooms in future without destroying the original design (Orlando Sentinel 1961). To decrease construction costs and improve the efficiency of the air-conditioning, a compact version of the "finger-type" school design was utilized at Alta Vista, as well as Lake Elbert and Kingsford (Tampa Tribune 1961b). This school design was prominent throughout the United States following WW II. In order to accommodate the post-WWII "baby boom" and building boom, school design became more lightweight in construction compared to previous multi-story, grand brick buildings. Similar to the Ranch style houses popular at the time, schools became more spread out in plan with flat roofs, decreased ornamentation, and often used brick or concrete with glass or metal window wall systems often in the International style (ICON Architecture, Inc. 2003; Baker 2012). The popular "finger plan" often had an E-shaped footprint with rows of classrooms (the "fingers") along covered, open air corridors separated by grassy courts (ICON Architecture, Inc. 2003). With this design, classrooms were provided direct access to the school grounds with entrances along covered walkways, as well as maximum circulation of fresh air and natural light (Baker 2012). In addition, the segmented design allowed for the schools to be expanded as needed without significantly altering the design of the campus – an important feature during a time of increasing population growth.

The SHPO determined the Alta Vista Elementary Resource Group (8PO10093) eligible for listing in the NRHP under Criteria A and C in the areas of Education and Architecture as the first air-conditioned school in Polk County. Although the overall design of Alta Vista Elementary is typical of this era, the approval and construction of this campus set the precedent for future construction of air-conditioned schools throughout Polk County from 1962 onward. The resource demonstrates the importance of architectural design and the application of new technology in improving the learning environment – and resulting success – of students.

# 6.4 Florence Citrus Growers Association Historic District (8PO09983)

The Florence Citrus Growers Association Historic District is located in Sections 16 and 17 of Township 28 South, Range 26 East in the Florence Villa community of Winter Haven, Florida (USGS 1959). The proposed boundary for the district is bounded by Martin Luther King Boulevard to the south, Ware Avenue NE to the north, 2<sup>nd</sup> Street NE to the east, and the former Atlantic Coast Line (ACL) Railroad to the west, which follows the 1920 subdivision plat. Within the APE, the historic district spans approximately 200 ft from either side of SR 544 from Martin Luther King Boulevard in the south to 2<sup>nd</sup> Street NE to the north. During the CRAS, 29 contributing resources (8PO09999 through 8PO10027) were identified within the historic district, as contained within the APE, as well as six non-contributing resources. This was a preliminary determination based on the limited information available at the time. For the purposes of the CRAS, contributing resources included any that were considered historic (constructed in or prior to 1977), while non-historic resources (constructed after 1977) were considered non-contributing.

Following additional research, it was determined that the period of significance spans from the establishment of the Florence Villa Citrus Growers Association in 1909 to the sale of the facility to GFBC in 1959. As such, there are 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015) contained within the APE (Figure 6-2). The contributing resources include seven Masonry Vernacular style buildings (8PO10007 – 8PO10012, 8PO10015), three Frame Vernacular style buildings (8PO09999, 8PO10000, 8PO10014), and one Industrial Vernacular style building (8PO10005), constructed between ca. 1918 – 1958. These resources are common examples of their respective architectural styles found throughout Winter Haven and Florida as a whole and are not significant embodiments of a type, period, or method of construction. As such, although the resources are contributing to the Florence Citrus Growers Association Historic District (8PO09983), the resources do not appear individually eligible for listing in the NRHP. The remaining 24 buildings within the APE are considered non-contributing resources because they do not fall within the period of significance or have been altered.

Based on the information gathered, the historic district appears eligible for listing in the NRHP under Criterion A in the areas of Ethnic Heritage (Black) and Industry. The FVCGA was one of the first to be convened as part of the FCE and was established by a key founder and the first president of the groundbreaking cooperative, making it a forerunner in the industry. The period of significance includes the years between the establishment of the FVCGA in 1909 and the sale of the plant to GFBC in 1959; thus, it reflects the evolution of citrus processing throughout the early to mid-twentieth century and demonstrates the significance of the citrus industry in communities throughout Florida. The historic district is also culturally significant for its role in developing the historically Black community that remains today. Through the development of the FVCGA, the associated FVCGA subdivision, the employment opportunities provided by the FVCGA, and the continuous development of surrounding subdivisions and neighborhoods outside of, but adjacent to, the historic district, the overarching Florence Villa community has become one of Winter Haven's largest historically Black communities.

Although the historic district was established as a result of Dr. Fredrick Inman's life's work, his role in the development of this specific area does not provide sufficient merit for listing in the NRHP under Criterion B. No evidence was found to suggest that Inman cultivated citrus or other agricultural

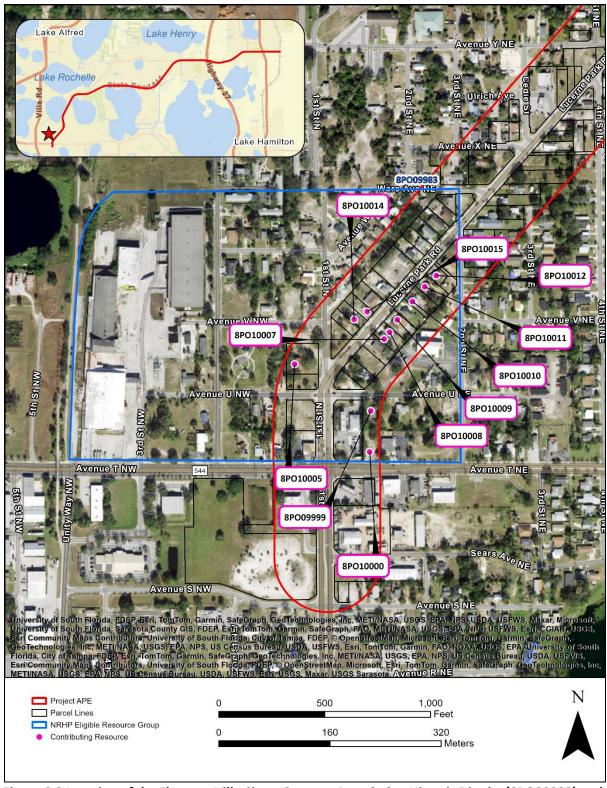


Figure 6-2 Location of the Florence Villa Citrus Growers Association Historic District (8PO09983) and 11 contributing resources within the APE.

products within the district boundary, and the available historic maps and aerial images do not suggest that the land was ever used for farming. None of the resources located within the district were built by Inman or constructed during his lifetime, making the affiliation with the person of significance indirect. Furthermore, the majority of the buildings located within the historic district boundaries were constructed after the period of significance and a significant number of early twentieth century residences within the district have been demolished.

The remaining buildings within the historic district have been altered and are not significant embodiments of a type, period, or method of construction and thus do not gain their historic significance from architectural design. Although the FVCGA subdivision is associated with the FVCGA and FVFC, there is no evidence to suggest that the residences within the subdivision were built specifically by the company. Research suggests that although the subdivision is named for the FVCGA, the residential development within the subdivision and surrounding area occurred organically as people moved to the area for employment opportunities. Thus, the historic district is not an example of a planned company town. As such, the historic district does not appear eligible for listing in the NRHP under Criterion C due to the lack of historic integrity and lack of planned, intentional design.

# 6.4.1 <u>Eleven Contributing Resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015)</u>

There are 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015) within the Historic District as contained within the APE. The contributing resources include three Frame Vernacular style buildings (8PO09999, 8PO10000, 8PO10014), one Industrial Vernacular style building (8PO10005), and seven Masonry Vernacular style buildings (8PO10007 – 8PO10012, 8PO10015), constructed between ca. 1918 – 1958. The contributing resources are summarized in **Table 6-1.** 

Table 6-1 Historic resources within the Florence Citrus Growers Association Historic District (8PO09983) as contained within the APE.

(8PO05983) as contained within the APE.				
FMSF No.	Address/Site Name	Year Built	Style/Type	NRHP Eligibility Recommendation
8PO09999	130 Avenue U NE	ca. 1918	Frame Vernacular	Individually Ineligible
8PO10000	131 Martin Luther King Blvd NE	ca. 1920	Frame Vernacular	Individually Ineligible
8PO10005	2101 1st Street N	ca. 1958	Industrial Vernacular	Individually Ineligible
8PO10007	2206 Lucerne Park Road (Building 1)	ca. 1952	Masonry Vernacular	Individually Ineligible
8PO10008	2206 Lucerne Park Road (Building 2)	ca. 1952	Masonry Vernacular	Individually Ineligible
8PO10009	2208 Lucerne Park Road	ca. 1947	Masonry Vernacular	Individually Ineligible
8PO10010	2220 Lucerne Park Road	ca. 1952	Masonry Vernacular	Individually Ineligible
8PO10011	2222 Lucerne Park Road	ca. 1952	Masonry Vernacular	Individually Ineligible
8PO10012	2244 Lucerne Park Road	ca. 1952	Masonry Vernacular	Individually Ineligible
8PO10014	2137 Lucerne Park Road	ca. 1925	Frame Vernacular	Individually Ineligible
8PO10015	0 Lucerne Park Road	ca. 1953	Masonry Vernacular	Individually Ineligible

The three Frame Vernacular style buildings (8PO09999, 8PO10000, and 8PO10014) are private residences that were constructed between ca. 1918 and ca. 1941. (Photos 6-4, 6-5, and 6-13). The buildings

within the Historic District have pier or continuous foundations. The principal roofs of these buildings are gable roofs clad with composition shingles and the exterior walls are clad in stucco, brick, or novelty siding. Exterior ornamentation is minimal, and typically consists of wood or stucco window and door surrounds, gable vents, and overhanging eaves with full or partially exposed rafter tails. The Industrial Vernacular style outbuilding (8PO10005) was constructed in ca. 1958 and has a continuous concrete block foundation with a steel skeleton structural system and a gable roof with two shed roof segments (Photo 6-6). The building exterior, as well as the roof, are clad with metal; however, some patches of vinyl and plywood siding are present. The seven Masonry Vernacular style buildings were constructed between ca. 1947 and ca. 1953 (Photos 6-7 through 6-12, and 6-14). Of the seven buildings, three are private residences (8PO10009, 8PO10010, 8PO10011), three are utilized as duplexes (8PO10007, 8PO10008, 8PO10012), and one is a vacant commercial building (8PO10015). The buildings within the Historic District have a concrete slab or continuous concrete block foundations and concrete block walls with principal gable roofs clad with composition shingles of 3V crimp sheet metal. Secondary roofs commonly include shed and hip roof extensions. The exterior cladding often consists of painted concrete block, stucco, and artificial masonry or brick veneer. The stucco buildings frequently have wood siding in the gable ends.



Photo 6-4 130 Avenue U NE (8PO09999), looking south.



Photo 6-5 131 Martin Luther King Blvd NE (8PO10000), looking north.



Photo 6-6 2101 1st Street N (8PO10005), looking northwest.



Photo 6-7 2206 Lucerne Park Road (Building 1) (8PO10007), looking southeast.



Photo 6-8 2206 Lucerne Park Road (Building 2) (8PO10008), looking northeast.



Photo 6-9 2208 Lucerne Park Road (8PO10009), looking southeast.



Photo 6-10 2220 Lucerne Park Road (8PO10010), looking southeast.



Photo 6-11 2222 Lucerne Park Road (8PO10011), looking southeast.



Photo 6-12 2244 Lucerne Park Road (8PO10012), looking southeast.



Photo 6-13 2137 Lucerne Park Road (8PO10014), looking northwest.



Photo 6-14 0 Lucerne Park Road (8PO10015), looking northwest.

These buildings are contributing to the Florence Citrus Growers Association Historic District (8PO09983) because they were constructed during the period of significance and have not been significantly altered. Although several of the buildings have in fact undergone alterations, these alterations are considered reversible and/or do not significantly detract from the overall feel and association of the historic district and period of significance. Common alterations include replacement roofing, siding, or windows, and the enclosure of porches with windows or screening. One resource (8PO10011) has been altered by the enclosure of the front porch with stucco siding; however, the design of the porch remains distinguishable from the main living space of the building and could be reversed. When assessed as a whole, the contributing resources make up the overall historic fabric of the district. However, the resources do not individually reflect the evolution of citrus processing throughout the early to mid-twentieth century, demonstrate the significance of the citrus industry in communities throughout Florida, or the development of one of Winter Haven's largest historically Black communities. In addition, the resources do not have significant associations with individuals whose activities are demonstrably important within a local, State, or national historic context. Furthermore, the resources are common examples of Frame Vernacular, Masonry Vernacular, and Industrial Vernacular style architecture found throughout Winter Haven and Florida as a whole and are not significant embodiments of a type, period, or method of construction. As such, although the resources are contributing to the Florence Citrus Growers Association Historic District (8PO09983), the resources do not appear individually eligible for listing in the NRHP.

# 7.0 EVALUATION OF EFFECTS

The FDOT applied the Criteria of Adverse Effect (36 CFR Part 800.5(a)(1)) to the 17 NRHP-eligible properties located within the project APE: the Colonial Revival style building located at 2208 Peninsular Drive (8PO03077), the Craftsman style building located at 128 Scenic Highway (8PO03079), the Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095), and the Florence Citrus Growers Association Historic District (8PO09983) with 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015). Potential adverse effects on historic properties include, but are not limited to: physical destruction of or damage to all or part of the property; alteration of a property; removal of the property from its historic location; change of the character of the property's use or of physical features within the property's setting that contribute to its historic character; introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features; and neglect of a property which causes its deterioration.

The focus of this effects discussion will address the preferred Build Alternative within Segment 1 from Martin Luther King Boulevard to North of Avenue Y and Segment 8 from LaVista Drive to SR 17. In addition, of the nine major intersection build alternatives evaluated for intersection configuration, the Martin Luther King Boulevard Intersection is the only one that contains a significant property within the APE. No historic properties are located within Preferred Build Alternatives Segments 2 through 7 between Avenue Y and LaVista Drive; therefore, these segments are not included in the descriptions below. These segments are shown in the plans as contained in **Appendix A; Sheets No. 2-13 and 16 & 17**) for reference.

The Florence Citrus Growers Association Historic District (8PO09983) and 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015) are located within Segment 1. The preferred alternative for Segment 1, from Martin Luther King Boulevard to north of Avenue Y, is the three-lane typical section with a best fit alignment. The preferred typical section includes two 11-ft travel lanes with a 12-ft center turn lane and 8-ft and 10-ft-wide concrete sidewalks located at the back of curb on both sides of the roadway. At the Martin Luther King Boulevard intersection, an exclusive southbound right turn lane is proposed to be added to this signalized intersection. This intersection alternative also includes a realignment of 1st Street to SR 544 through a city-owned parcel to move the northbound left turn lane onto 1st Street from SR 544 farther north. This realignment will remove the existing 1st Street pavement and a Storm Water Management Facility (SMF) will be developed at this location. A mini-roundabout is proposed at the Avenue Y intersection as this option has a lower cost than a traffic signal and fewer impacts than a traditional roundabout or traffic signal. See **Appendix A; Sheet No. 1** for more detail.

The Colonial Revival style building located at 2208 Peninsular Drive (8PO03077), a Craftsman style building located at 128 Scenic Highway (8PO03079), the Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095) are located within Segment 8. This segment extends from LaVista Drive to SR 17, and the preferred alternative is the reduced four-lane divided urban roadway with a centered alignment. The preferred typical section includes four 11-ft travel lanes with a 15.5-ft center grass median and due to ROW constraints, the shared-use path decreases to 8-ft-wide concrete sidewalk on both sides of the roadway. This option provides a balance in cost and impacts while providing a median for pedestrian

refuge and allowing for an access management plan without resulting in any residential or business relocations. See **Appendix A; Sheet Nos. 14 and 15** for more detail.

The analyses of potential traffic noise effects to the historic properties located within the SR 544 project APE were performed by CMT; a copy of the NSR is contained in **Appendix C**. The Draft NSR for this project was prepared to determine potential noise impacts associated with the proposed improvements (CMT 2023). According to FHWA regulation, noise abatement measures must be considered if predicted build condition traffic noise levels approach or exceed the NAC. FDOT further requires abatement consideration if predicted build condition traffic noise levels increase substantially from existing noise levels (defined as a 15 dB[A] or greater increase).

# 7.1 Florence Citrus Growers Association Historic District

By applying the Criteria of Adverse Effect, it was determined that the Preferred Build Alternative for Segment 1 and the Martin Luther King Boulevard intersection improvements for the SR 544 improvements project will have **No Adverse Effect** to the Florence Citrus Growers Association Historic District (8PO09983) and its 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015). The justification for this determination follows.

#### 7.1.1 Relationship to the Project

The Florence Citrus Growers Association Historic District (8PO09983) and 11 contributing resources within the APE are located between Martin Luther King Boulevard and Ware Avenue NE. The Segment 1 preferred build alternative proposes to widen SR 544 from an existing two-lane undivided roadway to a three-lane roadway with center turn lanes, sidewalks on both sides of the roadway, and 1st Street will be realigned. Of the 11 contributing resources within the district, four properties (8PO10009 – 8PO10012) will have approximately two-ft of ROW acquisition. In addition, the Martin Luther King Boulevard intersection will be widened on the west side of SR 544 and north of Avenue U NW as well as the east side at the intersection of Avenue U NE (Figure 7-1). As a result of the road widening in this area, two non-contributing buildings within the district will be demolished. Furthermore, the new alignment of 1st Street will require up to 12-ft of ROW acquisition from two contributing resources (8PO10014 and 8PO10015). No historic properties are located in the vicinity of the mini-roundabout at Avenue Y.

The historic district appears eligible for listing in the NRHP under Criterion A in the areas of Ethnic Heritage (Black) and Industry. The district is not a planned or intentionally designed community and the contributing resources within the historic district have been altered and do not gain historic significance from architectural design. None of the properties within the district appear individually eligible. While the proposed improvements will acquire ROW from properties within the historic district; these changes, however, will not further alter the setting of the historic district in a negative way that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP. Furthermore, the widening improvements will not remove physical features within the district's setting that contribute to its historic significance.

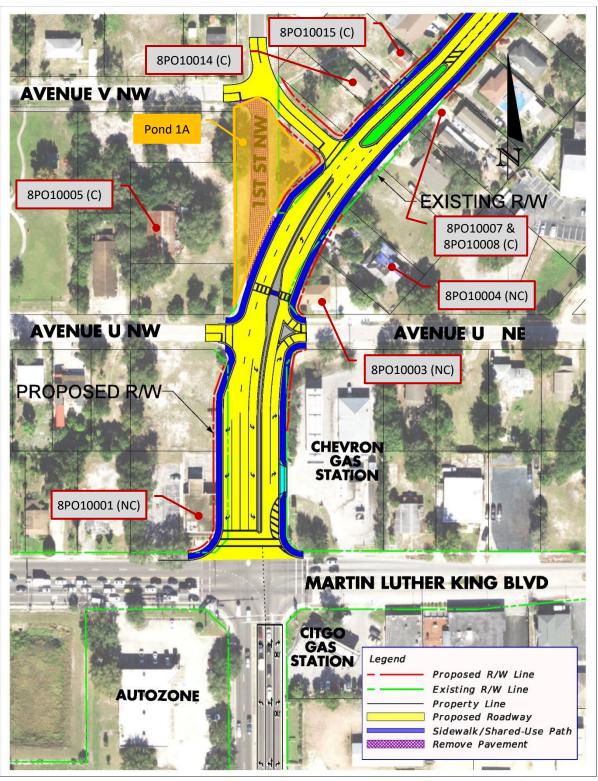


Figure 7-1 Martin Luther King Boulevard intersection within the southeast portion of the Historic District and five contributing resources. Note: C = contributing resources and NC = non-contributing to the district.

# 7.1.2 Visual/Aesthetics

The proposed project will replace the existing 8-ft sidewalks, realign 1<sup>st</sup> Street, and introduce an SMF site (Pond 1A). The 8-ft sidewalks will replace an existing concrete sidewalk that extends along both sides of the roadway between Martin Luther King Boulevard and Avenue Y. The new alignment of 1<sup>st</sup> Street will remove the pavement of the existing roadway and construct an SMF site at this location (**Figure 7-1**). These changes are approximately 90-ft from 2101 1st Street N (8PO10005), an Industrial Vernacular style building, that is a contributing resource to the historic district. While the proposed improvements will realign the roadway and add a SMF site within the historic district; these changes, are not introducing visually intrusive elements that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP. Furthermore, the removal of 1<sup>st</sup> Street is not changing an aesthetic feature that is significant to the historic district.

#### 7.1.3 Noise and Vibration, and Air Quality

**Noise and Vibration:** Based on the results of the noise analysis within the Florence Citrus Growers Association Historic District (8PO09983), existing roadway-related noise levels and the No-Build alternative traffic noise range from 66.3 dB(A) to 66.7 dB(A). In the design year (2045) with the preferred alternative, noise levels are predicted to approach or exceed the NAC within the site and range from 68.3 dB(A) to 68.8 dB(A).

As a result of these predicted traffic noise levels, seven of the residential contributing resources (8PO10007 – 8PO10012, and 8PO10014) within the Florence Citrus Growers Association Historic District are predicted to experience future noise levels that approach or exceed the NAC of 66.0 dB(A) for Activity Category B (residential). These seven properties will have a noise increase between 1.5 dB(A) to 2.8 dB(A) with the preferred alternative when compared to the existing condition. As such, there is a potential for adverse effects (based on impact criteria defined by the NAC) with respect to traffic noise within the Florence Citrus Growers Association Historic District. Abatement measures considered as part of the PD&E traffic noise analysis included traffic management, alignment modifications, buffer zones, and noise barriers. Due to the number of access driveways and cross streets between Martin Luther King Boulevard and Avenue Y, a continuous noise barrier could not be evaluated. As such, based on the noise analyses, there appear to be no reasonable or feasible mitigation solutions available for the impacted residential buildings in this area. Furthermore, construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact.

Although traffic management is not a reasonable measure to abate predicted noise impacts for the entire SR 544 project, several traffic management features are being implemented in close proximity to the historic district. The mini-roundabout at the Avenue Y intersection is to provide speed control for vehicles entering the neighborhood and a crosswalk is proposed south of Ware Avenue and just north of Avenue U NE to further slow speeds through Florence Villa. While this area is predicted to experience future noise levels that approach or exceed the NAC for Activity Category B, the increase is not substantial (increase of 15 dB(A) or more). The noise increase will not further diminish the integrity of the historic district in a negative way that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP. Therefore, the predicted increase will have no adverse effect to the Florence Citrus Growers Association Historic District.

**Air:** The project is not located within a USEPA-designated Air Quality Maintenance Area or Non-Attainment Area for any of the six pollutants [ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and small particulate matter] specified by the USEPA in National Ambient Air Quality Standards; therefore, the Clean Air Act conformity requirements do not currently apply to this project. Minimal, localized impacts to air quality could occur as a result of fugitive dust and exhaust emissions generated from equipment during project construction; no permanent effects to air quality are anticipated (FDOT 2019). In addition, the construction activities may cause minor short-term air quality effects in the form of dust from earthwork and unpaved roads and smoke from open burning. These effects will be minimized by adherence to all state and local regulations and to the latest edition of the FDOT Standard Specifications for Road and Bridge Construction.

#### 7.1.4 Access and Use

The Florence Citrus Growers Association Historic District is currently accessed via multiple streets adjacent to and traversing the district. The proposed project improvements will modify access to four properties within the historic district (8PO10007, 8PO10008, 8PO10014, and 8PO10015) (Figure 7-1). By developing a median in the middle lane, it will cut off access to 8PO10007 and 8PO10008 from the southbound lane; access, however, is still maintained from the northbound lane. Likewise, 8PO10014 and 8PO10015 will be cut off from the northbound lane, but access is still maintained from the southbound lane. The latter two properties (8PO10014 and 8PO10015) also utilize access from Avenue V NW which appears to be the primary entrance. In addition, the removal of 1st Street will not alter the entrance to 8PO10005. While the main address is 2101 1st Street, the surrounding parcels are owned by the same person and the main entry is from Avenue U NW. Therefore, the proposed improvements will not result in any major changes in access to the historic district or the contributing resources that will diminish the integrity of the characteristics for which it is considered eligible for listing in the NRHP.

The future use of each of the contributing resources within the district will ultimately be decided by the property owners and any local land development regulations. The planned improvements will not have a potential impact on the use of any of the contributing resources within the district, and no changes in land use are anticipated.

#### 7.2 Colonial Revival style building located at 2208 Peninsular Drive

By applying the Criteria of Adverse Effect, it was determined that the Segment 8 Preferred Build Alternative for the SR 544 improvements project will have **No Adverse Effect** to the Colonial Revival style building (8PO03077). The justification for this determination follows.

#### 7.2.1 Relationship to the Project

The NRHP-eligible Colonial Revival style building (8PO03077) is located at the northwest intersection of Peninsular Drive and SR 544 between LaVista Drive and SR 17. The Segment 8 preferred build alternative proposes to widen SR 544 from an existing four-lane undivided roadway to a four-lane roadway with a traffic separator, and a concrete sidewalk on both sides of the roadway. As a result of the road widening in this area, the side of the property will have up to 15-ft of ROW acquisition on the north side of SR 544 (Figure 7-2). The proposed ROW will extend to an existing fence located on the property in this area. The property was determined by the SHPO to be individually eligible for listing in the NRHP under Criterion C in the area of Architecture as a minimally altered example of a

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Colonial Revival style residence. While the preferred alternative will require additional ROW, it will not damage the historic property in a negative way that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP.



Figure 7-2 Location of the Colonial Revival style building located at 2208 Peninsular Drive (8PO03077) and the Craftsman style building located at 128 Scenic Highway (8PO03079) within Segment 8.

#### 7.2.2 Visual/Aesthetics

The proposed project will introduce an 8-ft concrete sidewalk that will extend along the southern boundary of the property. The concrete sidewalk will not alter the existing visual and aesthetic conditions of the historic property and will not introduce any visually intrusive elements. In addition, the project could include the construction of a noise barrier along the northern ROW that will also extend along the southern boundary of the property; however, this will be evaluated further during design (Figure 7-2). The noise barrier was considered a reasonable mitigation option, and the proposed optimal barrier is 876-ft long and 14-ft tall. The full details of the proposed noise barrier will be prepared during the design phase that will include additional public outreach to confirm that the affected property owners are in favor of a noise barrier and if so, the public can provide input on what it will look like. Since it is not known at this time if a noise barrier will be constructed near the historic property, the potential for the proposed noise barrier will be evaluated further during design and coordinated with the SHPO to determine potential effects at that time. At this point, it is anticipated that the proposed noise barrier along the northern ROW will be in the viewshed of the property; however, the proposed barrier should mitigate the increased traffic noise. Thus, the proposed noise barrier will not introduce any visually intrusive elements that will diminish or destroy the qualities and characteristics for which the property is considered eligible for listing in the NRHP.

# 7.2.3 Noise and Vibration, and Air Quality

**Noise and Vibration:** Based on the results of the noise analysis at the Colonial Revival style building, existing roadway related noise level is 66.2 dB(A) and the No-Build alternative traffic noise level is predicted to increase to 70.2 dB(A) by 2045. In the design year (2045) with the preferred alternative, noise levels are predicted to approach or exceed the NAC within the site to 72.4 dB(A), an increase of 6.2 dB(A) when compared to the existing condition. Furthermore, construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact.

As a result of the predicted traffic noise levels, the property is predicted to experience future noise levels that approach or exceed the NAC of 66.0 dB(A) for Activity Category B (residential). Noise abatement measures considered as part of the PD&E traffic noise analysis included traffic management, alignment modifications, buffer zones, and noise barriers. At this location, a noise barrier is considered a reasonable mitigation option. Therefore, the predicted increase will have no adverse effect to the property. However, while mitigating the traffic noise levels, the construction of noise barriers will result in a visual effect.

Air: The project is not located within a USEPA-designated Air Quality Maintenance Area or Non-Attainment Area for any of the six pollutants [ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and small particulate matter] specified by the USEPA in National Ambient Air Quality Standards; therefore, the Clean Air Act conformity requirements do not currently apply to this project. Minimal, localized impacts to air quality could occur as a result of fugitive dust and exhaust emissions generated from equipment during project construction; no permanent effects to air quality are anticipated (FDOT 2019). In addition, the construction activities may cause minor short-term air quality effects in the form of dust from earthwork and unpaved roads and smoke from open burning. These effects will be minimized by adherence to all state and local regulations and to the latest edition of the FDOT Standard Specifications for Road and Bridge Construction.

#### 7.2.4 Access and Use

The Colonial Revival style building is currently accessed on the north side of SR 544 on Peninsular Drive. All existing local street access will be maintained. The proposed project improvements will not modify access to the property; therefore, the project will not result in any major changes in access for this historic property.

The property has historically been and is currently used as a residence. The continued use as a residence should not be affected by the proposed roadway improvement project. The future use of the property will ultimately be decided by the property owner. The planned improvements will not have a potential impact on the use of the property, and no changes in land use are anticipated.

# 7.3 Craftsman style building located at 128 Scenic Highway

By applying the Criteria of Adverse Effect, it was determined that the Segment 8 Preferred Build Alternative for the SR 544 improvements project will have **No Adverse Effect** to the Craftsman style building (8PO03079). The justification for this determination follows.

# 7.3.1 Relationship to the Project

The NRHP-eligible Craftsman style building (8PO03079) is located at the southeast intersection of Myrtle Avenue and SR 544 between LaVista Drive and SR 17. The Segment 8 preferred build alternative proposes to widen SR 544 from an existing four-lane undivided roadway to a four-lane roadway with center grass median, and a concrete sidewalk on both sides of the roadway. As a result of the road widening in this area, the property will have up to 8-ft of ROW acquisition on the south side of SR 544 (Figure 7-2). The property was determined by the SHPO to be individually eligible for listing in the NRHP under Criterion C in the area of Architecture as a minimally altered example of a Craftsman style residence. While the preferred alternative will require additional ROW, it will not damage the historic property in a negative way that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP.

#### 7.3.2 Visual/Aesthetics

The proposed project will introduce an 8-ft concrete sidewalk that will extend along the northern boundary of the property. The concrete sidewalk does not alter the existing visual and aesthetic conditions of the historic property and will not introduce any visually intrusive elements. In addition, the proposed project could include the construction of a noise barrier along the northern ROW that will be adjacent to the property located on the south side of SR 544 (Figure 7-2). The full details of the proposed noise barrier will be prepared during the design phase that will include additional public outreach to confirm that the affected property owners are in favor of a noise barrier and if so, the public can provide input on what it will look like. Since it is not known at this time if a noise barrier will be constructed adjacent to the historic property, the potential for the proposed noise barrier will be evaluated further during design and coordinated with the SHPO to determine potential effects at that time. At this point, it is anticipated that the proposed noise barrier along the northern ROW will not alter the setting of the property and will not introduce a visually intrusive element that would diminish or destroy the integrity or qualities and characteristics for which the property is considered eligible for listing in the NRHP.

#### 7.3.3 Noise and Vibration, and Air Quality

**Noise and Vibration:** Based on the results of the noise analysis at the Craftsman style building, existing roadway related noise level is 66.7 dB(A) and the No-Build alternative traffic noise level is predicted to increase to 71.1 dB(A) by 2045. In the design year (2045) with the preferred alternative, noise levels are predicted to approach or exceed the NAC within the site to 72.5 dB(A), an increase of 4.8 dB(A) when compared to the existing condition. Furthermore, construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact.

As a result of the predicted traffic noise levels, the property is predicted to experience future noise levels that approach or exceed the NAC of 66.0 dB(A) for Activity Category B (residential). Noise abatement measures considered as part of the PD&E traffic noise analysis included traffic management, alignment modifications, buffer zones, and noise barriers. At this location, there are no reasonable or feasible mitigation solutions available for the impacted residential buildings in this area. The noise barrier is not considered a feasible abatement measure due to the side streets and access driveways as well as line-of-sight constraints. While mitigating the traffic noise levels in the area, the construction of a noise barrier adjacent to the property will result in a visual effect; however, this is not considered to have an adverse effect.

Air: The project is not located within a USEPA-designated Air Quality Maintenance Area or Non-Attainment Area for any of the six pollutants [ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and small particulate matter] specified by the USEPA in National Ambient Air Quality Standards; therefore, the Clean Air Act conformity requirements do not currently apply to this project. Minimal, localized impacts to air quality could occur as a result of fugitive dust and exhaust emissions generated from equipment during project construction; no permanent effects to air quality are anticipated (FDOT 2019). In addition, the construction activities may cause minor short-term air quality effects in the form of dust from earthwork and unpaved roads and smoke from open burning. These effects will be minimized by adherence to all state and local regulations and to the latest edition of the FDOT Standard Specifications for Road and Bridge Construction.

#### 7.3.4 Access and Use

The Craftsman style building is currently accessed on the south side of SR 544. The proposed project improvements will modify access to the property by developing a grass median and traffic separator in the middle lane, cutting off access to the property from the westbound lane; however, the property is still accessible from the eastbound lane. The proposed improvements will not result in any major changes in access to this historic property that will diminish the integrity of the characteristics for which the property is considered eligible for listing in the NRHP.

The property has historically been and is currently used as a residence. The continued use as a residence should not be affected by the proposed roadway improvement project. The future use of the property will ultimately be decided by the property owner. The planned improvements will not have a potential impact on the use of the property, and no changes in land use are anticipated.

# 7.4 Alta Vista Elementary School

By applying the Criteria of Adverse Effect, it was determined that the Segment 8 Preferred Build Alternative for the SR 544 improvements project will have **No Adverse Effect** to the Alta Vista Elementary School (8PO10093) building complex resource group. The justification for this determination follows.

# 7.4.1 Relationship to the Project

The NRHP-eligible Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095), is located between LaVista Drive and SR 17. The Segment 8 preferred build alternative proposes to widen SR 544 from an existing three-lane undivided roadway to a four-lane roadway with center grass median, and a concrete sidewalk on both sides of the roadway. As a result of the road widening in this area, the property will have up to 15-ft of ROW acquisition on the north side of SR 544 (**Figure 7-3**). The Alta Vista Elementary Resource Group (8PO10093) is eligible for listing in the NRHP under Criteria A and C in the areas of Education and Architecture as the first air-conditioned school in Polk County. The resource demonstrates the importance of architectural design and the application of new technology in improving the learning environment — and resulting success — of students. While the preferred alternative will require additional ROW, it will not damage the historic property in a negative way that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP.



Figure 7-3 Location of the Alta Vista Elementary School (8PO10093) and two contributing resources (8PO10094 and 8PO10095) within Segment 8.

# 7.4.2 Visual/Aesthetics

The proposed project will introduce an 8-ft concrete sidewalk that will extend along the northern boundary of the property. The concrete sidewalk will not alter the existing visual and aesthetic conditions of the historic property, or its viewshed, will not alter the setting of the property, and will not introduce any new visually intrusive elements.

#### 7.4.3 Noise and Vibration, and Air Quality

**Noise and Vibration:** The Alta Vista Elementary School was evaluated as a site that will not be impacted by the traffic noise. Based on the results of the noise analysis at this location, the existing roadway related noise level is 56.7 dB(A) and the No-Build alternative traffic noise level is predicted to increase to 60.6 dB(A) by 2045. In the design year (2045) with the preferred alternative, noise levels are predicted to approach or exceed the NAC within the site to 61.8 dB(A), an increase of 5.1 dB(A) when compared to the existing condition. This increase in predicted traffic noise level does not meet or exceed the NAC of 66 dB(A) for this historic property, classified as FHWA Activity Category C. Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact.

The results of the traffic noise analysis indicate that the proposed improvements would not adversely affect the exterior use of the Alta Vista Elementary School, and noise abatement measures do not need to be considered.

**Air:** The project is not located within a USEPA-designated Air Quality Maintenance Area or Non-Attainment Area for any of the six pollutants [ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and small particulate matter] specified by the USEPA in National Ambient Air Quality Standards; therefore, the Clean Air Act conformity requirements do not currently apply to this project. Minimal, localized impacts to air quality could occur as a result of fugitive dust and exhaust emissions generated from equipment during project construction; no permanent effects to air quality are anticipated (FDOT 2019). In addition, the construction activities may cause minor short-term air quality effects in the form of dust from earthwork and unpaved roads and smoke from open burning. These effects will be minimized by adherence to all state and local regulations and to the latest edition of the FDOT Standard Specifications for Road and Bridge Construction.

#### 7.4.4 Access and Use

The Alta Vista Elementary School bus pick-up/drop-off and visitor entrance is currently accessed on the north side of SR 544. Another access point to the main parking lot is from Walsdorf Way from Alta Vista Drive. The preferred typical section includes the addition of a grassed median from north of Avenue Y to SR 17. As part of the preferred typical section, a northbound directional median opening will allow continued access from eastbound lane. The property is still accessible from the westbound lane. The proposed improvements will not result in any major changes in access to this historic property that will diminish the integrity of the characteristics for which the property is considered eligible for listing in the NRHP. The future use of the school will ultimately be decided by the property owners and any local land development. The planned improvements to SR 544 will not have a potential impact on the use of Alta Vista Elementary School, and no changes in land use are anticipated.

# 7.5 **No Build Alternative**

The No-Build Alternative is considered a valid alternative throughout the life of the study. The No-Build Alternative assumes no improvements to SR 544 within the study limits through the Design Year of 2045, limiting work in the project area to routine maintenance. As such, based on the Criteria of Adverse Effects, the No Build Alternative will have **No Effect** to the 17 NRHP-eligible properties located within the project APE: the Colonial Revival style building located at 2208 Peninsular Drive (8PO03077), the Craftsman style building located at 128 Scenic Highway (8PO03079), the Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095), and the Florence Citrus Growers Association Historic District (8PO09983) with 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015).

# 8.0 CONCLUSIONS & RECOMMENDATIONS

The FDOT has applied the Criteria of Adverse Effect found in 36 CFR Part 800.5 to the 17 historic properties determined eligible or appear individually eligible for listing in the NRHP located within the APE. The preferred build alternative in Segment 1 is the three-lane typical section that will have minor ROW impacts (no residential relocations) but will provide additional safety and capacity for turning vehicles with the center turn lane. In addition, the preferred intersection improvement at the Martin Luther King Boulevard is to maintain the existing traffic signal but add a new southbound right turn lane at the intersection. Improvements also include realigning the 1st Street NW intersection with SR 544 farther away from the Martin Luther King Boulevard intersection. In addition, a mini-roundabout is recommended at Avenue Y. The preferred build alternative in Segment 8 is the reduced four-lane divided roadway with centered widening. This alignment is recommended to minimize residential relocations through this segment of the project but provide access control with the raised median.

Based on the proposed undertaking, it appears that the Preferred Alternative within the study Segments 1 and 8 will have **No Adverse Effect** to the Colonial Revival style building (8PO03077), the Craftsman style building (8PO03079), the Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095), and the Florence Citrus Growers Association Historic District (8PO09983) with 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015).

• The current and future access and use of the Florence Citrus Growers Association Historic District will not be affected by implementing the Preferred Alternative within Segment 1. Similarly, air quality will also not be affected. However, the noise analysis indicates that seven of the residential contributing resources (8PO10007 – 8PO10012, and 8PO10014) within the historic district are predicted to experience an increase between 1.5 dB(A) to 2.8 dB(A) in noise levels when compared to the No-Build Alternative. Due to the number of access driveways and cross streets between Martin Luther King Boulevard and Avenue Y, a continuous noise barrier could not be evaluated. However, several traffic management features are being implemented in close proximity to the historic district to help slow speeds through Florence Villa. These traffic management features include a mini-roundabout at the Avenue Y intersection as well as two crosswalks located south of Ware Avenue and just north of Avenue U NE. The predicted noise increase will not further diminish the integrity of the historic district in a negative way that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP.

Much of the setting within the district has changed over time and the district was not a planned or intentionally designed community. The contributing buildings within the historic district have been altered and do not gain historic significance from architectural design. None of the properties within the district appear individually eligible. The proposed improvements will not further alter the setting of the historic district in a negative way that will diminish or destroy the qualities and characteristics for which it is considered eligible for listing in the NRHP under Criterion A in the areas of Ethnic Heritage (Black) and Industry. Furthermore, the widening improvements will not remove physical features within the district's setting that contribute to its historic significance.

• The current and future access and use of the Colonial Revival style building will not be affected by implementing the Preferred Alternative within Segment 8. Similarly, air quality will also not

be affected. However, the noise analysis indicates that the property is predicted to experience a 2.2 dB(A) increase in noise levels when compared to the No-Build Alternative. A noise barrier is considered the most feasible and prudent noise abatement measure. However, while mitigating the traffic noise levels, the construction of the noise barrier may result in a visual effect. Nevertheless, the visual impact the noise barrier will have on the property is limited to the southern boundary view shed but is not considered to have an adverse effect since it will not diminish or destroy the integrity or qualities and characteristics for which the property is considered eligible for listing in the NRHP under Criterion C in the area of Architecture.

- The current and future and use of the Craftsman style building will not be affected by implementing the Preferred Alternative within Segment 8. Similarly, air quality will also not be affected. However, the access to the property will be modified by the proposed grass median and traffic separator in the middle lane, that will cut off access to the property from the westbound lane; however, the property is still accessible from the eastbound lane. The proposed improvements will not diminish the integrity or the characteristics for which the property is considered eligible for listing in the NRHP because of this modification. In addition, the noise analysis indicates that the property is predicted to experience a 1.4 dB(A) increase in noise levels when compared to the No-Build Alternative. At this location, there are no reasonable or feasible mitigation solutions available for the impacted residential buildings on the south side of SR 544; however, the construction of a noise barrier to mitigate the traffic noise levels on the north side of SR 544 is proposed. The proposed noise barrier along the northern ROW will not alter the setting of the property and will not introduce a visually intrusive element that would diminish or destroy the integrity or qualities and characteristics for which the property is considered eligible for listing in the NRHP under Criterion C in the area of Architecture.
- The current and future access and use of the Alta Vista Elementary School building complex resource group will not be affected by implementing the Preferred Alternative within Segment 8. Similarly, air quality will also not be affected. Furthermore, the noise analysis indicates that the property is predicted to experience a 1.2 dB(A) increase in noise levels when compared to the No-Build Alternative. This increase does not meet or exceed the NAC of 66 dB(A) for this historic property, classified as FHWA Activity Category C and noise abatement measures do not need to be considered. The proposed improvements will acquire up to 15-ft of ROW on the north side of SR 544 and will introduce an 8-ft concrete sidewalk that will extend along the northern boundary of the property. These improvements will not further alter the setting of the historic properties in a negative way that will diminish or destroy the qualities and characteristics for which they are considered eligible for listing in the NRHP under Criteria A and C in the areas of Education and Architecture.

A Draft NSR was prepared as part of the PD&E Study and the findings indicated that traffic noise is predicted to exceed the NAC within Segments 1 and 8 of the preferred Build Alternative. As such, the potential construction of a noise barrier along the northern ROW adjacent to the Colonial Revival style building located at 2208 Peninsular Drive (8PO03077) and the Craftsman style building located at 128 Scenic Highway (8PO03079) is a recommendation that will require further analysis and evaluation during the project's design phase. If a noise barrier is constructed, FDOT, District One, will follow acceptable best practices and context sensitive solutions, including aesthetic treatments in accordance with FDOT and/or FHWA Guidelines. FDOT will continue to coordinate with SHPO during design.

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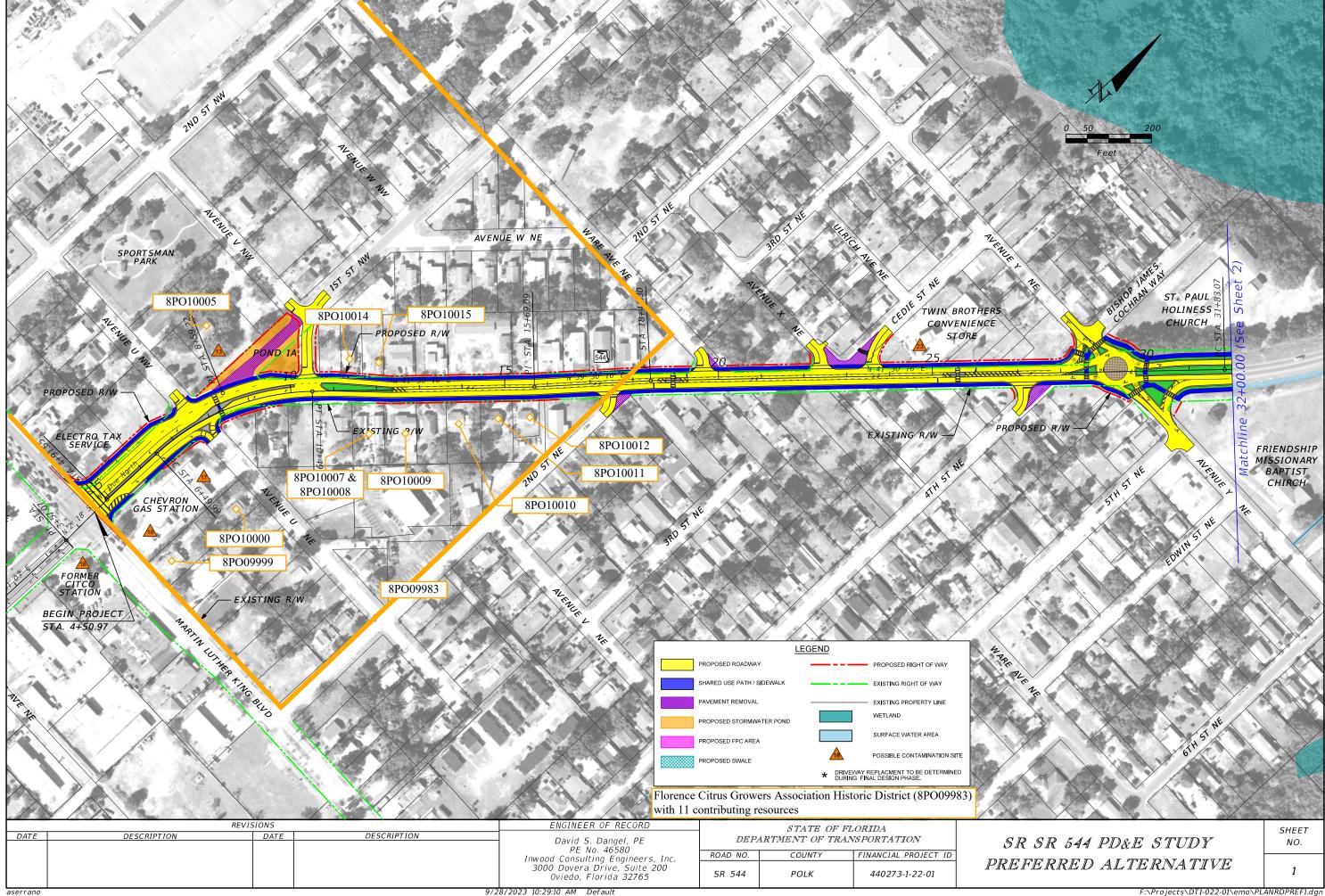
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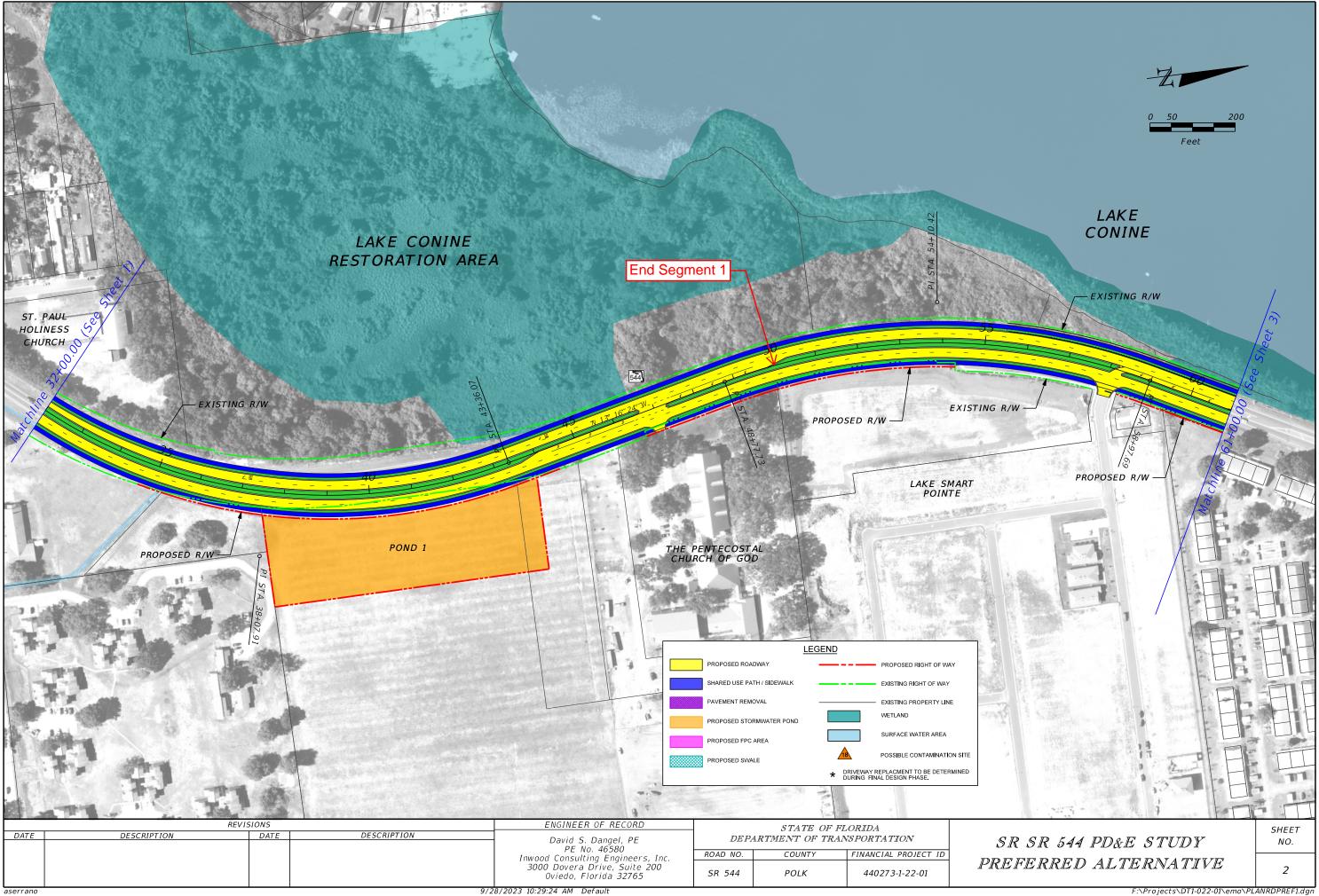
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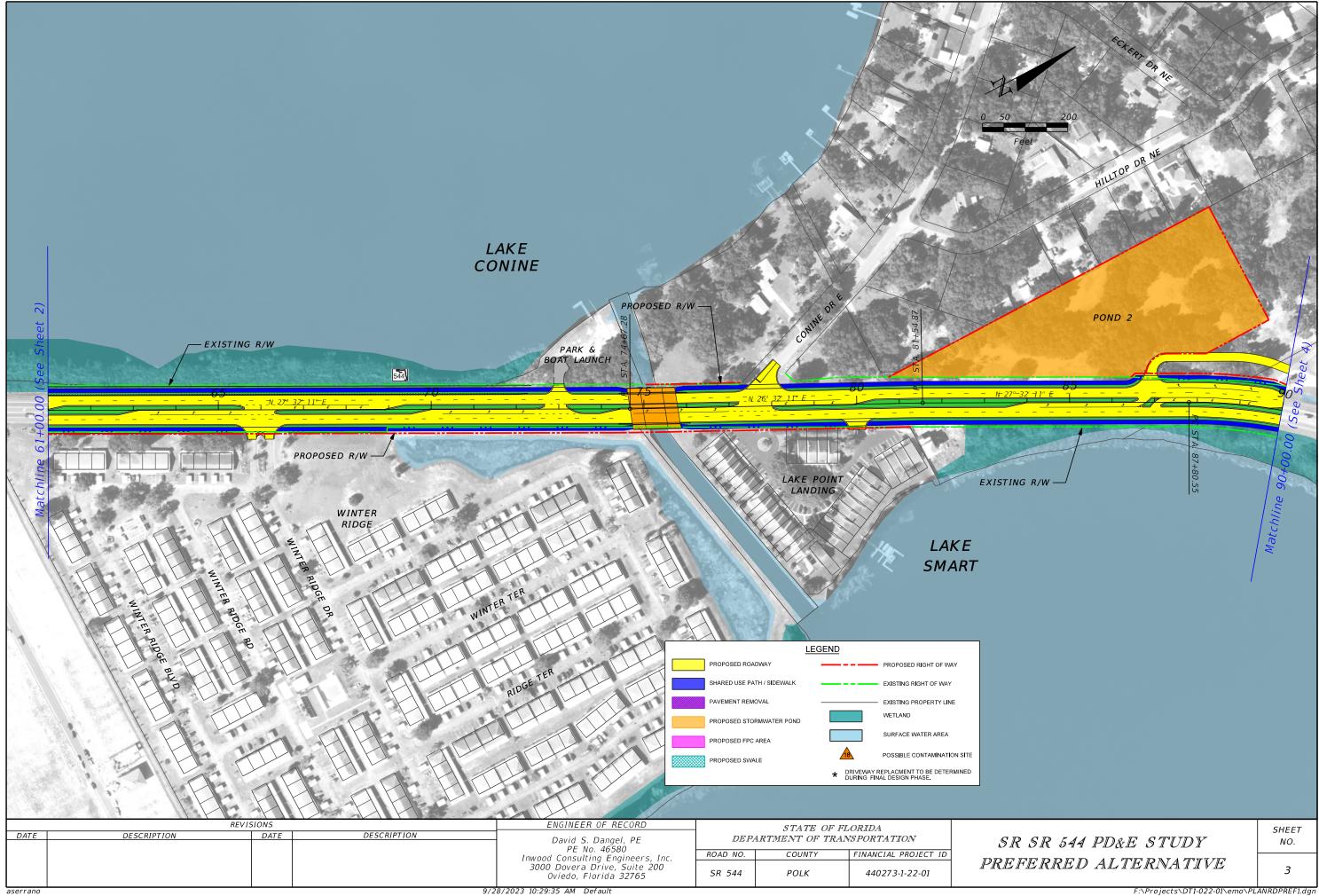
# APPENDIX A Preferred Alternative

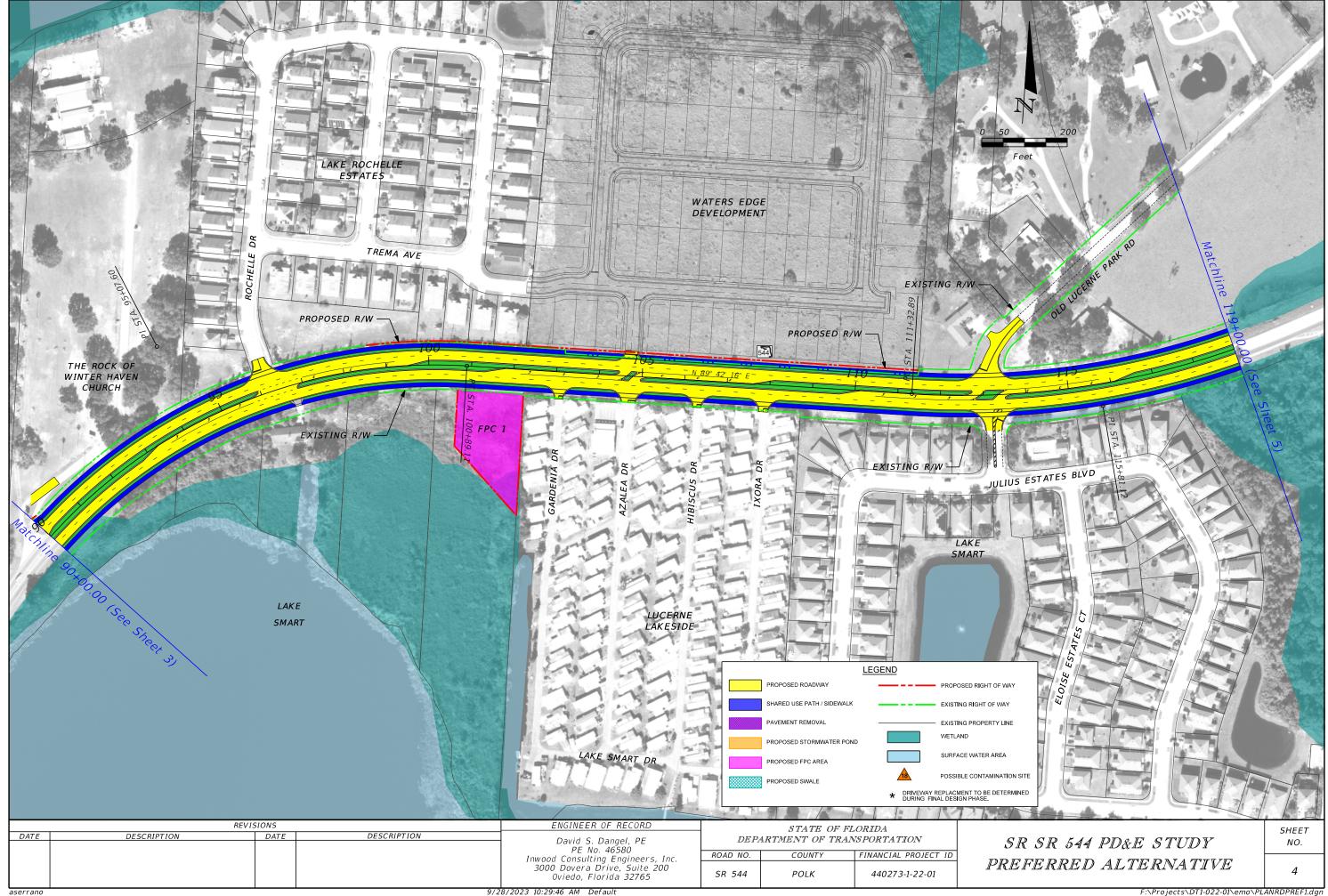
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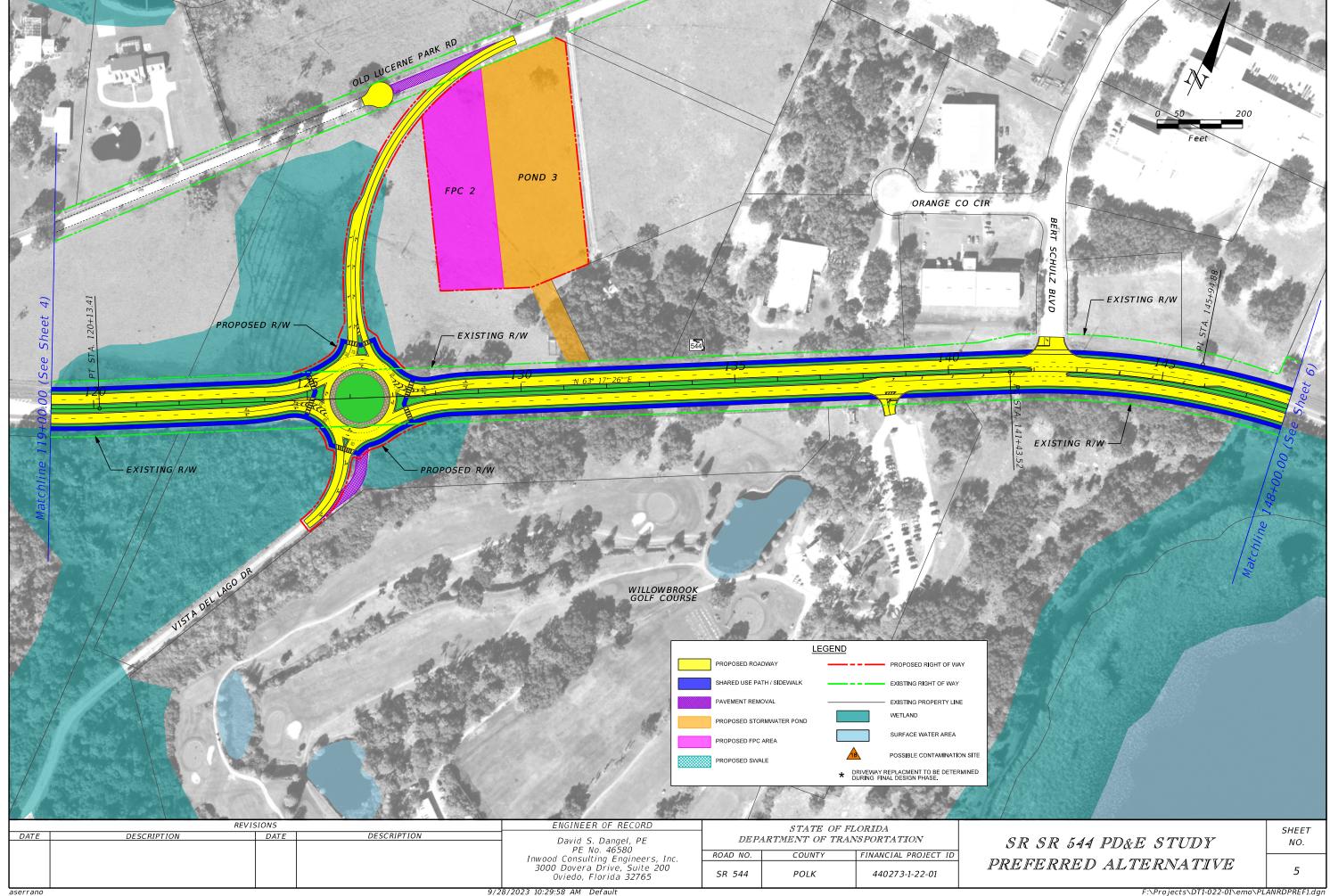
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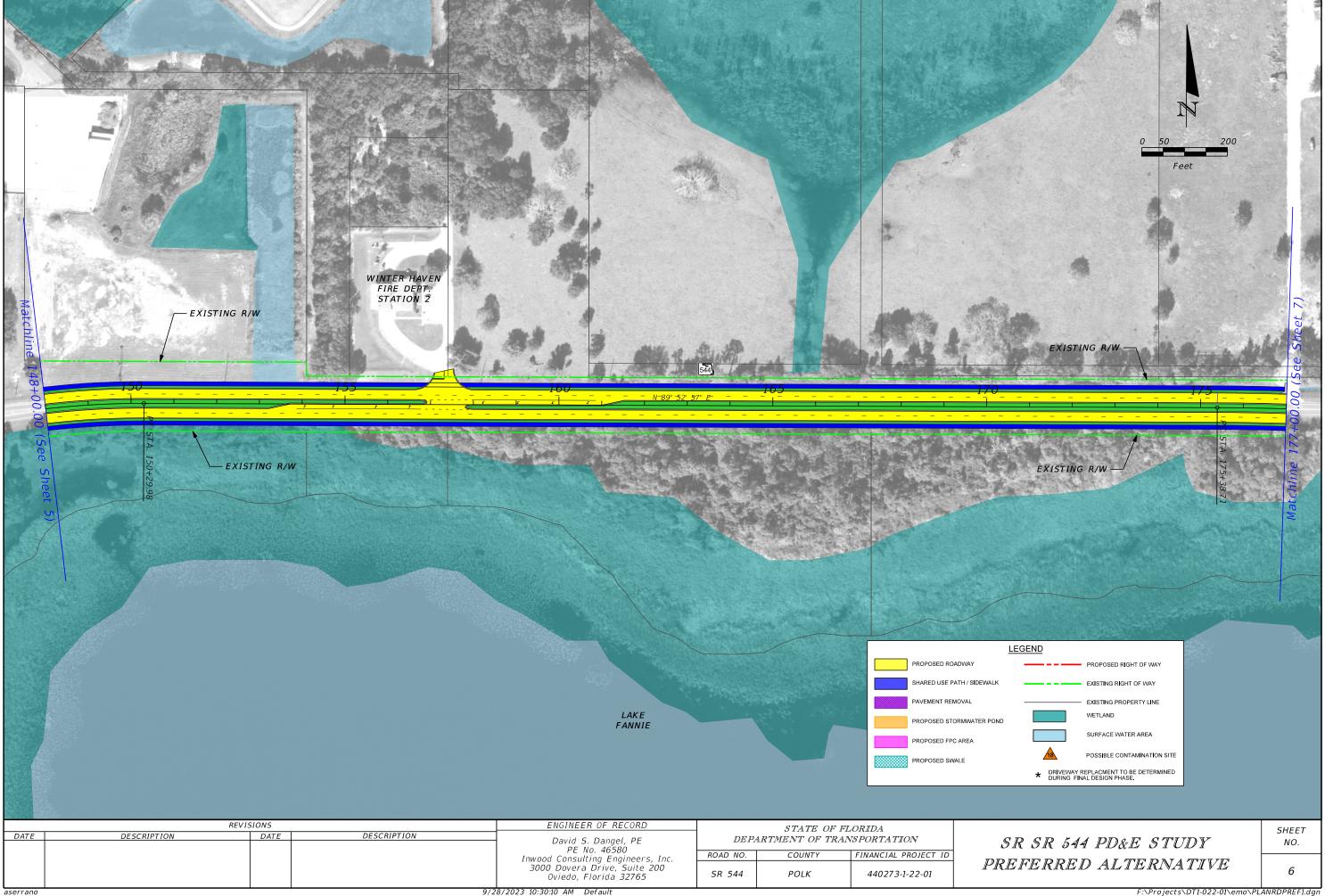


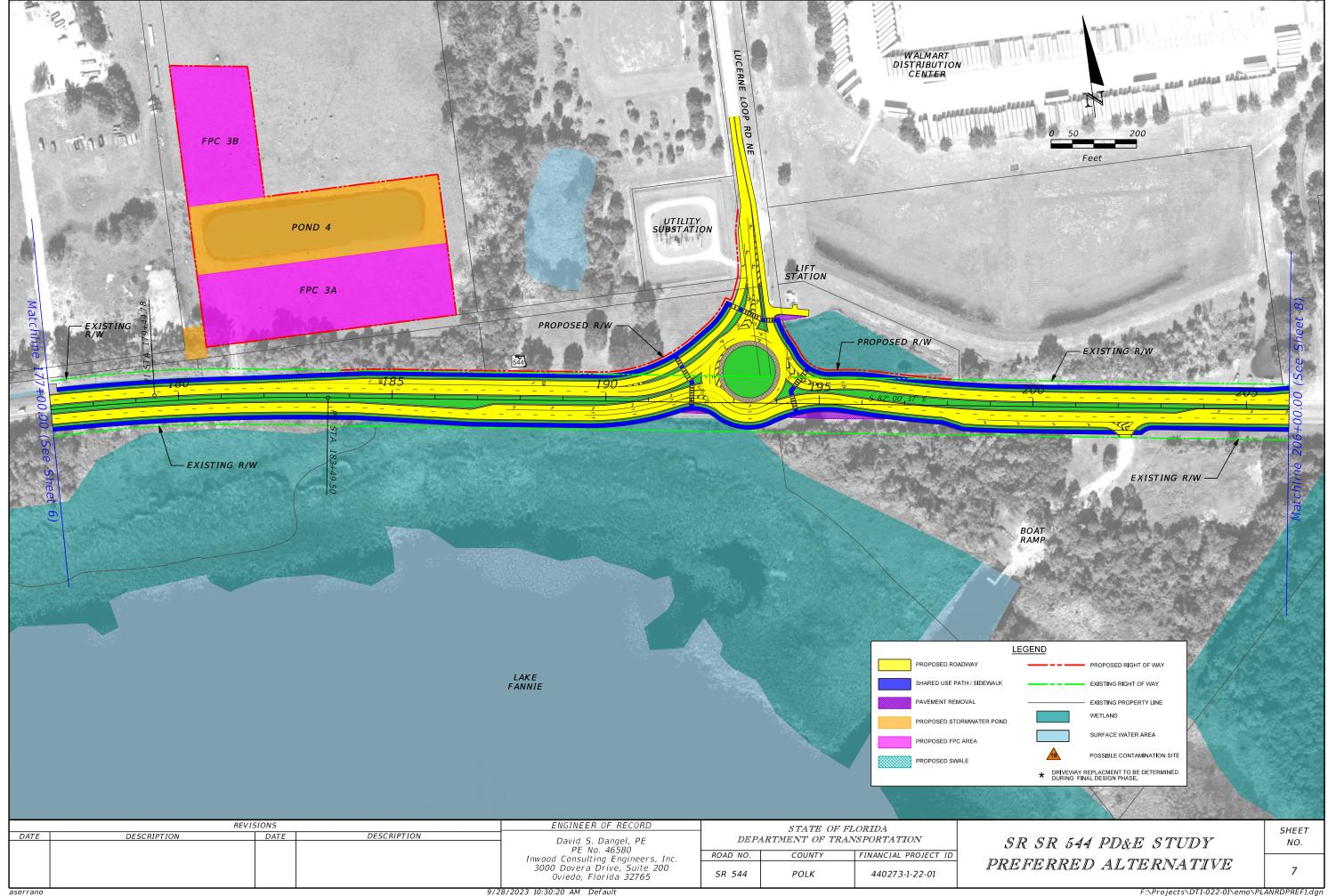


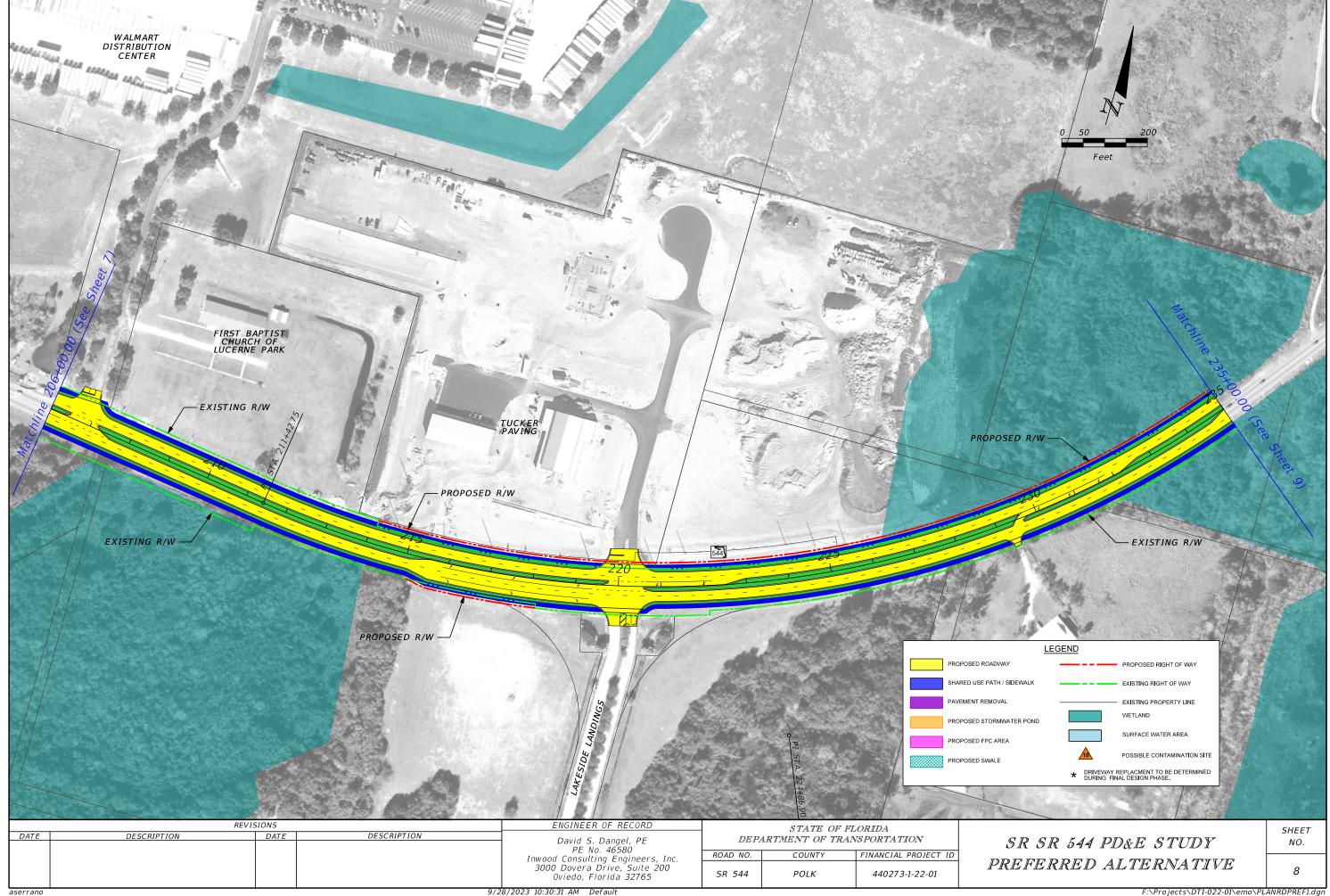


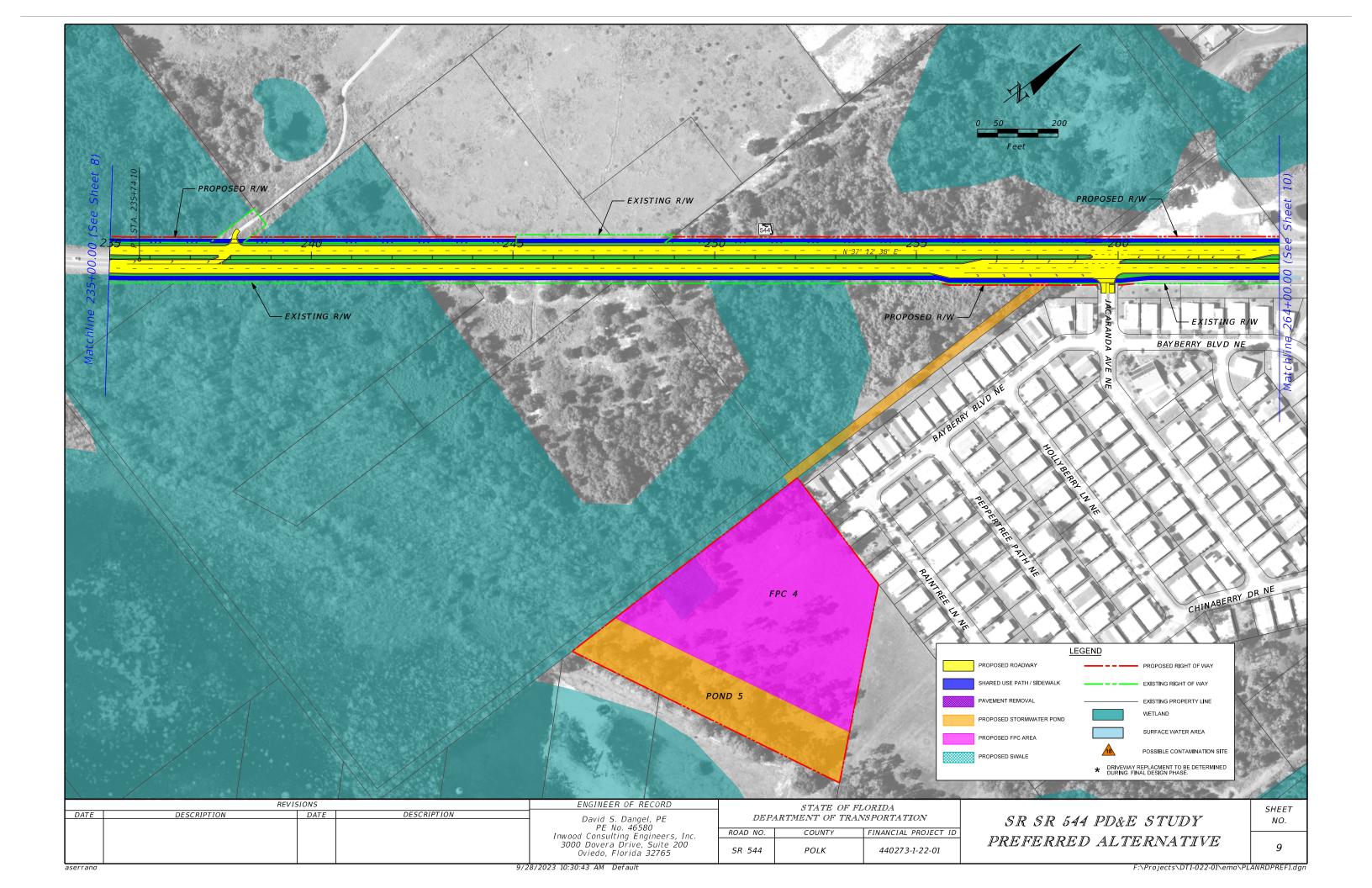






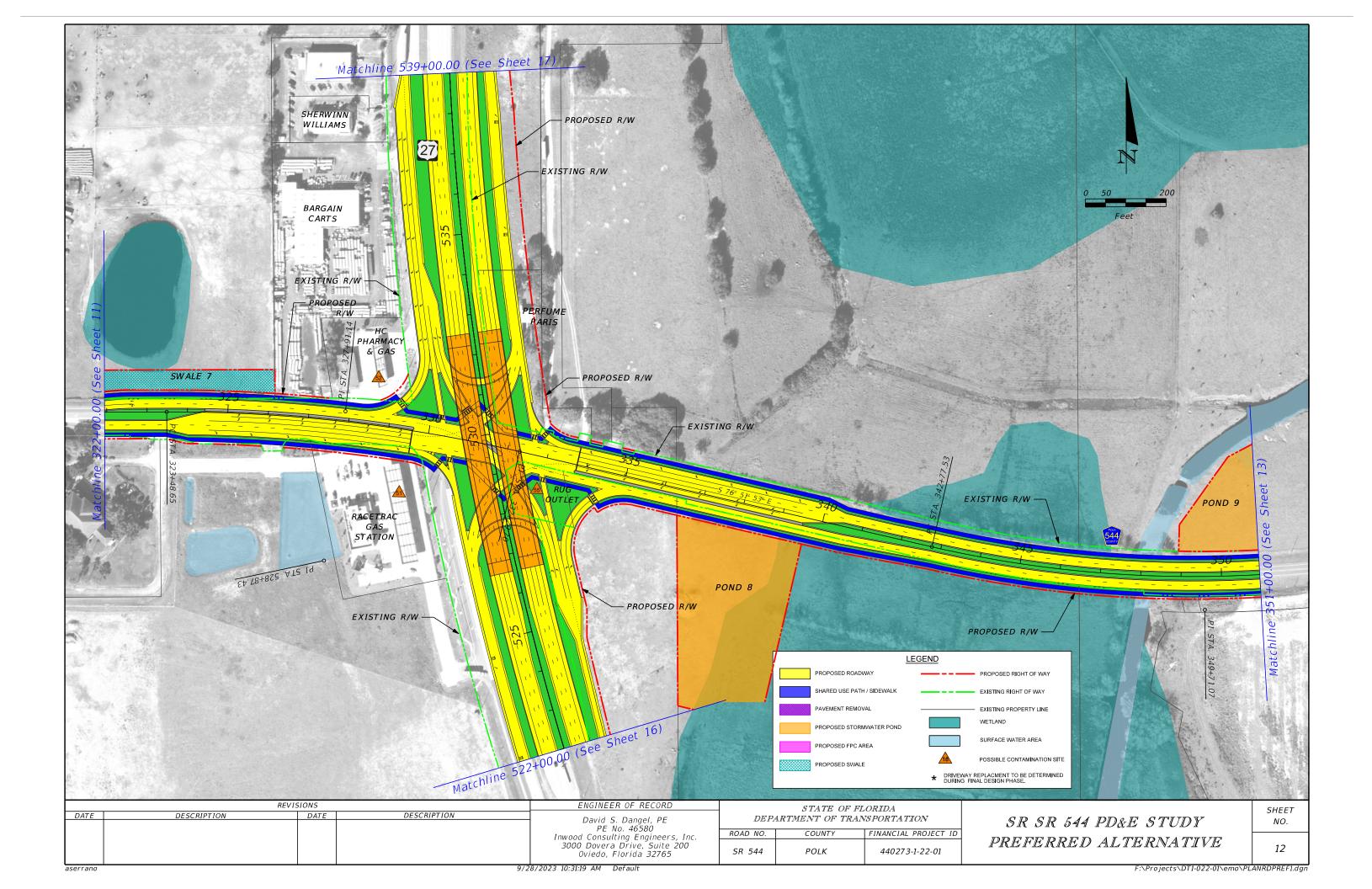


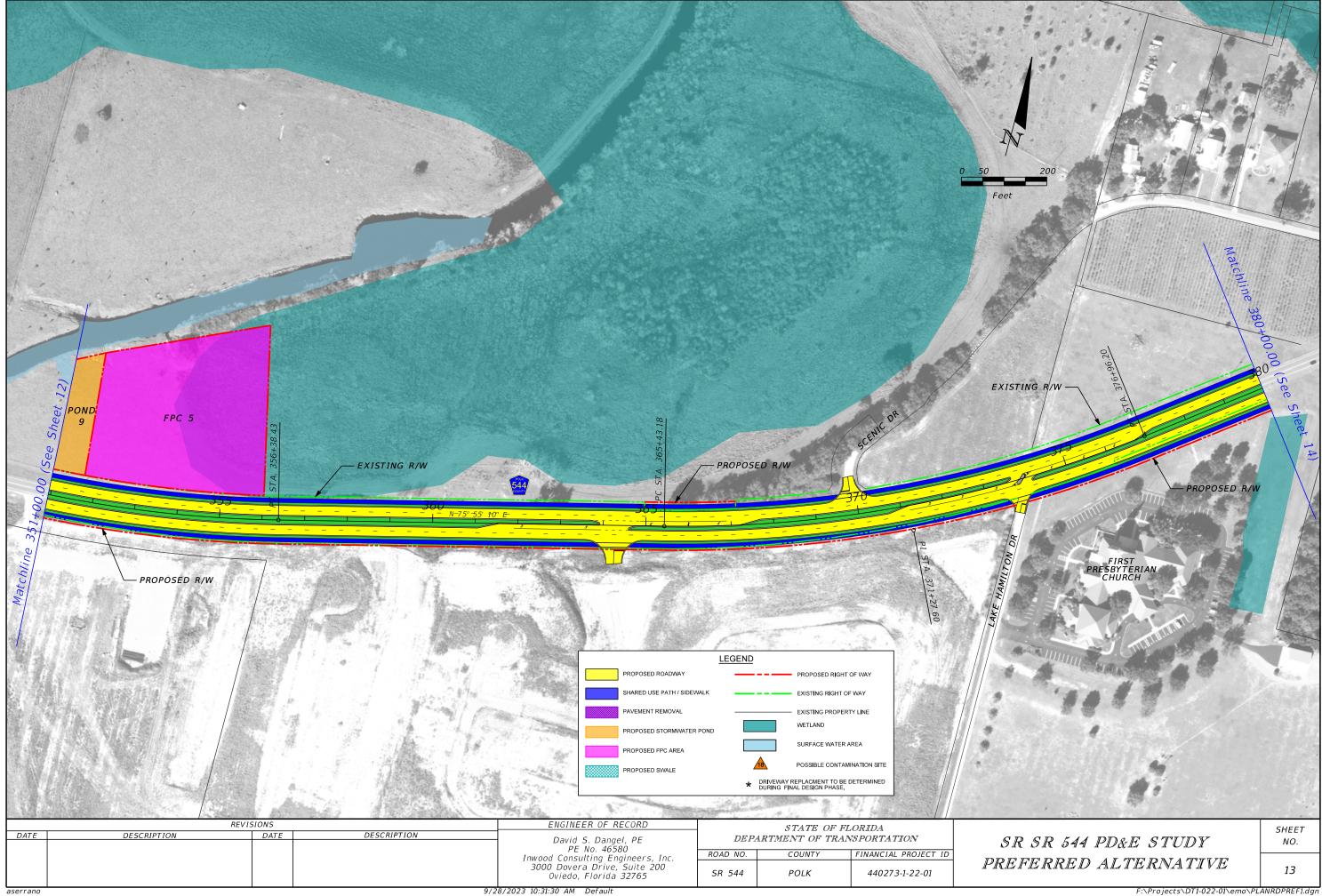


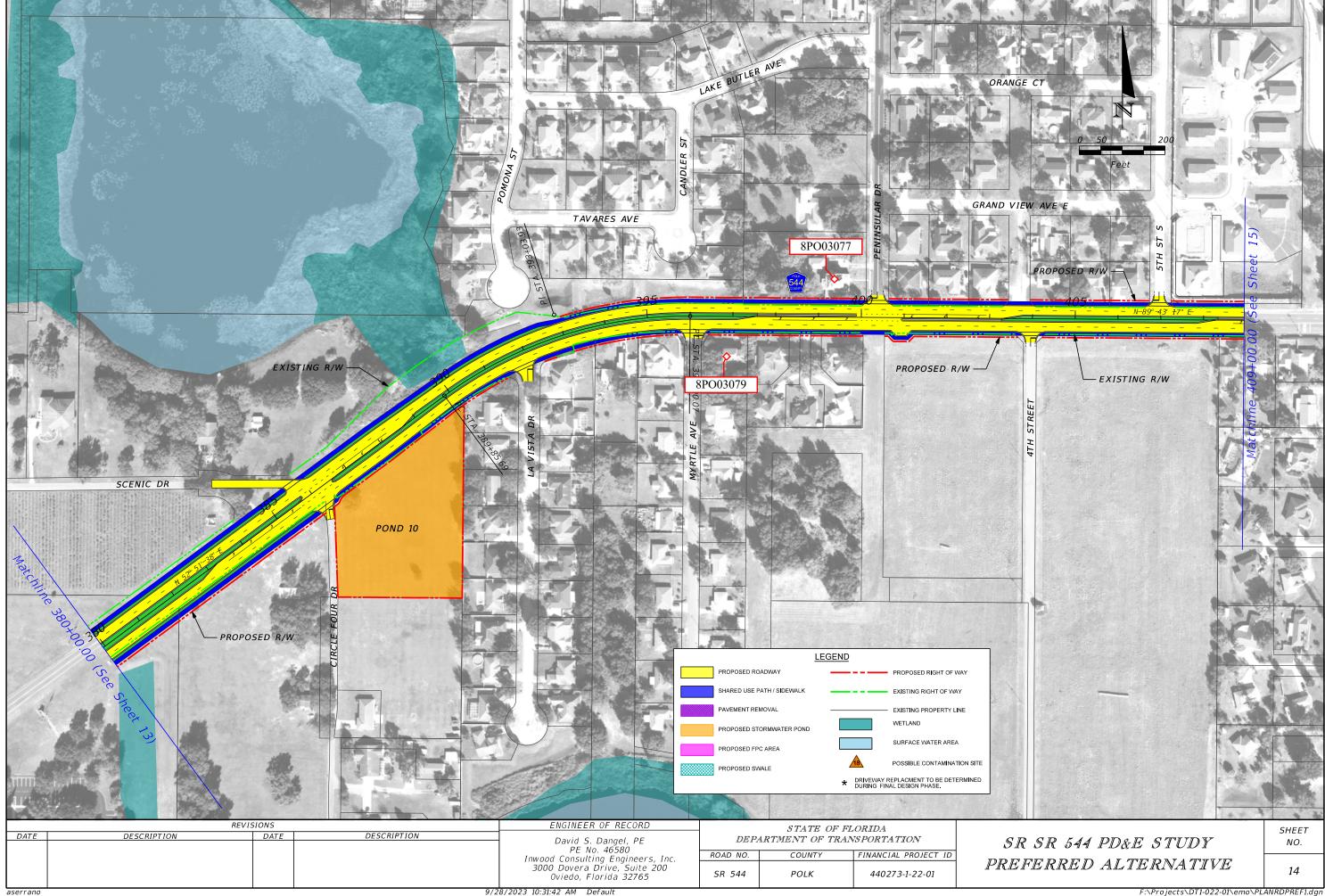


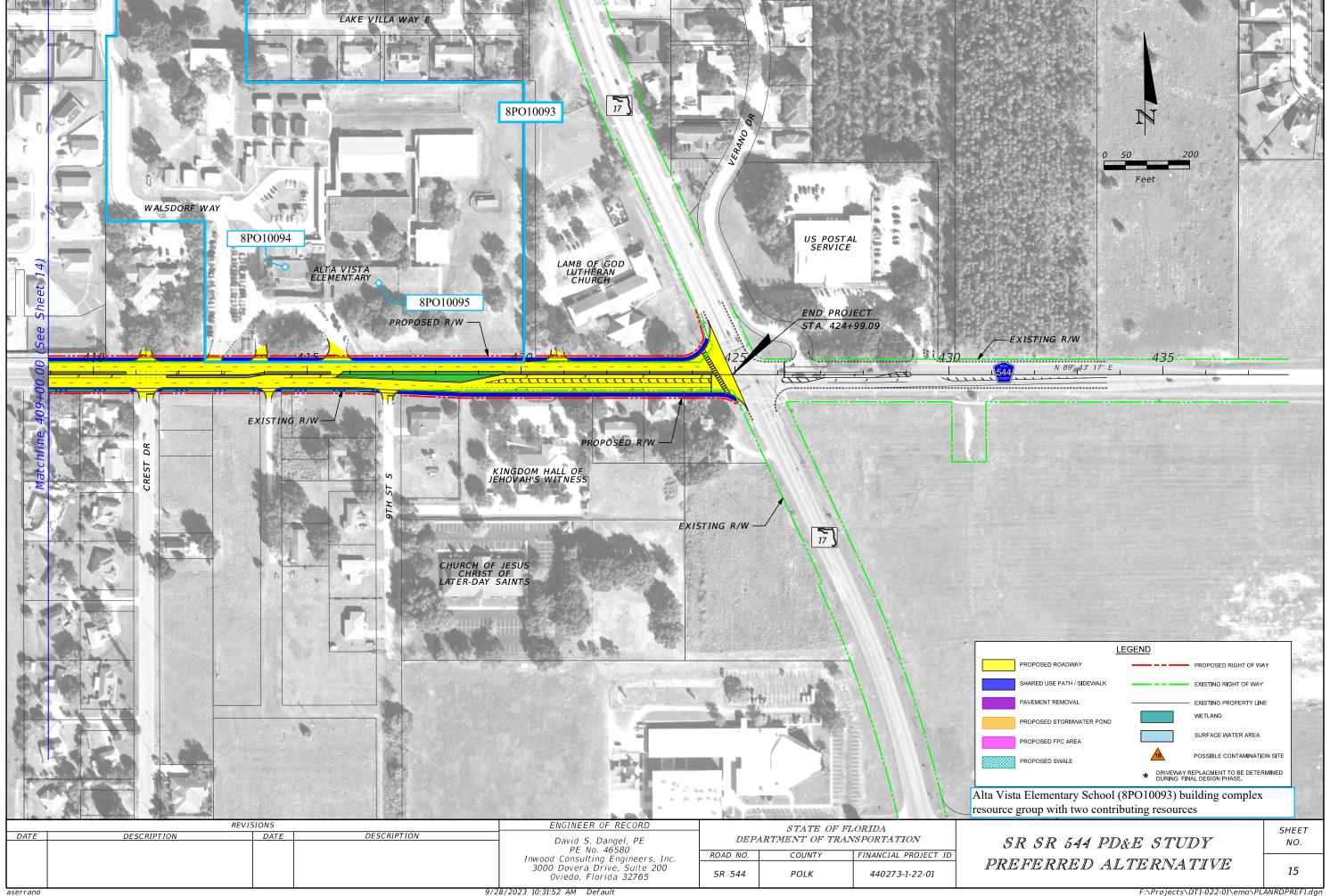


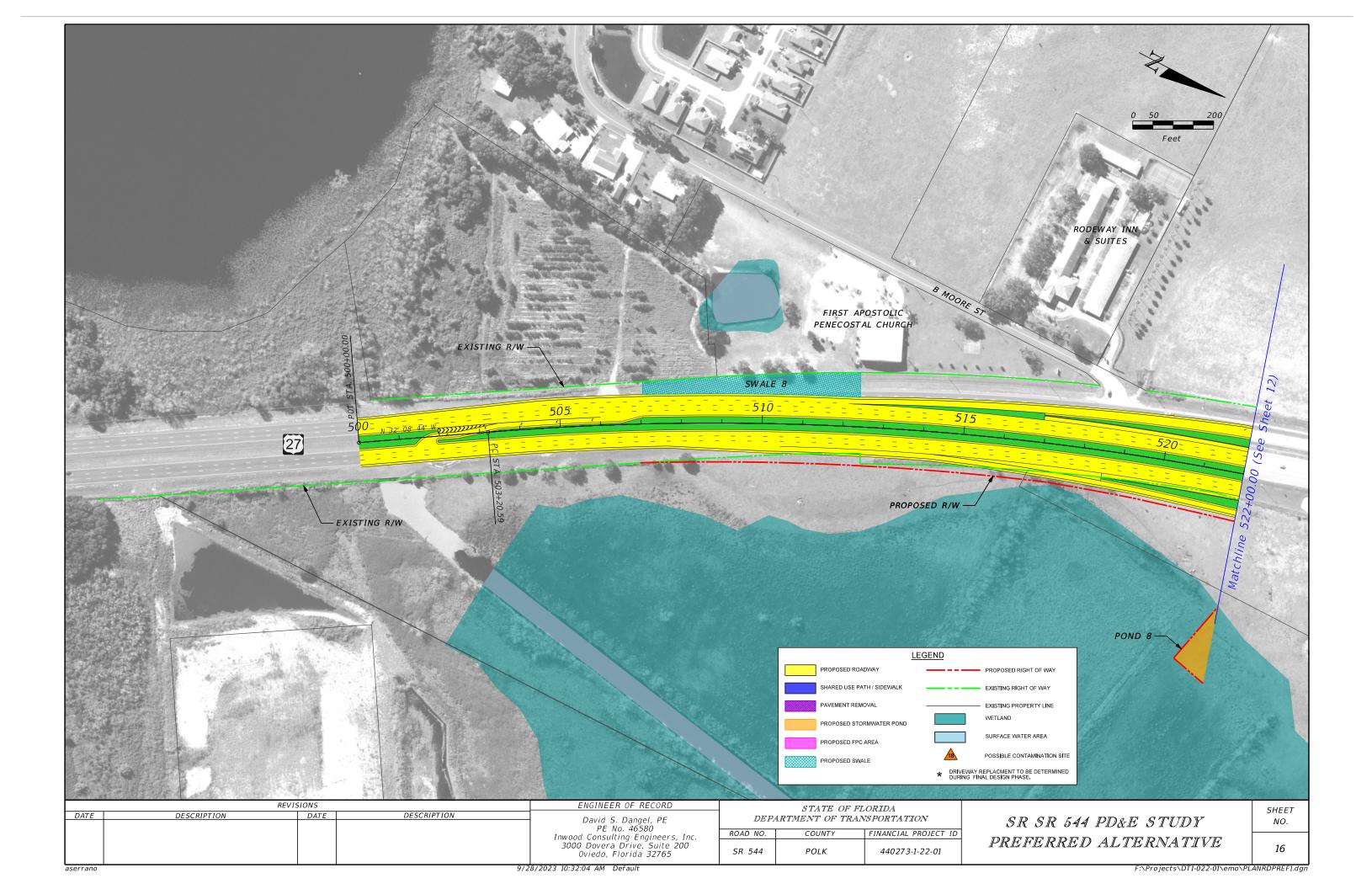


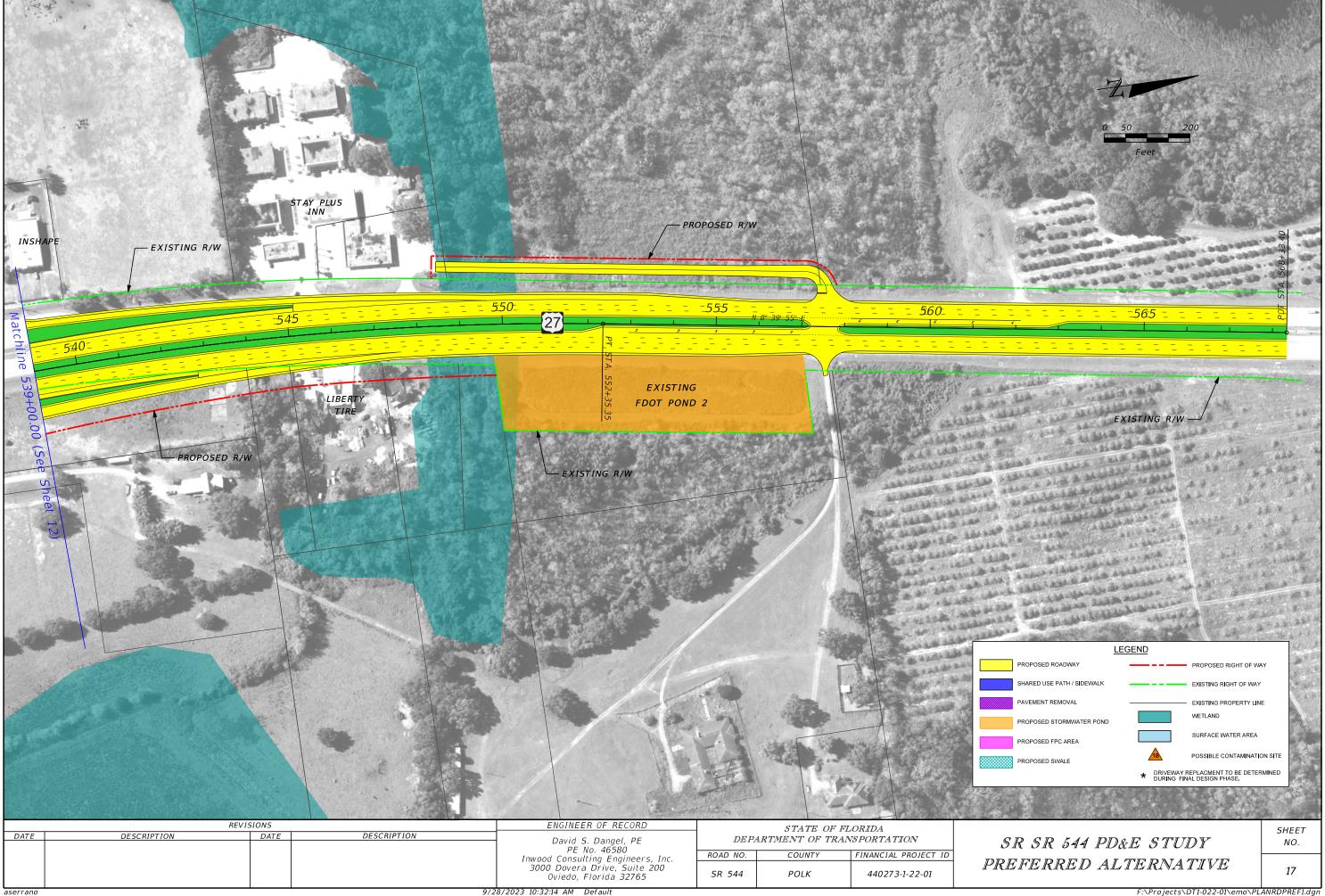












# APPENDIX B Relevant Correspondence

**CRAS Addendum** 

FPID No.: 440273-1-22-01



RON DESANTIS GOVERNOR 801 N. Broadway Avenue Bartow, FL 33830 JARED W. PERDUE, P.E. SECRETARY

August 18, 2023

Ms. Alissa S. Lotane, Director Florida Division of Historical Resources Department of State, R.A. Gray Building 500 South Bronough Street Tallahassee, FL 32399-0250

Attn: Mr. Benjamin Stewart, Transportation Compliance Review Program

**RE:** Cultural Resource Assessment Survey

Project Development & Environment (PD&E) Study State Road (SR) 544 (Lucerne Park Road) from Martin Luther King Boulevard to SR 17 Polk County, Florida

Financial Project ID No.: 440273-1-22-01 Federal Aid Project Number: D119-048-B

Dear Ms. Lotane:

Enclosed please find one copy of the report titled Cultural Resource Assessment Survey Project Development & Environment (PD&E) Study State Road (SR) 544 (Lucerne Park Road) from Martin Luther King Boulevard to SR 17, Polk County, Florida. This report presents the findings in support of the Florida Department of Transportation (FDOT), District One, proposed improvements to SR 544. The purpose of this project is to address roadway capacity deficiency along SR 544 (Lucerne Park Road) to accommodate future travel demand as a result of projected population and employment growth in the area. Other goals of the project include enhancing mobility options and multi-modal access as well as supporting local economic development initiatives. The proposed improvements include widening from two to four lanes, paved shoulders/marked bicycle lanes, sidewalks, and pond/swales/Floodplain Compensation (FPC) sites (hereinafter referred to as pond sites). Also, along SR 544, five roundabouts are proposed throughout the project limits at the intersections of Avenue Y NE, Vista Del Lago Drive, Lucerne Loop Road NE, Old Lucerne Park Road, and Benton Manor Avenue. Furthermore, additional right-of-way (ROW) will be required in some areas for the roadway widening and roundabouts. In addition, a single point urban interchange will be constructed at the US 27 intersection.

The archaeological APE was defined as the footprint of construction including pond sites. The historical APE includes the footprint of construction and immediately adjacent parcels where resources within 200-feet (ft) of the existing ROW were surveyed. In addition, the historical APE included resources within 100-ft of the proposed pond sites.

This CRAS was conducted in accordance with the requirements set forth in the National Historic Preservation Act of 1966 (as amended), which are implemented by the procedures contained in 36 CFR, Part 800, as well as the provisions contained in the revised Chapter 267, *Florida Statutes*. The investigations were carried out in accordance with Part 2, Chapter 8 (Archaeological and Historical Resources) of the FDOT's PD&E Manual, FDOT's Cultural

Ms. Alissa Lotane, Director SR 544, Polk County FPID No: 440273-1-22-01 FAP No: D119-048-B August 18, 2023 Page 2 of 5

Resources Manual, and the standards contained in the Florida Division of Historical Resources (FDHR) Cultural Resource Management Standards and Operations Manual (FDHR 2003). In addition, this survey meets the specifications set forth in Chapter 1A-46, Florida Administrative Code.

Archaeological background research indicated that three archaeological sites have been recorded within the APE and four within one-half mile. Sites within the APE include 8PO04797 (Homer's Grove Site), a single artifact site (today referred to as an archaeological occurrence [AO]), 8PO05426 (Whittaker Site) a low-density Pre-Contact artifact scatter, and 8PO05407 (Lake Tracey Canal), a historic earthwork dating to the American Boom Times (1921-1929). Sites within one-half mile include 8PO04798 (Hochberg Hammock) a single artifact site, 8PO07085 (Chris' Last Site) a lithic scatter, 8PO08107 (Bellaviva C Site) a lithic scatter, and 8PO06533 (Lake Rochelle Site). The two single artifact sites have not been evaluated by the State Historic Preservation Officer (SHPO), but the five other archaeological sites were determined ineligible for listing in the NRHP by the State Historic Preservation Office (SHPO). Based on a review of the relevant site information for environmentally similar areas within Polk County and the surrounding region, the archeological APE was considered to have variable archaeological potential. As a result of the survey, no Pre-Contact period or historic archaeological sites were discovered and no evidence of 8PO04797 (Homer's Grove Site) or 8PO05426 (Whittaker Site) were found within the APE. The Lake Tracey Canal (8PO05407) is within the APE, but no testing was deemed necessary given that it is a canal. However, one AO was found; it is not considered a site and is not NRHP eligible.

Historical/architectural background research indicated that nine (9) historic resources (8PO03077, 8PO03079, 8PO03084, 8PO03085, 8PO05399, 8PO08599, 8PO08600, 8PO08601, and 8PO08606) were previously recorded within the APE. These include eight (8) buildings (8PO03077, 8PO03079, 8PO03084, 8PO03085, 8PO05399, 8PO08599, 8PO08600, and 8PO08601) and one (1) bridge (8PO08606). Of these, six buildings (8PO03084, 8PO03085, 8PO05399, 8PO08599, 8PO08600, and 8PO08601) and the bridge (8PO08606) were determined ineligible for listing in the NRHP by the SHPO. One building (8PO03077) has not been evaluated and the SHPO found building (8PO03079) to have insufficient information to make a determination of NRHP eligibility. In addition, an unrecorded segment of the Peace Creek Drainage Canal (8PO05391) is located within Pond 5. Various segments of the Canal (8PO05391) have been previously recorded outside of the APE and were determined ineligible for listing in the NRHP by the SHPO.

Historical/Architectural field survey resulted in the identification of 108 historic resources within the APE. This includes 100 newly identified historic resources (8PO09983, 8PO09999 – 8PO10095, 8PO10132, 8PO10133), seven (7) extant previously recorded historic resources (8PO03077, 8PO03079, 8PO03084, 8PO03085, 8PO08599, 8PO08601, and 8PO08606), and an unrecorded segment of the Peace Creek Drainage Canal (8PO05391). These 108 historic resources include: 98 buildings (8PO03077, 8PO03079, 8PO03084, 8PO03085, 8PO08599, 8PO08601, 8PO09999 – 8PO10055, 8PO10057 – 8PO10060, 8PO10062 – 8PO10064, 8PO10066 – 8PO10068, 8PO10071 – 8PO10086, 8PO10088 – 8PO10092, 8PO10094, 8PO10095, 8PO10132, 8PO10133) constructed between ca. 1895 and 1977, three building complex resource groups (8PO10056, 8PO10070, 8PO10093), one historic district (8PO09983), one designed historic landscape (8PO10065), three linear resources (8PO05391, 8PO10061, 8PO10069), and two bridges (8PO08606 and 8PO10087). Of the seven (7) extant previously recorded historic resources located within the APE, two (8PO03077 and 8PO03079) were updated and re-evaluated

Ms. Alissa Lotane, Director SR 544, Polk County FPID No: 440273-1-22-01 FAP No: D119-048-B August 18, 2023 Page 3 of 5

and five (8PO03084, 8PO03085, 8PO08599, 8PO08601, and 8PO08606) were not updated because they were previously evaluated by the SHPO as ineligible for listing in the NRHP and no changes were observed during the field survey. Of these, 104 historic resources are within the mainline corridor APE and three historic resources (8PO05391, 8PO10054, and 8PO10075) are located within the pond site APE. Furthermore, the field survey revealed that two previously recorded historic resources (8PO05399 and 8PO08600) are no longer extant.

Of the 108 extant historic resources identified within the APE, 102 appear ineligible for listing in the NRHP (8PO03084, 8PO03085, 8PO05391, 8PO08599, 8PO08601, 8PO08606, 8PO09999 -8PO10092; 8PO10132, 8PO10133), five appear eligible (8PO03077, 8PO03079, 8PO10093, 8PO10094, and 8PO10095), and the newly identified historic district (8PO09983) has insufficient information to make a determination. The ineligible resources include 94 buildings (8PO03084, 8PO03085, 8PO08599, 8PO08601, 8PO09999 - 8PO10055, 8PO10057 - 8PO10060, 8PO10062 - 8PO10064, 8PO10066 - 8PO10068, 8PO10071 - 8PO10086, 8PO10088 - 8PO10092, 8PO10132, 8PO10133) constructed between circa (ca.) 1895 and 1977, two building complex resource groups (8PO10056 and 8PO10070), one designed historic landscape (8PO10065), three linear resources (8PO05391, 8PO10061, 8PO10069), and two bridges (FDOT Bridge No. 160021/8PO08606 and FDOT Bridge No. 160147/8PO10087). The buildings are common examples of their respective architectural style that have been altered and lack significant historical associations with persons or events. In addition, four (8PO03084, 8PO03085, 8PO08599, 8PO08601) of these were previously recorded and evaluated by the SHPO as ineligible. The two (2) building complexes, both of which are mobile home parks (8PO10056 and 8PO10070), and one designed historic landscape - a golf course (8PO10065) lack significant features and have no known historic associations with significant persons and/or events. The linear resources are of common design and construction that lack unique design features and characteristics. The concrete slab bridge (8PO08606) was previously recorded and evaluated by the SHPO as ineligible for listing in the NRHP. The newly identified concrete box culvert (8PO10087) does not possess any notable engineering features or design elements that would differentiate it from dozens of similar examples built throughout Florida during the same time period. In addition, background research did not reveal any historic associations with significant persons and/or events; therefore, none appear individually eligible for listing in the NRHP.

In addition, the Florence Citrus Growers Association Historic District (8PO09983) was newly identified during the survey. The proposed historic district within the APE spans approximately 200 ft from either side of SR 544 (Lucerne Park Road) from Martin Luther King Boulevard in the south to 2<sup>nd</sup> Street NE to the north. This portion of the proposed district is comprised of 29 contributing resources (8PO09999 through 8PO10027) that were constructed between circa (ca.) 1918 - 1974. Six non-contributing resources, as contained within the APE, are located within the historic district, and were not recorded as they are considered non-historic (constructed after 1977). It was beyond the scope of this CRAS to record the entire Florence Citrus Growers Association Historic District (8PO09983) and only historic resources within the current APE were evaluated. For the purposes of this survey, all resources recorded within the APE are considered contributing resources; however, this may be refined following the establishment of a period of significance for the proposed district. None of the contributing resources appear individually eligible for listing in the NRHP. Further in-depth research is needed to determine whether the subdivision was developed for the employees of the Florence Citrus Growers Association and identify a period of significance. As such, there is insufficient information for evaluating the NRHP eligibility of the historic district.

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A total of five historic resources within the APE appear eligible for listing in the NRHP. Of these, two buildings (8PO03077 and 8PO03079) were previously recorded but 8PO03077 has not been evaluated by the SHPO and 8PO03079 was found to have insufficient information. The Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095) were newly identified. The Colonial Revival style building located at 2208 Peninsular Drive (8PO03077) and the Craftsman style building located at 128 Scenic Highway (8PO03079) appear individually eligible for listing in the NRHP under Criterion C in the area of Architecture as a minimally altered example of its respective architectural style in Haines City. In addition, 8PO03077 and 8PO03077 appear to be contributing resources to the NRHP-listed Historic and Architectural Resources of Haines City MPL under Property Type F.3 - Residential Buildings. The Alta Vista Elementary Resource Group (8PO10093) appears eligible for listing in the NRHP under Criteria A and C in the areas of Education and Architecture as the first air-conditioned school in Polk County. Although the overall design of Alta Vista Elementary is typical of this era, the approval and construction of this campus set the precedent for future construction of air-conditioned schools throughout Polk County from 1962 onward. The resource demonstrates the importance of architectural design and the application of new technology in improving the learning environment – and resulting success – of students.

Based on the results of this study, it is the opinion of the District that the proposed undertaking will result in *no historic properties affected* for the previously recorded archaeological sites within the APE. Of the 108 extant historic resources identified within the APE, 102 appear individually ineligible for listing in the NRHP (8PO03084, 8PO03085, 8PO05391, 8PO08599, 8PO08601, 8PO08606, 8PO09999 - 8PO10092; 8PO10132, 8PO10133), five appear eligible (8PO03077, 8PO03079, 8PO10093, 8PO10094, and 8PO10095), and the newly identified historic district (8PO09983) has insufficient information to make a determination.

The five historic resources that appear eligible for listing in the NRHP within the APE include one Colonial Revival style building (8PO03077), one Craftsman style building (8PO03079), and the newly identified Alta Vista Elementary School (8PO10093) building complex resource group with two contributing resources (8PO10094 and 8PO10095). In addition, a portion of the newly identified Florence Citrus Growers Association Historic District (8PO09983) with 29 contributing buildings (8PO09999 through 8PO10027) is located within the APE. As a result of the survey, there is insufficient information for evaluating the NRHP eligibility of the historic district.

The proposed work being conducted within the APE includes ROW acquisition for the road widening and construction of a sidewalk, as well as the installation of traffic separators. In addition, to these improvements, work within the proposed district includes one pond site (Pond 1A) along 1st Street N between Avenue U NW and Avenue V NW. The proposed new ROW will be approximately 20-ft from the two residential buildings (8PO03077 and 8PO03079) and approximately 140-ft from the school (8PO10093). These resources are located between Myrtle Avenue and S 10th Street where the road widening will occur to the south of SR 544. Of the five potentially eligible resources, the Craftsman style building located at 128 Scenic Highway (8PO03079) is on the south side of SR 544 and the remaining properties are on the north side. Furthermore, ROW acquisition within the district will impact two contributing resources (8PO10001 and 8PO10003); however, both of these resources appear individually ineligible for listing in the NRHP. Based on these results, further coordination may be required.

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I respectfully request your concurrence with the findings of the enclosed report. If you have any questions, please do not hesitate to call me at (954) 336-3625 or email at <a href="mailto:matthew.marino@dot.state.fl.us">matthew.marino@dot.state.fl.us</a>.

Matt Marino, M.A., RPA Florida Department of Transportation, District One

Enclosures: One original copy of the CRAS Report (July 2023), 108 FMSF forms, One Completed Survey Log

CC: Dave Dangel, Inwood Maranda Kles, ACI

The Florida State Historic Preservation Officer (SF Assessment Survey Report complete and sufficient concur with the recommendations and findings properties File Number	and concurs/ does not ovided in this cover letter for SHPO/FDHR
insufficient information.	
SHPO Comments:  Based on the results, we concur. We look forward to fur	ther coordination.
Kely L Mase	V 01 0002
	8.21.2023
Alissa S. Lotane, Director	Date
State Historic Preservation Officer	
Florida Division of Historical Resources	

# APPENDIX C Noise Study Report (CMT 2023)

**CRAS Addendum** 

FPID No.: 440273-1-22-01

#### **TECHNICAL REPORT COVERSHEET**

#### NOISE STUDY REPORT

#### Florida Department of Transportation

District One

State Road 544(Lucerne Park Road) from Martin Luther King Boulevard to State Road 17

Project Development and Environment Study

Polk County, Florida

Financial Management Number: 440273-1-22-01

ETDM Number: 5873

Date: 11/8/2023

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 May 26, 2022 and executed by the Federal Highway Administration and FDOT.

#### NOISE STUDY REPORT

Florida Department of Transportation
District One

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Polk County, Florida

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#### **EXECUTIVE SUMMARY**

The Florida Department of Transportation (FDOT), District One, is conducting a Project Development and Environment (PD&E) Study to evaluate the improvements to SR 544 (Lucerne Park Road) from Martin Luther King Boulevard to State Road (SR) 17 in Polk County, a length of 7.96 miles. This Noise Study Report (NSR) documents the results of an analysis that was performed for the PD&E Study to identify land uses for which there are Noise Abatement Criteria (NAC) that would be impacted by highway traffic noise in the design year with the improved roadway. Traffic noise levels were predicted for the existing conditions (2019), and future conditions (2045) without the proposed improvements (the No-Build Alternative) and with the improvements (the Build Alternative).

The purpose of this Noise Study Report (NSR) is to identify land uses adjacent to the project corridor for which there are NAC, to evaluate future traffic noise levels at the properties with and without the proposed improvements, and to evaluate the need for, and effectiveness of, noise abatement measures. Additional objectives include the consideration of potential construction noise impacts and the identification of noise impact "contours" adjacent to the corridor.

The analysis was performed following FDOT procedures that comply with Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772), Procedures for Abatement of Highway Traffic Noise and Construction Noise. The evaluation uses methodologies established by the FDOT's traffic noise policy in the FDOT PD&E Manual – Highway Traffic Noise.

The results of the highway traffic noise analysis indicate that 116 residences, a park, and the outdoor use area of a place of worship would be impacted in the future with the Preferred Alternative. Noise abatement measures were considered for the impacted properties.

The Florida Department of Transportation and Polk County are committed to the construction of feasible and reasonable noise abatement measures at noise-impacted locations contingent upon the following conditions:

- 1. Final recommendations on the construction of abatement measures is determined during the project's final design and through the public involvement process;
- 2. Detailed noise analyses during the final design process support the need, feasibility and reasonableness of providing abatement;
- 3. Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost reasonable criterion:
- 4. Community input supporting types, heights, and locations of the noise barrier(s) is provided to the District Office; and
- 5. Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved.

Based on the results of the PD&E Study, the following noise barriers are a potentially reasonable and feasible noise abatement measure:

- Noise Barrier E1: Winter Ridge Condominiums. The optimal barrier is 453 feet long, and 16 feet tall. It benefits all 12 of the impacted receptors and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$217,440 or \$18,120 per benefited receptor.
- Noise Barrier E2: Lake Point Landing and Adjacent Residence. The optimal barrier is 472 feet long and 10 feet tall. It benefits all 10 of the impacted receptors and an additional 6 receptors and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$141,600 or \$8,850 per benefited receptor.
- Noise Barrier E4: Lake Smart Estates. The optimal barrier is 755 feet long and 10 feet tall. It benefits all 10 of the impacted receptors and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$226,500 or \$22,650 per benefited receptor.
- Noise Barrier E5: Brookhaven Village. The optimal barrier is 992 feet long and 12 feet tall. It benefits all 10 of the impacted receptors, and five additional receptors, and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$357,120 or \$23,808 per benefited receptor.
- Noise Barrier W2: Lake Rochelle Estates. The optimal barrier is 567 feet long and 12 feet tall. It benefits all 3 of the impacted receptors, and 3 additional receptors, and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$204,120 or \$34,020 per benefited receptor.
- Noise Barrier W3: Lake'n Golf Estates, Fairview Village, and Lakeside Ranch. The optimal barrier is 1,455 feet long and 12 feet tall. It benefits 13 of the 16 impacted receptors, and 8 additional receptors, and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$523,800 or \$24,943 per benefited receptor.
- Noise Barrier W4: Residences from Pomona Street to 5th Street South. The optimal barrier is 876 feet long and 14 feet tall. It benefits 4 of the 11 impacted receptors, and 6 additional receptors, and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$367,920 or \$36,792 per benefited receptor.

Section 6.0 of this NSR provides distances from the edge of the nearest travel lane with the proposed improvements at which noise levels are predicted to approach, meet, or exceed the NAC for the land uses designated as Activity Category A, B/C, and E for the project. This information is provided to assist local officials and developers in promoting noise compatible land uses.

#### 1.0 INTRODUCTION

This project involves capacity and multi-modal improvements to SR 544 (Lucerne Park Road) from Martin Luther King Boulevard to State Road (SR) 17 in Polk County, a length of 7.96 miles. The project location map is provided in **Figure 1-1**. The project corridor traverses three jurisdictions: the City of Winter Haven, Polk County, and Haines City. SR 544 plays an important role in the regional network by providing east-west access for a growing area of east-central Polk County. It links two north-south principal arterials of Polk County (US 17 and US 27), US 27 being part of Florida's Strategic Intermodal System (SIS) and connects the cities of Winter Haven and Haines City, the second and third most populated cities within Polk County, respectively.

SR 544 is classified as a two-lane urban minor arterial from Martin Luther King Boulevard to US 27 and as an urban collector from US 27 to SR 17. The roadway features two twelve-foot travel lanes with center and right turn lanes dispersed throughout the length of the corridor. The roadway also features an open drainage system; however, curbs and gutters exist from Martin Luther King Boulevard to Avenue Y and from La Vista Drive to SR 17 and in other areas where sidewalks are present.

Paved shoulders are present for the majority of the corridor and marked bicycle lanes exist on both sides of the roadway from 0.10 mile west of Brenton Manor Avenue to 0.2 mile east of US 27. The posted speed limit along the corridor ranges from 35 miles per hour to 55 miles per hour. Citrus Connection Route #60 (Winter Haven Northeast) operates along the eastern portion of the project corridor. Existing right-of-way along SR 544 ranges from 50 feet to 85 feet from Martin Luther King Boulevard to Avenue Y, 90 feet to 170 feet from Avenue Y to US 27, and 60 feet to 140 feet from US 27 to SR 17.

In addition to widening from two to four lanes, the proposed improvements may include paved shoulders/marked bicycle lanes, sidewalks, and/or a shared-use path to provide safe bicycle and pedestrian mobility and meet objectives of the Polk Transportation Planning Organization (TPO) in transforming this corridor into a Complete Street. Additional right-of-way may be required depending on the proposed improvements and specific right-of-way requirements will be determined during this Project Development and Environment (PD&E) Study.

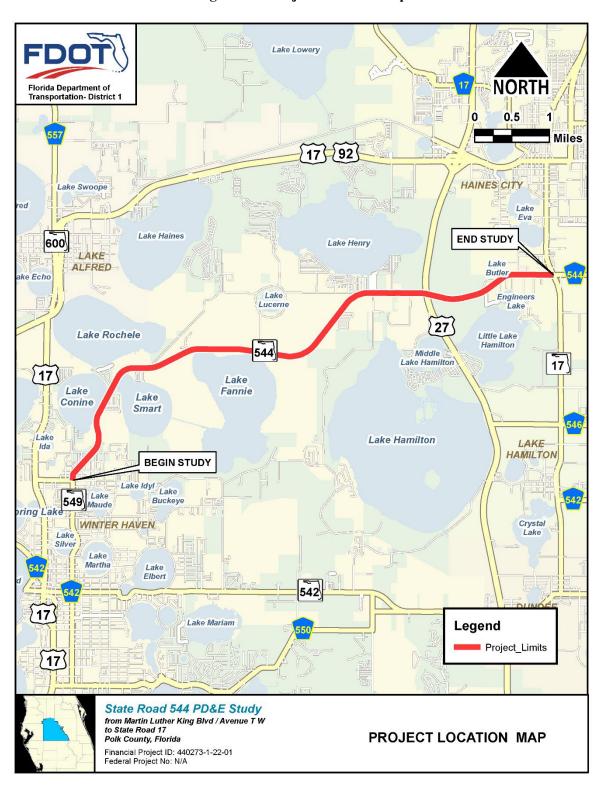


Figure 1-1: Project Location Map

#### 2.0 PURPOSE AND NEED

The purpose of this project is to address roadway capacity deficiency along SR 544 (Lucerne Park Road) from Martin Luther King Boulevard to SR 17 in Polk County to accommodate future travel demand as a result of projected population and employment growth in the area. Other goals of the project include enhancing mobility options and multi-modal access as well as supporting local economic development initiatives. The need for the project is based on the following criteria:

# CAPACITY/TRANSPORTATION DEMAND: Improve Operational Conditions and Accommodate Projected Travel Demand

This project is anticipated to improve traffic operations along SR 544 by increasing operational capacity to meet the projected travel demand as a result of Polk County population and employment growth and increased regional travel in the corridor.

The project segment occurs within two of the eight Polk County planning areas [Central Planning Area and East Planning Area] as depicted in Momentum 2040 [the Polk Transportation Planning Organization's (TPO) Long Range Transportation Plan (LRTP)]. Of the eight planning areas, the East Planning Area is expected to experience the highest increase in population growth between 2010 and 2040 with a 29% increase in single-family dwelling units and a 34% increase in multi-family dwelling units. The Central Planning Area is anticipated to experience the second highest increase in single family dwelling units (25% increase) during the same time period. Accordingly, the Central Planning Area will experience the highest increase in employment growth between 2010 and 2040 with a 42% increase in industrial employment, 34% increase in commercial employment, and a 32% increase in service employment. Likewise, the East Planning Area will experience the second highest increase in commercial employment (26% increase) and the third highest increase in service employment (21% increase) during the same time period. Countywide employment is expected to increase by 79% between 2010 and 2040. Growth within the project area may be attributed to the numerous developments that have been approved and continue to be approved by the City of Haines City.

The greater SR 544 corridor serves commuters of the area as it provides access to regional transportation facilities [including US 92, US 17, US 27, and SR 17] as well as residential and commercial hubs within central Polk County. The project segment of SR 544 specifically facilitates local commuter traffic between the population and employment centers of Winter Haven and Haines City. Identified as a Secondary Freight Network Highway Corridor by the Polk TPO, SR 544 additionally serves as a freight distribution route as it connects to a Strategic Intermodal System (SIS) Highway Corridor [US 27], Regional Freight Network Highway Corridors as designated by the Polk TPO [US 92, US 27, and SR 17], and another designated Polk TPO Secondary Freight Network Highway Corridor [US 17]. Truck traffic composes between 7.0% and 9.9% of the total daily traffic present along the project segment of SR 544. As such, this roadway plays an important role in facilitating truck traffic and the distribution of goods to both local and regional destinations.

While the roadway currently operates at an acceptable LOS, conditions are anticipated to deteriorate below established standards if no improvements occur by 2040 as the roadway lacks the capacity to accommodate the projected travel demand. With the proposed improvement, the corridor is expected to continue to operate at acceptable LOS or improved LOS.

#### MODAL INTERRELATIONSHIPS: Enhance Mobility Options and Multi-Modal Access

Notable pedestrian and bicycle traffic in the corridor was observed in the field despite the fact that sidewalks and bicycle lanes are intermittent and disconnected along the corridor. In addition, a large transit dependent population is present, composed primarily of minority and low-income populations as well as housing units with no vehicle available. Compared to the demographic characteristics for Polk County, the project analysis area [which consists of United States census block groups within a 500-foot buffer surrounding the project] contains a significantly higher minority population percentage [20.1% higher], a higher percentage of housing units with no vehicle available [1.2% higher], and a notably lower median family income [\$11,246 less]. This indicates a population with a higher propensity to walk, bike, or take transit to access essential services. The need for multi-modal options within the corridor is critical as growth in the area has created a latent demand for increased bicycle and pedestrian activity.

It should be noted that a portion of the project segment [from Ave T to Old Lucerne Park Road] is identified by the Polk TPO as a Future Complete Streets Corridor. A Complete Street is defined as a corridor that is designed to provide safe access and travel for all users [pedestrians, bicyclists, motorists, and transit riders] of all ages and abilities. Some of the treatments proposed as part of the Future Complete Streets Corridor have been applied to a section immediately south/adjacent to the project corridor [from Ave T to Ave O] and to the westernmost/southernmost section of the project segment [Ave T to Ave Y]. These treatments included the reconstruction of driveways to meet Americans with Disabilities Act (ADA) standards, the addition of pedestrian street lighting, and the construction of crosswalks on intersecting minor streets. New or enhanced sidewalks, landscaping, enhanced bus stops, improved signage, as well as a shared use path [Old Dixie Trail – ETDM Project #14328] are some of the additional improvements being considered/evaluated along the project corridor.

Overall, the proposed project is anticipated to meet the mobility needs of the area by alleviating future congestion on the corridor, providing multimodal travel options, and improving east-west access within east-central Polk County. The proposed bicycle and pedestrian facilities are to enhance multi-modal access and connections between community points of interest and to the regional trail network.

#### SOCIAL DEMANDS AND ECONOMIC DEVELOPMENT: Support Economic Development

One Florida Opportunity Zone [formerly titled Florida Enterprise Zone] borders the northern portion of the project corridor from Old Lucerne Park Road to US 27. This program provides tax incentives for investments in low-income communities. In addition, the easternmost/northernmost section of the project corridor occurs within the Haines City Community Redevelopment Area. Further, the westernmost/southernmost section of the project [Ave T to Ware Ave] occurs within the Florence Villa Community Redevelopment Area; the Winter Haven Community Redevelopment Agency fosters and promotes community redevelopment activities within this designated district of the City of Winter Haven. Community Redevelopment Areas are recognized as special districts under Florida Statute created to encourage investment within the district through a series of strategic and timely public investments; activities that occur within them are detailed in customized redevelopment plans and include: infrastructure improvements, streetscaping or beautification affordable housing, recreation and facility improvements, treatments. park development/redevelopment strategies, transportation improvements, and neighborhood enhancement.

The roadway operational conditions resulting from the project along with the bicycle and pedestrian facilities proposed for the corridor are intended to provide infrastructure to support commerce and customers as well as modal options to serve the Florida Opportunity Zone and other communities along the corridor. It will also renew the aesthetic appeal of the surrounding area, thereby stimulating economic growth/revitalization and investment in the adjacent communities. As such, the project aligns with the economic development initiatives of the proximate, local communities.

#### 3.0 PREFERRED ALTERNATIVE

Below is a summary of the preferred alternative for each roadway segment and intersection.

#### 3.1 SEGMENT 1 – MARTIN LUTHER KING BOULEVARD TO NORTH OF AVENUE Y

The preferred typical section in Segment 1 is the three-lane typical section with a best fit alignment. It is slightly wider and will have minor right-of-way impacts (no residential relocations) than the two-lane alternative but will provide additional safety and capacity for turning vehicles with the center turn lane. **Figure 3-1** illustrates this typical section.

The preferred improvement at the Martin Luther King Boulevard intersection is to maintain the existing traffic signal but add a new southbound right turn lane at the intersection. Improvements also include realigning the 1st Street NW intersection with SR 544 farther away from the Martin Luther King Boulevard intersection.

The mini-roundabout with the 90-foot inscribed diameter is recommended at Avenue Y. This concept will minimize impacts to the residences, businesses and church located at this intersection while providing an opportunity for an entrance feature to the historic Florence Villa neighborhood and speed control for vehicles entering the neighborhood.

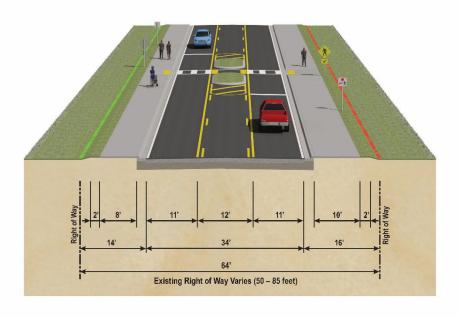


Figure 3-1: Segment 1 Preferred Typical Section

#### 3.2 SEGMENT 2 – NORTH OF AVENUE Y TO EAST OF LAKE CONINE CANAL

The four-lane divided roadway is proposed with widening to the south side of the road. This alignment is recommended to avoid impacts to the Lake Conine Wetland Restoration Area and due to the proximity of the

road to Lake Conine and wetlands along the lake. **Figure 3-2** illustrates the proposed four-lane divided roadway typical section for Segments 2 through 7.

## 3.3 SEGMENT 3 – EAST OF LAKE CONINE CANAL TO EAST OF OLD LUCERNE PARK ROAD (WEST END)

The four-lane divided roadway is proposed with widening to the north side of the road. This alignment is recommended to avoid impacts to existing residential developments on the south side of SR 544 and due to the proximity of the road to Lake Smart and wetlands along the lake.

The preferred concept at this intersection is to realign Old Lucerne Park Road (west end) to align with Vista Del Lago Drive and to provide a roundabout at the intersection. The roundabout will help with speed control along SR 544 and improve safety when compared to the traffic signal option.

### 3.4 SEGMENT 4 – EAST OF OLD LUCERNE PARK ROAD (WEST END) TO EAST OF LUCERNE LOOP ROAD

The four-lane divided roadway is proposed with centered widening. The existing road right-of-way can accommodate the proposed four-lane divided roadway in this segment.

The preferred improvement at this intersection is the roundabout. It will help with speed control along SR 544 and improve safety when compared to the traffic signal option.

#### 3.5 SEGMENT 5 – EAST OF LUCERNE LOOP ROAD TO EAST OF LAKE HAMILTON CANAL

The four-lane divided roadway is proposed with widening to the north side of the road. This alignment is recommended to avoid impacts to the Lake Region Lakes Management District boat ramp on the south side of the road and also to avoid impacts to the proposed Duke Energy transmission easement/poles on the south side of the road.

The preferred improvement at this intersection is the roundabout. It will help with speed control SR 544 and increase safety when compared to the traffic signal option at this skewed intersection.

#### 3.6 SEGMENT 6 – East OF LAKE HAMILTON CANAL TO WEST OF BRENTON MANOR AVENUE

The four-lane divided roadway is proposed with widening to the north side of the road. This alignment is recommended to avoid impacts to the Duke Energy transmission easement/poles and existing commercial development on the south side of the road.

The signalized thru-cut alternative is recommended at this intersection. This option includes realigning the two internal roads for the developments on the north side of SR 544 so that they intersect SR 544 in a single location (north leg of the intersection).

#### 3.7 SEGMENT 7 – WEST OF BRENTON MANOR AVENUE TO LAVISTA DRIVE

The four-lane divided roadway is proposed with widening to the north side of the road west of US 27 and to the south side of the road east of US 27. This alignment is recommended to avoid impacts to Duke Energy

transmission easement/poles that switch from the south side of the road to the north side of the road through the US 27 intersection.

The preferred intersection improvement at Brenton Manor Avenue is the roundabout. This intersection concept is paired with the recommended single point urban interchange at US 27.

The single point urban interchange is the recommended improvement at this intersection due to the lower predicted life cycle crash costs with this concept compared to the northwest quadrant roadway with three signalized intersections.

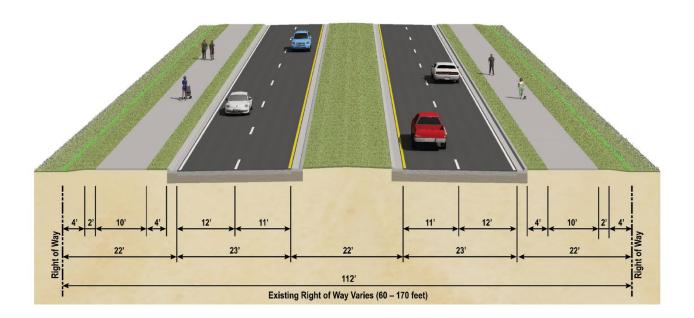


Figure 3-2: Segment 2 through 7 Preferred Typical Section

#### 3.8 SEGMENT 8 – LAVISTA DRIVE TO SR 17

The reduced four-lane divided roadway is proposed with centered widening through this segment. This alignment is recommended to minimize residential relocations through this segment of the project but providing access control with the raised median. **Figure 3-3** illustrates this typical section.

The preferred concept is a traffic signal with only improvements to the west leg of the intersection.

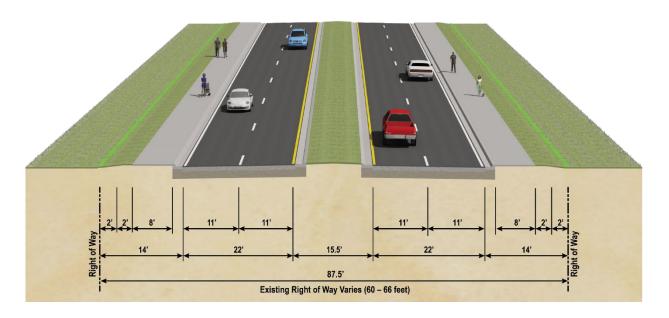


Figure 3-3: Segment 8 Preferred Typical Section

#### 4.0 METHODOLOGY

The methodologies used to prepare the highway traffic noise analysis are documented in Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772), the FDOT's Noise Policy (FDOT PD&E Manual – Highway Traffic Noise), and the FDOT's Traffic Noise Modeling and Analysis Practitioners Handbook.

This Noise Study Report (NSR) section describes the sound level metrics and motor vehicle traffic data that were used to prepare the analysis and the criteria used to determine if a future design year (2045) traffic noise level with the new roadway would be considered an impact. Potential noise abatement measures are also described.

#### 4.1 Noise Metrics

The predicted highway traffic noise levels presented in this NSR are expressed in decibels on the A-weighted scale (dB(A)). The A-weighted scale most closely approximates the response characteristics of the human ear to traffic noise. All traffic noise levels are reported as equivalent levels (Leq(h)). Levels reported as Leq(h) are equivalent steady state sound levels that contain the same acoustic energy as time-varying sound levels over a period of one hour.

#### 4.2 TRAFFIC DATA

Highway traffic noise levels are low when traffic volumes are low and operating conditions are good (LOS A or B). Highway traffic noise levels are also low when traffic is so congested that movement is slow (LOS D, E, or F). Generally, the maximum hourly noise level occurs between these two conditions (i.e., LOS C). For these reasons, when demand volumes are forecast to be less than LOS C conditions, LOS A or B conditions are modeled (because the demand volume is not forecast to reach the LOS C level). Conversely, when demand volumes are forecast to be greater than LOS C conditions, LOS C conditions are modeled because use of the LOS C data provides conservative results.

The traffic data (i.e., vehicle volume, fleet mix, and motor vehicle speeds) that was used to predict existing year (2019) and future year (2045) conditions both with and without the proposed improvements for SR 544 are provided in **Appendix A** of this NSR.

#### 4.3 Noise Abatement Criteria

To evaluate highway traffic noise, the Federal Highway Administration (FHWA) established Noise Abatement Criteria (NAC). As shown in **Table 4-1**, these criteria vary according to a land use's activity category. For comparative purposes, typical sound levels produced by common indoor and outdoor activities are provided in **Table 4-2**. Following Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772), highway traffic noise is predicted to impact a land use for which there is a NAC when design year traffic noise levels with a roadway improvement approach, meet, or exceed the NAC or when design year levels with an improvement increase substantially when compared to existing levels. FDOT's Noise Policy considers a NAC to be "approached" when a traffic noise level is predicted to be within 1 dB(A) of the NAC and a substantial increase is predicted when future highway traffic noise levels with a roadway improvement increase 15 dB(A) or more when compared to existing levels.

Table 4-1: FHWA and FDOT Noise Abatement Criteria

Activity		Activity Leq(h)1	
Category	Liegarintian at Activity Category		FDOT
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	57 (Exterior)	56 (Exterior)
$\mathbf{B}^2$	Residential	67 (Exterior)	66 (Exterior)
$C^2$	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails and trail crossings.	67 (Exterior)	66 (Exterior)
D	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	52 (Interior)	51 (Interior)
$E^2$	Hotels, motels, offices, restaurants/bars and other developed lands, properties or activities not included in A-D or F.	72 (Exterior)	71 (Exterior)
F	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical) and warehousing.		
G	Undeveloped lands that are not permitted.		

Sources: Table 1 of Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772) and Figure 18-1 of Chapter 18 of the FDOT's PD&E Manual (dated July 1, 2023).

Note: FDOT defines that a substantial noise increase occurs when the existing noise level is predicted to be exceeded by 15 decibels or more as a result of the transportation improvement project. When this occurs, the requirement for abatement consideration will be followed.

<sup>&</sup>lt;sup>1</sup> The Leq(h) activity criteria values are for impact determination only and are not design standards for noise abatement measures.

<sup>&</sup>lt;sup>2</sup> Includes undeveloped lands permitted for this activity category.

**Table 4-2: Typical Sound Levels** 

Common Outdoor Activities	Sound Level dB(A)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area daytime		
Gas lawnmower at 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
	0	

Source: California Dept. of Transportation Technical Noise Supplement, November 2009, Page 2-21.

#### 5.0 TRAFFIC NOISE ANALYSIS

This section discusses sound level measurements that were obtained within the study area to validate the TNM and provides the results of the traffic noise analysis for the land uses within the project limits for which there are NAC. The on-site land use review for this project was conducted on May 30, 2023.

#### 5.1 MODEL VALIDATION

The purpose of model validation is to ensure that motor vehicle traffic is the primary source of noise within a project's study area and to verify that the TNM predicts existing traffic noise levels that are within an acceptable range. The validation process involves obtaining sound level measurements adjacent to the existing roadway and during each measurement period noting the average vehicle travel speeds, vehicle counts, and fleet identification (e.g., automobiles, trucks, buses, and motorcycles), and site conditions (e.g., topography and distance from the roadway). Sources of sound other than motor vehicles (e.g., aircraft flyovers, birds, barking dogs, etc.) are also noted during each measurement period because the presence of such sound sources could result in measured levels exceeding the modeled levels. These data are then used to create input for the TNM, and the model is executed. Following FDOT's methodology, the TNM is considered valid to predict existing conditions if the field measured sound levels are within +/- 3.0 dB(A) of the TNM predicted highway traffic noise levels.

Field measurements were conducted in accordance with the FHWA's Noise Measurement Handbook (FHWA-HEP-18-065). The measurements were obtained using a Larson Davis (LD) 831 Type 1 integrating sound level meter (SLM), and the SLM was calibrated before and after each period with an LD CAL200 calibrator.

Based on the field measurements and validation results the ability of TNM to predict traffic noise levels for the project was confirmed (see **Table 5-1**). Documentation in support of the validation is provided in **Appendix B** of this NSR. Measured levels were slightly higher than the modeled levels due to the SLM measuring traffic noise as well as background noise whereas the TNM only predicts traffic noise. The locations at which the measurements were obtained are illustrated on project aerials in **Appendix C**.

Measurement **Modeled Difference** Measured dB(A) Location Period dB(A) dB(A) 1 63.1 0.9 64.0 100 ft from edge 2 Site 1 64.1 63.8 0.3 of pavement 3 63.5 62.4 1.1 1 61.4 -1.5 62.9 100 ft from edge Site 2 2 59.8 -2.362.1 of pavement 3 60.0 62.5 -2.5

**Table 5-1: Noise Validation Summary** 

#### 5.2 PREDICTED NOISE LEVELS AND ABATEMENT ANALYSIS

Traffic noise levels were predicted at properties with land uses for which there are NAC in proximity to SR 544. A total of 300 receptors were evaluated. The locations of the receptors are depicted on aerials in **Appendix C**. These 300 receptors represent 327 residences, 6 outdoor areas, 14 interior sites (churches/schools), and 2 hotel pools.

Receptors were predicted to be impacted by traffic noise if the TNM results with the proposed improvements were equal to or greater than 66 dB(A) for NAC B and C. Traffic noise impacts were predicted for NAC D (interior) if the TNM results with the proposed improvements were greater or equal to 51 dB(A). To determine interior noise levels, an exterior noise level is first predicted at an impacted building, and the building noise reduction factor of 25 dB(A) (masonry building with single glazed windows) The building noise reduction factor is from FDOT's PD&E Manual Chapter 18 Table 18-3 Building Noise Reduction Factors. The noise reduction fact is then subtracted from the exterior noise level to predict the interior noise level. Traffic noise impacts were predicted for NAC E if the TNM results with the proposed improvements were greater than or equal to 71 dB(A).

The predicted traffic noise levels for each of the evaluated receptors are provided in **Appendix D**. In addition to predicting future (2045) traffic noise with the Preferred Alternative (as described in Sections 3.0 of this NSR), traffic noise was predicted for the existing year (2019) with the existing roadway geometry and for the future without the proposed improvements (i.e., the No-Build Alternative).

In the existing year (2019), traffic noise is predicted to range from 47.6 to 71.7 dB(A) for all exterior land uses (NAC B, C and E). For NAC D receptors (interior) traffic noise is predicted to range from 30.1 to 43.5 dB(A). The project's design year (2045) with the No-Build Alternative traffic noise at the exterior land uses is predicted to range from 47.7 to 73.1 dB(A), and from 30.1 to 46.1 dB(A) for interior land uses. In the design year with the Preferred Alternative traffic noise is predicted to range from 50.0 to 73.9 dB(A) at the outdoor land uses, exceeding the NAC at 101 receptors representing 116 residences, and two outdoor land uses (Harry King Park and the basketball court at the First Apostolic Pentecostal Church). As also shown in **Appendix D**, traffic noise along the project corridor is not predicted to increase substantially from existing levels with the maximum increase being 7.5 dB(A) at receptor W76.

#### 5.3 Noise Abatement Measures

#### 5.3.1 TRAFFIC MANAGEMENT

Some traffic management measures can reduce motor vehicle-related noise. For example, trucks can be prohibited from certain streets and roads, or be permitted to only use certain streets and roads during daylight hours. The timing of traffic lights can also be changed to smooth out the flow of traffic and eliminate the need for frequent stops and starts. Reducing speed limits and increasing enforcement of speed limits is also an effective method of reducing motor vehicle noise.

#### 5.3.2 ALIGNMENT MODIFICATIONS

Modifying the alignment of a roadway can also be an effective traffic noise mitigation measure. When the horizontal alignment is shifted away from a noise sensitive land use, the sound level is reduced for the land uses that are farther from the roadway than before the shift. In certain circumstances, when a change is made to the vertical alignment (i.e., shifting the alignment so that it is below or above the elevation of a land use), highway traffic noise may be reduced due to shielding.

#### **5.3.3** BUFFER ZONES

Providing a buffer between a roadway and future noise sensitive land uses is an abatement measure that can minimize/eliminate noise impacts in areas of future development. To encourage use of this abatement measure through local land use planning, noise contours have been developed and are further discussed in Section 6 of this

NSR. To abate traffic noise for an existing land use using this abatement measure, the property would have to be acquired.

#### **5.3.4** Noise Barriers

Noise barriers have the potential to reduce traffic noise by interrupting the sound path between the motor vehicles on a roadway and a noise sensitive land use next to the roadway. To effectively reduce traffic noise, a barrier must be relatively long, continuous, and sufficiently tall. Use of noise barriers is the most common traffic noise abatement measure. Generally, noise barriers are most effective when placed as close to the noise source or as close to the noise receptor as possible.

#### 5.3.5 FEASIBLE AND REASONABLE ABATEMENT MEASURES

For PD&E studies, a measure is considered a potential noise abatement measure if the following criteria are met:

- Minimum Noise Reduction To meet the minimum noise reduction criteria, an abatement measure must provide at least a 5 dB(A) reduction in traffic noise for two or more impacted receptors and provide a 7 dB(A) reduction, the FDOT's Noise Reduction Design Goal (NRDG), for one or more benefited receptors. Failure of a measure to provide at least a 5 dB(A) reduction for two or more impacted receptors results in a measure being deemed not feasible. Failure to achieve the NRDG results in a measure being deemed not reasonable.
- Cost Effectiveness Criterion Based on FDOT's Noise Policy, to be considered a reasonable abatement measure for a residence, the measure should cost no more than \$42,000 per benefited receptor (i.e., per benefited property for which the land use has a NAC). For the cost of an abatement measure for a special land use (e.g., Harry King Park) to be considered reasonable, the measure should cost no more than \$995,935 per person-hour per square foot. The FDOT currently uses an estimated cost of \$30 per square foot for noise barrier-related materials and labor.

If the results of an abatement measure evaluation indicate that a measure would provide at least the minimum required reduction in traffic noise at a cost that is less than the cost effectiveness criterion, additional factors are considered. Depending on the measure, feasibility factors relate to design and construction (i.e., given site-specific details, can an abatement measure be implemented), safety, accessibility, ROW requirements, maintenance, and impacts on utilities and/or drainage. Because the analysis is performed on conceptual designs for roadway improvements, noise abatement measures are only identified as being potentially feasible and reasonable at the conclusion of a project's PD&E phase. For such measures, the FDOT makes a commitment to perform detailed analysis in the project's design phase (including obtaining the viewpoints of the property owners and/or residents of the benefited properties) when the final construction plans for an improvement are prepared.

#### 5.4 ABATEMENT CONSIDERATIONS

As previously stated, when traffic noise impacts are predicted, noise abatement measures are considered for the impacted properties. The following discusses the FDOT's consideration of each of the measures for the impacted receptors with the improvements to SR 544.

#### 5.4.1 TRAFFIC MANAGEMENT

Reducing traffic speeds and/or the traffic volume or changing the motor vehicle fleet is inconsistent with the goal of increasing operational capacity of the roadway. Therefore, traffic management is not considered to be a reasonable measure to abate the predicted traffic noise impacts for the SR 544 Project.

#### 5.4.2 ALIGNMENT MODIFICATION

As discussed in Section 2.0 the project is planned to improve operational capacity along an existing roadway. A significant change in the alignment (i.e., a doubling of the distance between the roadway and the receptor) would be needed to provide a 3 dB(A) change in noise level and the alignment change would require the acquisition of additional ROW for the improvement. A review of data from the Polk County Property Appraiser indicates that the cost to acquire the additional ROW would exceed the cost-effective limit. Therefore, a modification of the alignment of the roadway is not considered to be a reasonable noise abatement measure.

#### 5.4.3 BUFFER ZONES

As previously stated, to abate predicted traffic noise at an existing noise sensitive land use, the impacted property would have to be acquired. As also previously stated, to be considered a cost-effective measure, the cost of abatement should cost no more than \$42,000 per benefited residential receptor. A review of data from the Polk County Property Appraiser indicates that the cost to acquire the impacted properties adjacent to the SR 544 Project would exceed the cost-effective limit. Therefore, creating a buffer zone by acquiring the properties is not considered to be a reasonable noise abatement measure.

#### **5.4.4** Noise Barriers

The TNM was used to evaluate the potential for noise barriers to reduce traffic noise levels for the impacted receptors. The noise barrier results are presented for the eight barriers evaluated for the impacted receptors along the eastbound side of SR 544 (e.g., Noise Barrier E1, Noise Barrier E2, etc.), followed by the four barriers evaluated for the impacted receptors along the westbound side of SR 544 (e.g., Noise Barrier W1, Noise Barrier W2, etc.), and finally for the single barrier evaluated for the impacted receptor along US 27 (e.g., Noise Barrier U1).

The lengths of the barriers were optimized in an attempt to benefit all of the impacted receptors. Once optimized, the reduction in traffic noise at each impacted receptor was reviewed to determine if the acoustic feasibility requirement (i.e., a reduction of at least 5 dB(A) for two impacted receptors) and the acoustic reasonableness requirement (i.e., a reduction of at least 7 dB(A) for one benefited receptor) could be achieved. If the noise reduction requirements were met, the cost reasonableness of providing a noise barrier as an abatement measure was also considered (i.e., not to exceed \$42,000 per benefited receptor).

As stated in the introduction to this NSR, the proposed project is currently in the PD&E phase. As such, the roadway elevations and alignment information used to perform the traffic noise analysis are not finalized. Therefore, the results of the analysis presented in this report should be considered preliminary (i.e., the locations of the noise barriers are potential). A final determination regarding the reasonable and feasible barriers in this NSR as traffic noise abatement measures will be made during the project's design phase.

FDOT's noise policy states that the number of impacted receptors required to achieve a 5 dB(A) reduction or greater in order for a noise barrier to be considered feasible will be two or greater. Therefore, noise barriers were not

evaluated for isolated impacted receptors. Based on the noise analyses, there appear to be no feasible mitigation solutions available for the impacted isolated residential receptors E63 and E150.

Due to the numerous direct access driveways and cross streets between Martin Luther King Boulevard and Avenue Y, a continuous noise barrier could not be evaluated for two or more adjacent impacted receptors. As such, noise barriers for impacted receptors in this section of the project are not considered to be a reasonable and feasible noise abatement measure. These twenty impacted receptors include E3-E10, E17, E20-E22, and W3-W10.

#### 5.4.4.1 Noise Barrier E1: Winter Ridge Condominiums

A noise barrier was evaluated for the 12 impacted residences represented by receptors E33-E38. The barrier was evaluated at the back of the proposed shared use path. This placed the barrier six feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-2**. As shown, the barrier could reduce traffic noise by at least 5 dB(A) at all the impacted receptors and achieve the NRDG of 7 dB(A) to at least one benefited receptor at heights ranging from 16 to 22 feet. The cost of the noise barrier would be below the FDOT's cost reasonable criterion of \$42,000 per benefited receptor. The limits of the optimal barrier (highlighted below) are depicted on page 2 of the project aerials in **Appendix C**.

**Table 5-2: Noise Barrier E1 Evaluation Results** 

Noise E	Barrier	Number of Impacted Receptors	Nois Reducti Impac Recept (dB(A	on at ted tors		Estir		Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
Height (feet)	Length (feet)		5 -6.9	≥7	Impacted	Not Impacted	Total			
8	NA <sup>5</sup>		0	0	0	0	0	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>5</sup>		0	0	0	0	0	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
12	NA <sup>6</sup>		10	0	10	0	10	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>
14	440	12	8	2	10	0	10	\$184,800	\$18,480	Yes
16	453	12	4	8	12	0	12	\$217,440	\$18,120	Yes
18	453		4	8	12	0	12	\$244,620	\$20,385	Yes
20	443		4	8	12	2	14	\$265,800	\$18,986	Yes
22	443		4	8	12	2	14	\$292,380	\$20,884	Yes

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup>The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>&</sup>lt;sup>5</sup> A reduction of at least 5 dB(A) for two or more impacted receptors could not be achieved at any length at this height.

<sup>&</sup>lt;sup>6</sup> The NRDG could not be achieved at any length at this height.

#### 5.4.4.2 Noise Barrier E2: Lake Point Landing and Adjacent Residence

A noise barrier was evaluated for the 10 impacted residences represented by receptors E55, E58, E61, and E62. The barrier was evaluated at the back of the proposed shared use path. This placed the barrier six feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-3**. As shown, the barrier could reduce traffic noise by at least 5 dB(A) at all the impacted receptors and achieve the NRDG of 7 dB(A) to at least one benefited receptor at all evaluated heights. The cost of the noise barrier would be below the FDOT's cost reasonable criterion of \$42,000 per benefited receptor. The limits of the optimal barrier (highlighted below) are depicted on page 2 of the project aerials in **Appendix C**.

Table 5-3: Noise Barrier E2 Evaluation Results

Noise ?	Barrier	Number of Impacted Receptors	at Im Rece	eduction pacted eptors (A)) <sup>1</sup>	Number	Number of Benefited Receptors <sup>2</sup>			Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
Height (feet)	Length (feet)	Receptors	5 -6.9	≥7	Impacted	Not Impacted	Total			
8	492		5	5	10	0	10	\$118,080	\$11,808	Yes
10	472		3	7	10	6	16	\$141,600	\$8,850	Yes
12	472		1	9	10	6	16	\$169,920	\$10,620	Yes
14	472	10	1	9	10	6	16	\$198,240	\$12,390	Yes
16	472	10	1	9	10	6	16	\$226,560	\$14,160	Yes
18	472		1	9	10	6	16	\$254,880	\$15,930	Yes
20	472		1	9	10	6	16	\$283,200	\$17,700	Yes
22	472		1	9	10	6	16	\$311,520	\$19,470	Yes

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup>The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

#### 5.4.4.3 Noise Barrier E3: Lucerne Lakeside

A noise barrier was evaluated for the seven impacted residences represented by receptors E64-E70. The barrier was evaluated at the back of the proposed shared use path. This placed the barrier 11 feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-4**. As shown, although the barrier could reduce traffic noise by at least 5 dB(A) at all seven of the impacted receptors at a height of 22 feet, the barrier could not achieve the NRDG of 7 dB(A) at any height. This is due to the gaps in the barrier required to accommodate the four access roads to the community. As such, the barrier is not considered a reasonable noise abatement measure for the impacted receptors.

Table 5-4: Noise Barrier E3 Evaluation Results

Noise E	Barrier	Number of Impacted	No Reduc Impa Rece (dB(	tion at acted ptors	Number o	Number of Benefited Receptors <sup>2</sup>			Cost per Benefited	Cost Reasonable Yes/No
Height (feet)	Length (feet)	Receptors	5 -6.9	≥7	Impacted	Not Impacted	Total	Cost <sup>3</sup>	Receptor <sup>4</sup>	1 65/110
8	NA <sup>5</sup>		0	0	0	0	0	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>6</sup>		1	0	1	0	1	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>
12	NA <sup>6</sup>		6	0	6	4	10	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>
14	NA <sup>6</sup>	7	6	0	6	6	12	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>
16	NA <sup>6</sup>	/	6	0	6	7	13	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>
18	NA <sup>6</sup>		6	0	6	8	14	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>
20	NA <sup>6</sup>	6 0			6	9	15	NA <sup>6</sup>	$NA^6$	NA <sup>6</sup>
22	NA <sup>6</sup>		7	0	7	10	17	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup>The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>&</sup>lt;sup>5</sup> A reduction of at least 5 dB(A) for two or more impacted receptors could not be achieved at any length at this height.

<sup>&</sup>lt;sup>6</sup> The NRDG could not be achieved at any length at this height.

#### 5.4.4.4 Noise Barrier E4: Lake Smart Estates

A noise barrier was evaluated for the 10 impacted residences represented by receptors E86-E95. The barrier was evaluated 12 feet within the FDOT ROW. This placed the barrier four to eight feet behind the back of the proposed shared use path. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-5**. As shown, the barrier could reduce traffic noise by at least 5 dB(A) at all the impacted receptors and achieve the NRDG of 7 dB(A) to at least one benefited receptor at heights ranging from 10 to 22 feet. The cost of the noise barrier would be below the FDOT's cost reasonable criterion of \$42,000 per benefited receptor. The limits of the optimal barrier (highlighted below) are depicted on page 3 of the project aerials in **Appendix C**.

Table 5-5: Noise Barrier E4 Evaluation Results

Noise B	arrier	Number of Impacted	Noise Redu Impacted R (dB(A	Receptors	Number of Benefited  Receptors <sup>2</sup>		Total Estimated	Cost per Benefited	Cost Reasonable	
Height (feet)	Length (feet)	Receptors	5 – 6.9	≥7	Impacted	Not Impacted	Total	Cost <sup>3</sup>	Receptor <sup>4</sup>	Yes/No
8	907		7	1	8	0	8	\$217,680	\$27,210	Yes
10	755		7	6	10	0	10	\$226,500	\$22,650	Yes
12	755		3	7	10	0	10	\$271,800	\$27,180	Yes
14	735	10	3	7	10	0	10	\$308,700	\$30,870	Yes
16	735		3	7	10	1	11	\$352,800	\$32,073	Yes
18	715		2	8	10	0	10	\$386,100	\$38,610	Yes
20	715		2	8	10	3	13	\$429,000	\$33,000	Yes
22	715		2	8	10	5	15	\$471,900	\$31,460	Yes

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup> The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

#### 5.4.4.5 Noise Barrier E5: Brookhaven Village

A noise barrier was evaluated for the 10 impacted residences represented by receptors E110-E119. The barrier was evaluated at the back of the proposed shared use path. The barrier segment west of the access road was placed six feet inside the FDOT ROW and the barrier segment east of the access road was 10 feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-6**. As shown, the barrier could reduce traffic noise by at least 5 dB(A) at all the impacted receptors and achieve the NRDG of 7 dB(A) to at least one benefited receptor at heights ranging from 12 to 22 feet. The cost of the noise barrier would be below the FDOT's cost reasonable criterion of \$42,000 per benefited receptor. The limits of the optimal reasonable barrier (highlighted below) are depicted on page 6 of the project aerials in **Appendix C**.

**Table 5-6: Noise Barrier E5 Evaluation Results** 

Imp		Number of Impacted		-		per of Benef Receptors <sup>2</sup>	iited	Total Estimated	Cost per Benefited	Cost Reasonable
Height (feet)	Length (feet)	Receptors	5-6.9	≥7	Impacted	Not Impacted	Total	Cost <sup>3</sup>	Receptor <sup>4</sup>	Yes/No
8	NA <sup>5</sup>		0	0	0	0	0	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>6</sup>		9	0	9	1	10	NA <sup>6</sup>	$NA^6$	NA <sup>6</sup>
12	992		2	8	10	5	15	\$357,120	\$23,808	Yes
14	992	10	2	8	10	6	16	\$416,640	\$26,040	Yes
16	972		2	8	10	6	16	\$466,560	\$29,160	Yes
18	952		1	9	10	6	16	\$514,080	\$32,130	Yes
20	952	1 9		10	7	17	\$571,200	\$33,600	Yes	
22	932		1 9		10	7	17	\$615,120	\$36,184	Yes

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup> The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>&</sup>lt;sup>5</sup> A reduction of at least 5 dB(A) for two or more impacted receptors could not be achieved at any length at this height.

<sup>&</sup>lt;sup>6</sup> The NRDG could not be achieved at any length at this height.

#### 5.4.4.6 NOISE BARRIER E6: RESIDENCES BETWEEN LA VISTA DRIVE TO EAST OF MYRTLE AVENUE

A noise barrier was evaluated for the seven impacted residences represented by receptors E131-E137. The barrier was evaluated at the back of the proposed sidewalk. This placed the barrier four feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-7**. As shown, the barrier could not reduce traffic noise by at least 5 dB(A) at two or more impacted receptors at any height. This was due to the five side streets and direct access driveways. Due to line-of-sight constraints, only one barrier segment could be evaluated for the impacted receptors, which resulted in only one impacted receptor receiving a noise reduction of at least 5 dB(A). As such, the barrier is not considered a feasible noise abatement measure for the impacted receptors.

Table 5-7: Noise Barrier E6 Evaluation Results

Noise I	Barrier	Number of Impacted	Noise Redu Impacted F (dB(A	Receptors	Number of Benefited  Receptors <sup>2</sup>		Total Estimated	Cost per Benefited	Cost Reasonable	
Height (feet)	Length (feet)	Receptors	5 – 6.9	≥7	Impacted	Not Impacted	Total	Cost <sup>3</sup>	Receptor <sup>4</sup>	Yes/No
8	NA <sup>5</sup>		1	0	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>5</sup>		0	1	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
12	NA <sup>5</sup>		0	1	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
14	NA <sup>5</sup>	7	0	1	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
16	NA <sup>5</sup>	1	0	1	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
18	NA <sup>5</sup>		0	1	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
20	NA <sup>5</sup>		0	1	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
22	NA <sup>5</sup>		0	1	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup> The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>&</sup>lt;sup>5</sup> A reduction of at least 5 dB(A) for two or more impacted receptors could not be achieved at any length at this height.

#### 5.4.4.7 Noise Barrier E7: Residences at Crest Drive

A noise barrier was evaluated for the three impacted residences represented by receptors E145-E147. The barrier was evaluated at the back of the proposed sidewalk. This placed the barrier four feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-8**. As shown, the barrier could reduce traffic noise by at least 5 dB(A) at all the impacted receptors and achieve the NRDG of 7 dB(A) to at least one benefited receptor at heights ranging from 12 to 22 feet. However, the cost of the barrier would exceed the FDOT's cost reasonable criterion of \$42,000 per benefited receptor at all evaluated heights. This is due to a required gap in the barrier to accommodate a driveway. The extent of the east end of the barrier is constrained by Crest Drive. Since the barrier is predicted to exceed the cost-effective criterion, the barrier is not considered a reasonable noise abatement measure for the impacted receptors.

Table 5-8: Noise Barrier E7 Evaluation Results

Noise I		Number of Impacted	Impacted	eduction at I Receptors B(A)) <sup>1</sup>	Number of Benefited Receptors <sup>2</sup>		Total Estimated	Cost per Benefited	Cost Reasonable	
Height (feet)	Length (feet)	Receptors	5 – 6.9	≥7	Impacted	Not Impacted	Total	Cost <sup>3</sup>	Receptor <sup>4</sup>	Yes/No
8	NA <sup>5</sup>		1	0	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>6</sup>		2	0	2	0	2	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>
12	368		2	1	3	0	3	\$132,480	\$44,160	No
14	348	3	2	1	3	0	3	\$146,160	\$48,720	No
16	328		2	1	3	0	3	\$157,440	\$52,480	No
18	328		2	1	3	0	3	\$177,120	\$59,040	No
20	328		2	1	3	0	3	\$196,800	\$65,600	No
22	328		2	1	3	0	3	\$216,480	\$72,160	No

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup> The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>&</sup>lt;sup>5</sup> A reduction of at least 5 dB(A) for two or more impacted receptors could not be achieved at any length at this height.

<sup>&</sup>lt;sup>6</sup> The NRDG could not be achieved at any length at this height.

# 5.4.4.8 Noise Barrier E8: Residences in the Southwest Quadrant of the SR 544/SR 17 Intersection

A noise barrier was evaluated for the two impacted residences represented by receptors E152 and E153. The barrier was evaluated at the back of the proposed sidewalk. This placed the barrier four feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-9**. As shown, the barrier could reduce traffic noise by at least 5 dB(A) at all the impacted receptors and achieve the NRDG of 7 dB(A) to at least one benefited receptor at heights ranging from 12 to 22 feet. However, the cost of the barrier would exceed the FDOT's cost reasonable criterion of \$42,000 per benefited receptor at all evaluated heights. This is due to a required gap in the barrier to accommodate a direct access driveway and the long distance between the residences requiring a long barrier. Since the barrier is predicted to exceed the cost-effective criterion, the barrier is not considered a reasonable noise abatement measure for the impacted receptors.

**Table 5-9: Noise Barrier E8 Evaluation Results** 

Noise 1	Noise Barrier  Number of Impacted Receptor		at Impacted  Receptors (dB(A)) <sup>1</sup>		I	er of Bene Receptors <sup>2</sup>	fited	Total Estimated	Cost per Benefited	
Height (feet)	Length (feet)		5 – 6.9	≥7	Impacted	Not Impacted	Total	Cost <sup>3</sup>	Receptor <sup>4</sup>	Yes/No
8	NA <sup>5</sup>		0	0	0	0	0	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>5</sup>		1	0	1	0	1	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
12	428		1	1	2	0	2	\$154,080	\$77,040	No
14	408	2	1	1	2	0	2	\$171,360	\$85,680	No
16	388		1	1	2	0	2	\$186,240	\$93,120	No
18	388		1	1	2	0	2	\$209,520	\$104,760	No
20	388		1 1		2	0	2	\$232,800	\$116,400	No
22	388		1	1	2	0	2	\$256,080	\$128,040	No

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup> The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>&</sup>lt;sup>5</sup> A reduction of at least 5 dB(A) for two or more impacted receptors could not be achieved at any length at this height.

#### 5.4.4.9 Noise Barrier W1: Harry King Park and Public Boat Ramp

A noise barrier was analyzed for the impacted park represented by receptor W38 using FDOT's Special Land Use Methodology. The barrier was evaluated at the back of the proposed shared use path. This placed the barrier six feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The impacted area of the park represents approximately 30% of the entire area of the park. At an optimal height of 10 feet and an optimal length of 496 feet, a noise barrier would reduce predicted traffic noise levels within the impacted area a minimum of 5 dB(A) and achieve the NRDG of 7 dB(A). Because it is not known how long the park would be used and by how many people, the minimum number of person-hours of use on an average day to have the cost be considered effective was calculated (not to exceed \$995,935 per person-hour per square foot).

The cost calculations were based on the formulas for evaluating cost effectiveness from the special land use procedures. Assuming the optimal barrier height and length above, the minimum daily use required in order for a noise barrier to be considered cost effective is 444 person-hours (i.e., 444 people would have to use the park for one hour each day of the year). Because the park has only two picnic tables and a small gravel parking area, it is not reasonable to assume that this level of activity would occur every day. Therefore, a noise barrier is not considered a reasonable noise abatement measure for the park.

#### 5.4.4.10 Noise Barrier W2: Lake Rochelle Estates

A noise barrier was evaluated for the three impacted residences represented by receptors W53-W55. The barrier was evaluated at the back of the proposed shared use path. This placed the barrier six feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-10**. As shown, the barrier could reduce traffic noise by at least 5 dB(A) at all the impacted receptors and achieve the NRDG of 7 dB(A) to at least one benefited receptor. The cost of the barrier would be below the FDOT's cost reasonable criterion of \$42,000 per benefited receptor at heights ranging from 12 to 20 feet. The limits of the optimal barrier (highlighted below) are depicted on page 3 of the project aerials in **Appendix C**.

Table 5-10: Noise Barrier W2 Evaluation Results

Noise 1	Noise Barrier Number of Impacted Receptors  Impacted (dB(A)) <sup>1</sup>			ber of Bene Receptors <sup>2</sup>		Total Estimated	Cost per Benefited	Cost Reasonable		
Height (feet)	Length (feet)	Receptors	5 – 6.9	≥7	Impacted	Not Impacted	Total	Cost <sup>3</sup>	Receptor <sup>4</sup>	Yes/No
8	NA <sup>5</sup>		0	0	0	0	0	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>6</sup>		3	0	3	0	3	NA <sup>6</sup>	$NA^6$	NA <sup>6</sup>
12	567		1	2	3	3	6	\$204,120	\$34,020	Yes
14	719	3	0	3	3	5	8	\$301,980	\$37,748	Yes
16	772	3	0	3	3	7	10	\$370,560	\$37,056	Yes
18	720		0	3	3	7	10	\$388,800	\$38,880	Yes
20	695		0	3	3	7	10	\$417,000	\$41,700	Yes
22	722		0	3	3	8	11	\$476,520	\$43,320	No

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup> The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>&</sup>lt;sup>5</sup> A reduction of at least 5 dB(A) for two or more impacted receptors could not be achieved at any length at this height.

<sup>&</sup>lt;sup>6</sup> The NRDG could not be achieved at any length at this height.

#### 5.4.4.11 Noise Barrier W3: Lake'n Golf Estates, Fairview Village, and Lakeside Ranch

A noise barrier was evaluated for the 16 impacted residences represented by receptors W72-W82 and W96-W100. The barrier was evaluated at the back of the proposed shared use path. This placed the barrier six feet within the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-11**. As shown, the barrier could reduce traffic noise by at least 5 dB(A) at 13 of the 16 impacted receptors and achieve the NRDG of 7 dB(A) to at least one benefited receptor at heights ranging from 12 to 22 feet. The cost of the noise barrier would be below the FDOT's cost reasonable criterion of \$42,000 per benefited receptor. The three impacted receptors that could not be benefited are in vicinity of a gap in the barrier to accommodate the proposed combined access road to both Fairview Village and Lakeside Ranch. The limits of the optimal barrier (highlighted below) are depicted on page 7 of the project aerials in **Appendix C**.

Table 5-11: Noise Barrier W3 Evaluation Results

Noise 1	Barrier	Number of	Noise Red mpacted (dB(	Receptor	Number of Benefited  Receptors <sup>2</sup>			Total Estimated	Cost per Benefited	Cost Reasonable
Height (feet)	Length (feet)	песерия	5 – 6.9	≥7	Impacted	Not Impacted	Total	Cost <sup>3</sup>	Receptor <sup>4</sup>	Yes/No
8	944		6	3	9	1	10	\$226,560	\$22,656	Yes
10	1,480		3	9	12	2	14	\$444,000	\$31,714	Yes
12	1,455		3	10	13	8	21	\$523,800	\$24,943	Yes
14	1,455	16	3	10	13	10	23	\$611,100	\$26,570	Yes
16	1,505	10	3	10	13	12	25	\$722,400	\$28,896	Yes
18	1,480		2	11	13	12	25	\$799,200	\$31,968	Yes
20	1,455		3	10	13	13	26	\$873,000	\$33,577	Yes
22	1,430		3	10	13	13	26	\$943,800	\$36,300	Yes

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup> The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

#### 5.4.4.12 Noise Barrier W4: Residences between Pomona Street and 5th Street South

A noise barrier was evaluated for the 11 impacted residences represented by receptors W110-W120. The barrier was evaluated at the back of the proposed sidewalk. This placed the barrier four feet inside the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The results of the barrier evaluation are shown in **Table 5-12**. As shown, the barrier could reduce traffic noise by at least 5 dB(A) at four of the 11 impacted receptors and achieve the NRDG of 7 dB(A) to at least one benefited receptor. The cost of the barrier would be below the FDOT's cost reasonable criterion of \$42,000 per benefited receptor at heights ranging from 14 to 20 feet. Due to line-of-sight constraints, the barrier was evaluated in two segments for the impacted receptors. The limits of the optimal reasonable (highlighted below) are depicted on page 10 of the project aerials in **Appendix C**.

**Table 5-12: Noise Barrier W4 Evaluation Results** 

Noise I	Barrier	Number of Impacted	Noise Redu Impacted F (dB(A	Receptors	Number of Benefited  Receptors <sup>2</sup>		Total Estimated	Cost per Benefited	Cost Reasonable	
Height (feet)	Length (feet)	Receptors	5 – 6.9	≥7	Impacted	Not Impacted	Total	Cost <sup>3</sup>	Receptor <sup>4</sup>	Yes/No
8	NA <sup>5</sup>		0	0	0	0	0	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>6</sup>		3	0	3	0	3	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>
12	825		0	4	4	1	5	\$297,000	\$59,400	No
14	876	11	0	4	4	6	10	\$367,920	\$36,792	Yes
16	1,008		0	4	4	8	12	\$483,840	\$40,320	Yes
18	980		0	4	4	10	14	\$529,200	\$37,800	Yes
20	980		0	4	4	10	14	\$588,000	\$42,000	Yes
22	980		0	4	4	10	14	\$646,800	\$46,200	No

<sup>&</sup>lt;sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>&</sup>lt;sup>2</sup> Receptors with a predicted reduction of 5 dB(A) or more are considered benefited.

<sup>&</sup>lt;sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>&</sup>lt;sup>4</sup> The FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>&</sup>lt;sup>5</sup> A reduction of at least 5 dB(A) for two or more impacted receptors could not be achieved at any length at this height.

<sup>&</sup>lt;sup>6</sup> The NRDG could not be achieved at any length at this height.

#### 5.4.4.13 Noise Barrier U1: Outdoor Use Area at the First Apostolic Pentecostal Church

A noise barrier was analyzed for the impacted outdoor use area (basketball court) represented by receptor U2a using FDOT's Special Land Use Methodology. The barrier was evaluated 12 feet within the FDOT ROW. The barrier was evaluated at a minimum height of 8 feet to the maximum allowable height of 22 feet in two-foot increments. The entire area of the basketball court was impacted. At an optimal height of 14 feet and an optimal length of 282 feet, a noise barrier would reduce predicted traffic noise levels for the entire impacted area by at least 5 dB(A) and achieve the noise reduction design goal of 7 dB(A). Because it is not known how long the basketball would be used and by how many people, the minimum number of person-hours of use on an average day to have the cost be considered effective was calculated (i.e., cost not to exceed \$995,935 per person-hour per square foot).

The cost calculations were based on the formulas for evaluating cost effectiveness from the special land use procedures. Assuming the optimal barrier height and length above, the minimum daily use required in order for a noise barrier to be considered cost effective is 166 person-hours (i.e., 166 people would have to use the basketball court for one hour each day of the year). Because the basketball court is a small area and located on private property, it is not reasonable to assume that this level of activity would occur every day. Therefore, a noise barrier is not considered a reasonable noise abatement measure for the basketball court.

#### 6.0 NOISE CONTOURS

The land uses in Table 4-1 of this NSR are considered incompatible with highway noise levels that approach, meet, or exceed the NAC. To reduce the potential for these land uses to be permitted for construction in areas where traffic noise impacts have been predicted with the proposed improvements noise contours were developed. The contours delineate a distance from the improved roadway's edge-of-pavement where a traffic noise level of 56 dB(A)—the FDOT approach criteria for land uses classified as Activity Category A, 66 dB(A)—the approach criteria for land uses classified as Activity Category B and C, and 71 dB(A)—the approach criteria for land uses classified as Activity Category E, are predicted.

The distance at which the NAC would be approached for each Activity Category is shown in **Table 6-1** and **Figures 6-1** through **6-3**.

Table 6-1: Distance at Which NAC Would be Approached, Met, or Exceeded

	Distance From Improved Roadway's Edge-of-Pavement (feet)*					
Roadway Segment	Activity Category A	Activity Category B/C	Activity Category E			
	56 dB(A)	66 dB(A)	71 dB(A)			
Martin Luther King Blvd to Ave Y	220	60	10			
Ave Y to Lake Conine Dr	350	100	50			
Lake Conine Dr to Old Lucerne Park Rd (west)	340	90	40			
Old Lucerne Park Rd (west) to Lucerne Loop Rd	320	90	70			
Lucerne Loop Rd to Old Lucerne Park Rd (east)	350	100	40			
Old Lucerne Park Rd (east) to Lake Hamilton Dr	350	100	50			
Lake Hamilton Dr to Brenton Manor Ave	350	100	40			
Brenton Manor Ave to US 27	340	90	40			
US 27 to Speed Limit Change (Milepost 10.773)	340	90	40			
Speed Limit Change (Milepost 10.773) to SR 17	400	110	50			
US 27	640	220	110			

<sup>\*</sup>See Table 4-1 for a description of the activities that occur within each category. Distances do not reflect any reduction in noise levels that would occur from existing structures (shielding) and should be used for planning purposes only.

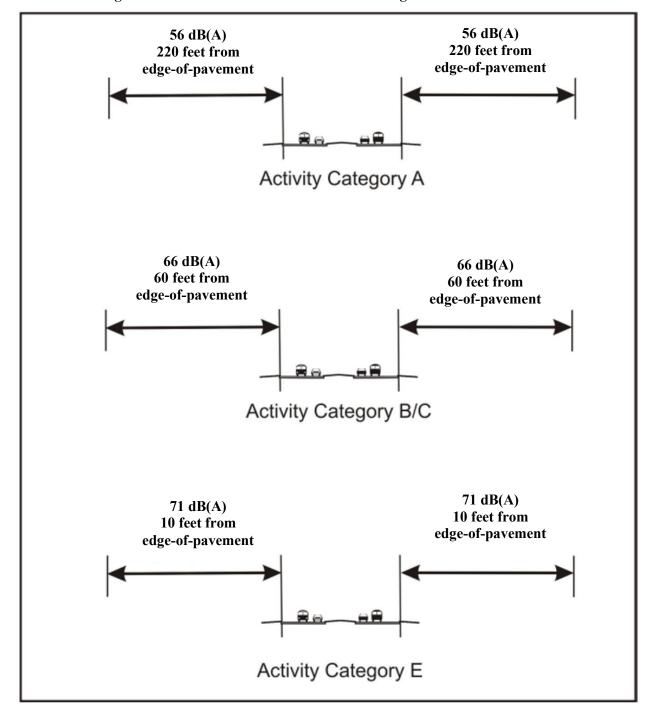


Figure 6-1: Noise Contours: Martin Luther King Boulevard to Avenue Y

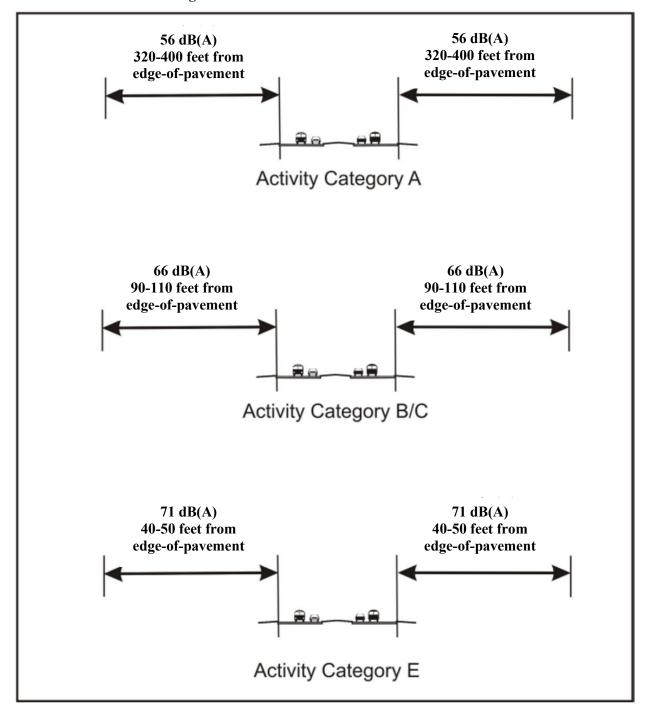


Figure 6-2: Noise Contours: Avenue Y to SR 17

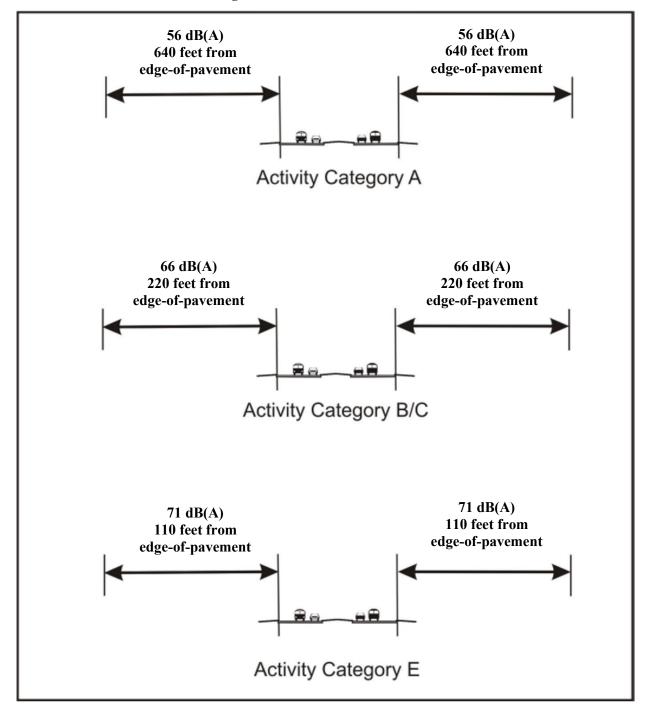


Figure 6-3: Noise Contours: US 27

#### 7.0 CONSTRUCTION NOISE AND VIBRATION

Construction of the roadway improvements is not expected to have a substantial noise or vibration impact. If noise-sensitive land uses develop adjacent to the roadway prior to construction, additional impacts could result. It is anticipated that application of the FDOT *Standard Plans for Road and Bridge Construction* will minimize or eliminate most of the potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Manager, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

#### 8.0 CONCLUSIONS

This NSR documents the results of an analysis that was performed for the PD&E Study for SR 544. Traffic noise levels were predicted for the existing conditions (2019) and future conditions without the proposed improvements (the No-Build Alternative) and with the improvements (the Preferred Alternative).

The results of the highway traffic noise analysis indicate that 116 residences, a park, and an outdoor use area of a place of worship would be impacted in the future (2045) with the Preferred Alternative for the proposed improvements. Following FDOT's Noise Policy, noise abatement measures were considered for the impacted properties.

The FDOT is committed to the construction of feasible and reasonable noise abatement measures at noise-impacted locations contingent upon the following conditions:

- 1. Final recommendations on the construction of abatement measures is determined during the project's final design and through the public involvement process;
- 2. Detailed noise analyses during the final design process support the need, feasibility and reasonableness of providing abatement;
- 3. Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost reasonable criterion;
- 4. Community input supporting types, heights, and locations of the noise barrier(s) is provided to the District Office; and
- 5. Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved.

Based on the results of the PD&E Study, the following noise barriers are a potentially reasonable and feasible noise abatement measure:

- Noise Barrier E1: Winter Ridge Condominiums. The optimal barrier is 453 feet long, and 16 feet tall. It benefits all 12 of the impacted receptors and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$217,440 or \$18,120 per benefited receptor.
- Noise Barrier E2: Lake Point Landing and Adjacent Residence. The optimal barrier is 472 feet long and 10 feet tall. It benefits all 10 of the impacted receptors and an additional 6 receptors and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$141,600 or \$8,850 per benefited receptor.
- Noise Barrier E4: Lake Smart Estates. The optimal barrier is 755 feet long and 10 feet tall. It benefits all 10 of the impacted receptors and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$226,500 or \$22,650 per benefited receptor.

- Noise Barrier E5: Brookhaven Village. The optimal barrier is 992 feet long and 12 feet tall. It benefits all 10 of the impacted receptors, and five additional receptors, and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$357,120 or \$23,808 per benefited receptor.
- Noise Barrier W2: Lake Rochelle Estates. The optimal barrier is 567 feet long and 12 feet tall. It benefits
  all 3 of the impacted receptors, and 3 additional receptors, and meets the NRDG of achieving a 7 dB(A)
  reduction for at least one of the benefited receptors. The barrier costs a total of \$204,120 or \$34,020 per
  benefited receptor.
- Noise Barrier W3: Lake'n Golf Estates, Fairview Village, and Lakeside Ranch. The optimal barrier is 1,455 feet long and 12 feet tall. It benefits 13 of the 16 impacted receptors, and 8 additional receptors, and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$523,800 or \$24,943 per benefited receptor.
- Noise Barrier W4: Residences from Pomona Street to 5th Street South. The optimal barrier is 876 feet long and 14 feet tall. It benefits 4 of the 11 impacted receptors, and 6 additional receptors, and meets the NRDG of achieving a 7 dB(A) reduction for at least one of the benefited receptors. The barrier costs a total of \$367,920 or \$36,792 per benefited receptor.

Section 6.0 of this NSR provides distances from the edge-of-pavement with the proposed improvements at which noise levels are predicted to approach, meet, or exceed the NAC for the land uses designated as Activity Category A, B/C, and E for the project. This information is provided to assist local officials and developers in promoting noise compatible land uses.

#### 9.0 REFERENCES

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# APPENDIX A TRAFFIC DATA

Traffic Data for Noise Analysis

From Martin Luther King Boulevard to Avenue Y (From Milepost 3.693 to Milepost 4.169) - Context Classification = C4

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
	AADT =	AADT = 19,400			AADT = 22,500	AADT = 27,000	
	10 - 1.		Posted Speed = 35 mph			Posted Speed = 35 mph	Posted Speed = 35 mph
Demand Peak		100000	No. of Lanes = 2			No. of Lanes = 2	No. of Lanes = 2
Hour/LOS C	Direction	Vehicle Type	No. of Vehicles	Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos	864		Autos	1,002	1,203
PM Peak Hour Demand		Medium Trucks	16		Medium Trucks	18	22
	Deal Dissertes	Heavy Trucks	32		Heavy Trucks	37	45
	Peak Direction	Buses	5	Peak Direction	Buses	6	7
		Motorcycles	9		Motorcycles	10	12
		Total <sup>(1)</sup>	925	1	Total <sup>(1)</sup>	1,073	1,288
		Autos	766	Off-Peak Direction	Autos	889	1,066
		Medium Trucks	14		Medium Trucks	16	20
	Off-Peak Direction	Heavy Trucks	29		Heavy Trucks	33	40
	On-Peak Direction	Buses	4		Buses	5	6
		Motorcycles	8		Motorcycles	9	11
		Total <sup>(1)</sup>	821		Total <sup>(1)</sup>	952	1,142
		Autos	628		Autos	628	824
		Medium Trucks	12		Medium Trucks	12	15
	Peak Direction	Heavy Trucks	23	B 1 B 1 B 1	Heavy Trucks	23	31
	Peak Direction	Buses	3	Peak Direction	Buses	3	5
		Motorcycles	6		Motorcycles	6	8
LOSC		Total <sup>(2)</sup>	673		Total <sup>(2)</sup>	673	882
LOSC		Autos	557		Autos	557	731
		Medium Trucks	10		Medium Trucks	10	13
	Off Book Dispetion	Heavy Trucks	21	0" 0-1 0	Heavy Trucks	21	27
	Off-Peak Direction	Buses	3	Off-Peak Direction	Buses	3	4
		Motorcycles	5		Motorcycles	5	7
		Total <sup>(2)</sup>	596		Total <sup>(2)</sup>	596	783

<sup>(1)</sup> Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

I certify that the ab	ove information is accurate and appropriate for	or use with the traffic noise analysis.	
Prepared By:	Greg Root	Ciedos	Date: 6/12/2023
	Print Name	Signature	5/22/2005
I have reviewed the	e information and concur that it is appropriate	for use with the traffic noise analysis. DocuSigned by:	
FDOT Reviewer:	Kyle Purvis	Kyle Purnis	06/21/2023   10:23 AM EDT
35 24 34 34 34 34 34	Print Name	Signature 35E9D52E12B14A4	Date.

<sup>&</sup>lt;sup>(2)</sup> Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

<sup>2-</sup>lane undivided roadway with no exclusive left-turn lanes (Existing) LOS D AADT volume = 17,600 X 0.80 = 14,100

<sup>2-</sup>lane divided roadway with two-way center left-turn lane (Proposed) LOS D AADT volume = 17,600 X 1.05 = 18,500

<sup>\*</sup>Note: As a conservative approach, the LOS D service volume is being used since the 2023 Quality/LOS Handbook does not provide a LOS C service volume for this context classification.

Traffic Data for Noise Analysis

From Avenue Y to Speed Limit Change (From Milepost 4.169 to Milepost 4.919) - Context Classification = C3R

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
		AADT = 20,000			AADT = 23,000	AADT = 37,000	
			Posted Speed = 45 mph			Posted Speed = 45 mph	Posted Speed = 45 mph
Demand Peak		1 47 3 3	No. of Lanes = 2			No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C	Direction	Vehicle Type	No. of Vehicles	Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos	889		Autos	1,023	1,645
PM Peak Hour Demand		Medium Trucks	19		Medium Trucks	22	35
	Peak Direction	Heavy Trucks	38	David Discounting	Heavy Trucks	44	70
	reak Direction	Buses	5	Peak Direction	Buses	5	9
		Motorcycles	3		Motorcycles	4	6
		Total <sup>(1)</sup>	954		Total <sup>(1)</sup>	1,097	1,765
	Off-Peak Direction	Autos	789	Off-Peak Direction	Autos	907	1,459
		Medium Trucks	17		Medium Trucks	19	31
		Heavy Trucks	34		Heavy Trucks	39	62
		Buses	4		Buses	5	8
		Motorcycles	3		Motorcycles	3	5
		Total <sup>(1)</sup>	846		Total <sup>(1)</sup>	973	1,565
		Autos	916		Autos	916	1,525
		Medium Trucks	19		Medium Trucks	19	32
	Peak Direction	Heavy Trucks	39	Part Discoster	Heavy Trucks	39	65
	reak Direction	Buses	5	Peak Direction	Buses	5	8
		Motorcycles	3		Motorcycles	3	6
LOS C		Total <sup>(2)</sup>	983		Total <sup>(2)</sup>	983	1,636
LOSC		Autos	812		Autos	812	1,353
		Medium Trucks	17		Medium Trucks	17	28
	Off-Peak Direction	Heavy Trucks	35	04 0	Heavy Trucks	35	58
	OII-reak Direction	Buses	4	Off-Peak Direction	Buses	4	7
		Motorcycles	3		Motorcycles	3	5
		Total <sup>(2)</sup>	871		Total <sup>(2)</sup>	871	1,451

<sup>(1)</sup> Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)
(2) Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook
2-lane undivided roadway with left-turn & right-turn lanes (Existing) LOS C AADT volume = 19,600 x 1.05 = 20,600
4-lane divided roadway with left-turn lanes (Proposed) LOS C AADT volume = 34,300

I certify that the ab	ove information is accurate and appropriate fo	or use with the traffic poise analysis	
Prepared By:	Greg Root	View KUS	Date: 6/12/2023
	Print Name	Signature	
I have reviewed the	information and concur that it is appropriate	for use with the traffic noise and boousigned by:	
FDOT Reviewer:	Kyle Purvis	Kyle Purnis	06/21/2023   10:23 AM EDT
Controversor	Print Name	Signature 35E9D52E12B14A4	<i>Date.</i>

Traffic Data for Noise Analysis

From Speed Limit Change to Lake Conine Drive (From Milepost 4.919 to Milepost 5.075) - Context Classification = C3R

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 20,000			AADT = 23,000	AADT = 37,000
			Posted Speed = 55 mph			Posted Speed = 55 mph	Posted Speed = 45 mph
Demand Peak			No. of Lanes = 2			No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C	Direction	Vehicle Type	No. of Vehicles	Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
Peak Direction PM Peak Hour Demand		Autos	889		Autos	1,023	1,645
		Medium Trucks	19		Medium Trucks	22	35
	Poak Direction	Heavy Trucks	38	Danis Discoving	Heavy Trucks	44	70
	Peak Direction	Buses	5	Peak Direction	Buses	5	9
		Motorcycles	3		Motorcycles	4	6
		Total <sup>(1)</sup>	954		Total <sup>(1)</sup>	1,097	1,765
	Off-Peak Direction	Autos	789	Off-Peak Direction	Autos	907	1,459
		Medium Trucks	17		Medium Trucks	19	31
		Heavy Trucks	34		Heavy Trucks	39	62
		Buses	4		Buses	5	8
		Motorcycles	3		Motorcycles	3	5
		Total <sup>(1)</sup>	846		Total <sup>(1)</sup>	973	1,565
		Autos	872		Autos	872	1,525
		Medium Trucks	18		Medium Trucks	18	32
	Peak Direction	Heavy Trucks	37		Heavy Trucks	37	65
	Peak Direction	Buses	5	Peak Direction	Buses	5	8
		Motorcycles	3		Motorcycles	3	6
LOS C		Total <sup>(2)</sup>	935		Total <sup>(2)</sup>	935	1,636
LOSC		Autos	773		Autos	773	1,353
		Medium Trucks	16		Medium Trucks	16	28
	Off-Peak Direction	Heavy Trucks	33	Off Pank Disasting	Heavy Trucks	33	58
	On-reak Direction	Buses	4	Off-Peak Direction	Buses	4	7
		Motorcycles	3		Motorcycles	3	5
		Total <sup>(2)</sup>	829		Total <sup>(2)</sup>	829	1,451

 $<sup>^{(1)}</sup>$  Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

(2) Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

Print Name

2-lane undivided i	oadway with no turn lanes but only one co	nnection (Existing) LOS C AADT volume = 19,600	
4-Lane divided roa	dway with no turn lanes but only one conne	ection (Proposed) LOS C AADT volume = 34,300	
I certify that the abo	ove information is accurate and appropriate	for use with the troffic noise analysis.	
Prepared By:	Greg Root	Gred Kool	Date: 6/12/2023
	Print Name	Signature	
I have reviewed the	information and concur that it is appropria	te for use with the traffic noise analysis.	
FDOT Reviewer:	Kyle Purvis	Kula. Pua mia	06/21/2023   10:23 AM EDT

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Traffic Data for Noise Analysis

From Lake Conine Drive to Old Lucerne Park Road (west end)(From Milepost 5.075 to Milepost 5.749) - Context Classification = C3R

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
	Peak		AADT = 17,600			AADT = 23,000	AADT = 37,000
			Posted Speed = 55 mph			Posted Speed = 55 mph	Posted Speed = 45 mph
Demand Peak			No. of Lanes = 2			No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C	Direction	Vehicle Type	No. of Vehicles	Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos	794		Autos	1,038	1,670
		Medium Trucks	13		Medium Trucks	16	26
	Peak Direction	Heavy Trucks	26	Bank Dissertion	Heavy Trucks	33	54
	reak Direction	Buses	4	Peak Direction	Buses	5	9
		Motorcycles	3		Motorcycles	4	6
PM Peak Hour Demand		Total <sup>(1)</sup>	840		Total <sup>(1)</sup>	1,097	1,765
	Off-Peak Direction	Autos	704	Off-Peak Direction	Autos	921	1,481
		Medium Trucks	11		Medium Trucks	15	23
		Heavy Trucks	23		Heavy Trucks	30	48
		Buses	4		Buses	5	8
		Motorcycles	3		Motorcycles	3	. 5
		Total <sup>(1)</sup>	744		Total <sup>(1)</sup>	973	1,565
		Autos	885		Autos	885	1,548
		Medium Trucks	14		Medium Trucks	14	25
	no construction	Heavy Trucks	28	200 200 000	Heavy Trucks	28	50
	Peak Direction	Buses	5	Peak Direction	Buses	5	8
		Motorcycles	3		Motorcycles	3	6
105.6		Total <sup>(2)</sup>	935		Total <sup>(2)</sup>	935	1,636
LOS C		Autos	784		Autos	784	1,373
		Medium Trucks	12		Medium Trucks	12	22
	Off-Peak Direction	Heavy Trucks	25	000000000000000000000000000000000000000	Heavy Trucks	25	44
	Oli-reak Direction	Buses	4	Off-Peak Direction	Buses	4	7
		Motorcycles	3		Motorcycles	3	5
		Total <sup>(2)</sup>	829		Total <sup>(2)</sup>	829	1,451

<sup>(1)</sup> Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

(2) Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

Print Name

2-lane undivided roadway with some left-turn lanes (Existing) LOS C AADT volume = 19,600 4-lane divided roadway with some left-turn lanes (Proposed) LOS C AADT volume = 34,300

Prepared By:	Greg Root	( ) W/ KORT	P-4-	5 42 1222	
	Print Name	Signature	Date: _	6/12/2023	
I have reviewed the in	formation and concur that it is appropriate	for use with the traffic noise analysi Docusigned by:			
FDOT Reviewer:	Kyle Purvis	Kyle Purvia	Date:	06/21/2023   10:23 AM	EDT

Signature\_\_\_35E9D52E12B14A4...

Traffic Data for Noise Analysis

From Old Lucerne Park Road (west end) to Lucerne Loop Road (From Milepost 5.749 to Milepost 7.284) - Context Classification = C3C

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 14,500			AADT = 17,500	AADT = 32,000
			Posted Speed = 55 mph			Posted Speed = 55 mph	Posted Speed = 45 mph
Demand Peak			No. of Lanes = 2			No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C	Direction	Vehicle Type	No. of Vehicles	Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos	654		Autos	789	1,442
PM Peak Hour Demand		Medium Trucks	11		Medium Trucks	13	24
	Peak Direction	Heavy Trucks	21	Dank Discostina	Heavy Trucks	25	46
	reak Direction	Buses	3	Peak Direction	Buses	4	6
		Motorcycles	4		Motorcycles	5	9
		Total <sup>(1)</sup>	692		Total <sup>(1)</sup>	835	1,526
		Autos	580	Off-Peak Direction	Autos	699	1,279
		Medium Trucks	9		Medium Trucks	11	21
	Off-Peak Direction	Heavy Trucks	18		Heavy Trucks	22	40
	On-Peak Direction	Buses	3		Buses	3	6
		Motorcycles	3		Motorcycles	4	8
		Total <sup>(1)</sup>	613		Total <sup>(1)</sup>	740	1,354
		Autos	726		Autos	726	1,384
		Medium Trucks	12		Medium Trucks	12	23
	Peak Direction	Heavy Trucks	23		Heavy Trucks	23	44
	Peak Direction	Buses	3	Peak Direction	Buses	3	6
		Motorcycles	4		Motorcycles	4	8
LOS C		Total <sup>(2)</sup>	768		Total <sup>(2)</sup>	768	1,464
LUSC		Autos	644		Autos	644	1,227
		Medium Trucks	10	1 [	Medium Trucks	10	20
	Off-Peak Direction	Heavy Trucks	20	0" 01 0	Heavy Trucks	20	39
	Oli-Peak Direction	Buses	3	Off-Peak Direction	Buses	3	5
		Motorcycles	4		Motorcycles	4	7
		Total <sup>(2)</sup>	681		Total <sup>(2)</sup>	681	1,299

<sup>(1)</sup> Peak hour peak direction volumes = AADT  $\times$  0.09  $\times$  0.53 / Peak hour off-peak direction volumes = AADT  $\times$  0.09  $\times$  (1-0.53)

2-lane undivided roadway with left-turn & right-turn lanes (Existing) LOS C AADT Volume =  $15,300 \times 1.05 = 16,100$ 

4-lane divided roadway with left-turn & right-turn lanes (Proposed) LOS C AADT volume = 30,700

(2) Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

I certify that the ab	ove information is accurate and appropriate	te for use with the traffic noise analysis.	
Prepared By:	Greg Root	Cres Koot	Date: 6/12/2023
	Print Name	Signature	
I have reviewed the	information and concur that it is appropria	ate for use with the traffic noise analysis. DocuSigned by:	06/21/2023   10:23 AM EDT
FDOT Reviewer:	Kyle Purvis	Kyle Purnis	Date:
CATE VECTORIES	Print Name	Signature 35E9D52E12B14A4	Date,

Traffic Data for Noise Analysis

From Lucerne Loop Road to Speed Limit Change (From Milepost 7.284 to Milepost 8.384) - Context Classification = C3C

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 14,000	1 1		AADT = 22,000	AADT = 37,000
			Posted Speed = 55 mph	1 1		Posted Speed = 55 mph	Posted Speed = 45 mph
Demand Peak	1000		No. of Lanes = 2			No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C	Direction	rection Vehicle Type	No. of Vehicles	Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos	621		Autos	977	1,642
		Medium Trucks	7		Medium Trucks	11	18
	Peak Direction	Heavy Trucks	37	Beat Discover	Heavy Trucks	58	97
	reak Direction	Buses	1	Peak Direction	Buses	1	2
		Motorcycles	2		Motorcycles	3	5
PM Peak Hour Demand		Total <sup>(1)</sup>	668		Total <sup>(1)</sup>	1,049	1,765
		Autos	551	Off-Peak Direction	Autos	866	1,456
		Medium Trucks	6		Medium Trucks	10	16
	Off-Peak Direction	Heavy Trucks	33		Heavy Trucks	51	86
	On-Peak Direction	Buses	1		Buses	1	1
		Motorcycles	2		Motorcycles	3	5
		Total <sup>(1)</sup>	592		Total <sup>(1)</sup>	931	1,565
		Autos	715		Autos	715	1,363
		Medium Trucks	8		Medium Trucks	8	15
	Peak Direction	Heavy Trucks	42	0.10	Heavy Trucks	42	80
	Peak Direction	Buses	1	Peak Direction	Buses	1	1
		Motorcycles	2		Motorcycles	2	5
LOS C		Total <sup>(2)</sup>	768		Total <sup>(2)</sup>	768	1,464
LOSC		Autos	634		Autos	634	1,208
		Medium Trucks	7		Medium Trucks	7	14
	Off-Peak Direction	Heavy Trucks	37	Off Deals Disastin	Heavy Trucks	37	71
	Oli-reak Direction	Buses	-1	Off-Peak Direction	Buses	1	1
		Motorcycles	2		Motorcycles	2	4
		Total <sup>(2)</sup>	681		Total <sup>(2)</sup>	681	1,299

<sup>(1)</sup> Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

I certify that the at	oove information is accurate and appropriate	e for use with the traffic noise analysis.	
Prepared By:	Greg Root	( )record car	Date: 6/12/2023
	Print Name	Signature	
I have reviewed th	e information and concur that it is appropria	ite for use with the traffic our grantysis.	
FDOT Reviewer:	Kyle Purvis	Kyla Purvia	06/21/2023   10:23 AM EDT
	Print Name	or Signature Dana	

<sup>(2)</sup> Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook
2-lane undivided roadway with left-turn & right-turn lanes (Existing) LOS C AADT Volume = 15,300 x 1.05 = 16,100
4-lane divided roadway with left-turn & right-turn lanes (Proposed) LOS C AADT volume = 30,700

Traffic Data for Noise Analysis

From Speed Limit Change to Old Lucerne Park Road (east end) (From Milepost 8.384 to Milepost 8.965) - Context Classification = C3C

Demand Peak	Direction		Existing Year (2019)	Direction	Vehicle Type	Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 14,000 Posted Speed = 50 mph No. of Lanes = 2 No. of Vehicles			AADT = 22,000	AADT = 37,000
						Posted Speed = 50 mph	Posted Speed = 45 mph
						No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C		Vehicle Type				No. of Vehicles	No. of Vehicles
		Autos	621		Autos	977	1,642
		Medium Trucks	7		Medium Trucks	11	18
	Peak Direction	Heavy Trucks	37	Peak Direction	Heavy Trucks	58	97
	reak Direction	Buses	1		Buses	1	2
		Motorcycles	2		Motorcycles	3	5
PM Peak Hour	4	Total <sup>(1)</sup>	668		Total <sup>(1)</sup>	1,049	1,765
Demand	Off-Peak Direction	Autos	551	Off-Peak Direction	Autos	866	1,456
		Medium Trucks	6		Medium Trucks	10	16
		Heavy Trucks	33		Heavy Trucks	51	86
		Buses	1		Buses	1	1
		Motorcycles	2		Motorcycles	3	5
		Total <sup>(1)</sup>	592		Total <sup>(1)</sup>	931	1,565
	Peak Direction	Autos	715	Peak Direction	Autos	715	1,363
		Medium Trucks	8		Medium Trucks	8	15
		Heavy Trucks	42		Heavy Trucks	42	80
		Buses	1		Buses	1	1
LOS C		Motorcycles	2		Motorcycles	2	5
		Total <sup>(2)</sup>	768		Total <sup>(2)</sup>	768	1,464
	Off-Peak Direction	Autos	634		Autos	634	1,208
		Medium Trucks	7	Off-Peak Direction	Medium Trucks	7	14
		Heavy Trucks	37		Heavy Trucks	37	71
		Buses	1		Buses	1	1
		Motorcycles	. 2		Motorcycles	2	4
		Total <sup>(2)</sup>	681		Total <sup>(2)</sup>	681	1,299

<sup>(1)</sup> Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

Prepared By:

Greg Root
Print Name

Signature

I have reviewed the information and concur that it is appropriate for use with the traffocustigned bysis.

Kyle Purvis

Print Name

Signature

Kyle Purvis

Kyle Purvis

Print Name

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<sup>(2)</sup> Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

2-lane undivided roadway with left-turn & right-turn lanes (Existing) LOS C AADT Volume = 15,300 x 1.05 = 16,100

4-lane divided roadway with left-turn & right-turn lanes (Proposed) LOS C AADT volume = 30,700

Traffic Data for Noise Analysis

From Old Lucerne Park Road (east end) to Lake Hamilton Drive (From Milepost 8.965 to Milepost 9.156) - Context Classification = C3C

	Direction		Existing Year (2019)	h Direction		Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 18,500 Posted Speed = 50 mph No. of Lanes = 2 No. of Vehicles			AADT = 27,000	AADT = 40,000
					Vehicle Type	Posted Speed = 50 mph	Posted Speed = 45 mph
Demand Peak						No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C		Vehicle Type				No. of Vehicles	No. of Vehicles
		Autos	812		Autos	1,185	1,755
		Medium Trucks	15		Medium Trucks	22	33
	Peak Direction	Heavy Trucks	48	Deal Discotion	Heavy Trucks	70	103
	reak Direction	Buses	2	Peak Direction	Buses	2	3
		Motorcycles	6		Motorcycles	9	14
PM Peak Hour		Total <sup>(1)</sup>	882		Total <sup>(1)</sup>	1,288	1,908
Demand	Off-Peak Direction	Autos	720	Off-Peak Direction	Autos	1,051	1,556
		Medium Trucks	13		Medium Trucks	20	29
		Heavy Trucks	42		Heavy Trucks	62	92
		Buses	1		Buses	2	3
		Motorcycles	6		Motorcycles	8	12
		Total <sup>(1)</sup>	783		Total <sup>(1)</sup>	1,142	1,692
	Peak Direction	Autos	706	Peak Direction	Autos	706	1,347
		Medium Trucks	13		Medium Trucks	13	25
		Heavy Trucks	42		Heavy Trucks	42	79
		Buses	1		Buses	1	3
		Motorcycles	5		Motorcycles	5	10
LOS C		Total <sup>(2)</sup>	768		Total <sup>(2)</sup>	768	1,464
	Off-Peak Direction	Autos	626		Autos	626	1,195
		Medium Trucks	12	Off-Peak Direction	Medium Trucks	12	22
		Heavy Trucks	37		Heavy Trucks	37	70
		Buses	1		Buses	1	2
		Motorcycles	5		Motorcycles	5	9
		Total <sup>(2)</sup>	681		Total <sup>(2)</sup>	681	1,299

<sup>(1)</sup> Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

2-lane undivided roadway with left-turn & right-turn lanes (Existing) LOS C AADT Volume = 15,300 x 1.05 = 16,100

I have reviewed the information and concur that it is appropriate for use with the traffic possigned by is.

(2) Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

FDOT Reviewer:

Kyle Purvis

Kyle Purvis

Print Name

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Date: 06/21/2023 | 10:23 AM EDT

<sup>4-</sup>lane divided roadway with left-turn & right-turn lanes (Proposed) LOS C AADT volume = 30,700

I certify that the above information is accurate and appropriate for use with the traffic poise analysis

Prepared By:

Greg Root

Print Name

Signature

Date: 6/12/2023

Traffic Data for Noise Analysis

From Lake Hamilton Drive to Brenton Manor Avenue (From Milepost 9.156 to Milepost 9.661) - Context Classification = C3C

	Direction		Existing Year (2019)	Direction	Vehicle Type	Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 21,000 Posted Speed = 50 mph No. of Lanes = 2 No. of Vehicles			AADT = 30,000	AADT = 43,000
						Posted Speed = 50 mph	Posted Speed = 45 mph
Demand Peak						No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C		Vehicle Type				No. of Vehicles	No. of Vehicles
		Autos	930		Autos	1,329	1,905
		Medium Trucks	15		Medium Trucks	21	31
	Peak Direction	Heavy Trucks	48	1	Heavy Trucks	68	97
	reak Direction	Buses	2	Peak Direction	Buses	3	4
		Motorcycles	7		Motorcycles	10	15
PM Peak Hour		Total <sup>(1)</sup>	1,002		Total <sup>(1)</sup>	1,431	2,051
Demand	Off-Peak Direction	Autos	825	Off-Peak Direction	Autos	1,179	1,689
		Medium Trucks	13		Medium Trucks	19	27
		Heavy Trucks	42		Heavy Trucks	60	86
		Buses	2		Buses	2	3
		Motorcycles	6		Motorcycles	9	13
		Total <sup>(1)</sup>	888		Total <sup>(1)</sup>	1,269	1,819
	Peak Direction	Autos	713	Peak Direction	Autos	713	1,360
		Medium Trucks	12		Medium Trucks	12	22
		Heavy Trucks	36		Heavy Trucks	36	69
		Buses	1		Buses	1	3
		Motorcycles	5		Motorcycles	5	10
LOSC		Total <sup>(2)</sup>	768		Total <sup>(2)</sup>	768	1,464
	Off-Peak Direction	Autos	632	Off-Peak Direction	Autos	632	1,206
		Medium Trucks	10		Medium Trucks	10	19
		Heavy Trucks	32		Heavy Trucks	32	62
		Buses	1		Buses	1	2
		Motorcycles	5		Motorcycles	5	9
		Total <sup>(2)</sup>	681		Total <sup>(2)</sup>	681	1,299

 $<sup>^{(1)}</sup>$  Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

(	<sup>2)</sup> Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook
	2-lane undivided roadway with left-turn & right-turn lanes (Existing) LOS C AADT Volume = 15,300 x 1.05 = 16,100
	4-lane divided roadway with left-turn & right-turn lanes (Proposed) LOS C AADT volume = 30,700

I certify that the abov	e information is accurate and appropriate for	use with the traffic noise analysis.	
Prepared By:	Greg Root	Crest Carl	Date: 6/12/2023
	Print Name	Signature	9,20,2023
I have reviewed the in	formation and concur that it is appropriate for	or use with the traffic no pocossidyrid by:	
FDOT Reviewer:	Kyle Purvis	Kyle Purnis	06/21/2023   10:23 AM EDT
744 - MI 16/400 -	Print Name	Signature	Date.

#### Traffic Data for Noise Analysis

From Brenton Manor Avenue to US 27 (From Milepost 9.661 to Milepost 9.873) - Context Classification = C3C

			Existing Year (2019)	(FI 17)		Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 22,000			AADT = 30,000	AADT = 43,000
			Posted Speed = 50 mph No. of Lanes = 2 No. of Vehicles	Direction	Vehicle Type	Posted Speed = 50 mph	Posted Speed = 45 mph
Demand Peak						No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C	Direction	Vehicle Type				No. of Vehicles	No. of Vehicles
		Autos	979		Autos	1,335	1,913
		Medium Trucks	15		Medium Trucks	20	29
	Peak Direction	Heavy Trucks	46		Heavy Trucks	63	91
	reak Direction	Buses	2	Peak Direction	Buses	3	4
		Motorcycles	7		Motorcycles	10	15
PM Peak Hour		Total <sup>(1)</sup>	1,049		Total <sup>(1)</sup>	1,431	2,051
Demand		Autos	868	Off-Peak Direction	Autos	1,184	1,697
		Medium Trucks	13		Medium Trucks	18	25
	Off Dook Dispetion	Heavy Trucks	41		Heavy Trucks	56	80
	Off-Peak Direction	Buses	2		Buses	2	3
		Motorcycles	7		Motorcycles	9	13
		Total <sup>(1)</sup>	931		Total <sup>(1)</sup>	1,269	1,819
		Autos	716		Autos	716	1,366
		Medium Trucks	11		Medium Trucks	11	20
	Peak Direction	Heavy Trucks	34	600 BOOK 5	Heavy Trucks	34	65
	Peak Direction	Buses	1	Peak Direction	Buses	1	3
		Motorcycles	5		Motorcycles	5	10
LOS C		Total <sup>(2)</sup>	768		Total <sup>(2)</sup>	768	1,464
LOS C		Autos	635		Autos	635	1,211
		Medium Trucks	10	1 1	Medium Trucks	10	18
	Off Deal Diseasing	Heavy Trucks	30		Heavy Trucks	30	57
	Off-Peak Direction	Buses	1	Off-Peak Direction	Buses	1	2
		Motorcycles	5		Motorcycles	5	9
		Total <sup>(2)</sup>	681	1	Total <sup>(2)</sup>	681	1,299

<sup>(1)</sup> Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

I certify that the abo	ove information is accurate and appropriate for	r use with the traffic noise analysis.		
Prepared By:	Greg Root	() was Kit	Date:	6/12/2023
	Print Name	Signature		9,50,50
I have reviewed the	information and concur that it is appropriate t	or use with the traffic noise analybiocusigned by:		06/21/2022   10-22 w ====
FDOT Reviewer:	Kyle Purvis	Kyle Purnis	Date:	06/21/2023   10:23 AM EDT
	Print Name	Signature association 1444	Date.	

<sup>(2)</sup> Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

<sup>2-</sup>lane undivided roadway with left-turn & right-turn lanes (Existing) LOS C AADT Volume = 15,300 x 1.05 = 16,100

<sup>4-</sup>lane divided roadway with left-turn & right-turn lanes (Proposed) LOS C AADT volume = 30,700

Traffic Data for Noise Analysis

From US 27 to Speed Limit Change (From Milepost 9.873 to Milepost 10.773) - Context Classification = C3R

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 11,000 Posted Speed = 55 mph			AADT = 22,000	AADT = 26,000
				Direction	Vehicle Type	Posted Speed = 55 mph	Posted Speed = 45 mph
Demand Peak		100	No. of Lanes = 2			No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C	Direction	Vehicle Type	No. of Vehicles			No. of Vehicles	No. of Vehicles
		Autos	479		Autos	959	1,133
		Medium Trucks	10		Medium Trucks	20	23
	Peak Direction	Heavy Trucks	31	Death Discoving	Heavy Trucks	62	73
	Peak Direction	Buses	1	Peak Direction	Buses	2	2
PM Peak Hour		Motorcycles	4		Motorcycles	7	9
		Total <sup>(1)</sup>	525		Total <sup>(1)</sup>	1,049	1,240
Demand		Autos	425	Off-Peak Direction	Autos	850	1,005
		Medium Trucks	9		Medium Trucks	17	20
	Off-Peak Direction	Heavy Trucks	27		Heavy Trucks	55	65
	On-Peak Direction	Buses	1		Buses	2	2
		Motorcycles	3		Motorcycles	7	8
		Total <sup>(1)</sup>	465		Total <sup>(1)</sup>	931	1,100
		Autos	854		Autos	854	1,495
	1 [	Medium Trucks	17		Medium Trucks	17	30
	Peak Direction	Heavy Trucks	55		Heavy Trucks	55	96
	reak Direction	Buses	2	Peak Direction	Buses	2	3
		Motorcycles	7		Motorcycles	7	12
LOS C		Total <sup>(2)</sup>	935		Total <sup>(2)</sup>	935	1,636
LO3 C		Autos	757		Autos	757	1,326
	1 [	Medium Trucks	15	1	Medium Trucks	15	27
	Off-Peak Direction	Heavy Trucks	49	0""	Heavy Trucks	49	85
	Oli-reak Direction	Buses	1	Off-Peak Direction	Buses	1	3
		Motorcycles	6		Motorcycles	6	10
		Total <sup>(2)</sup>	829		Total <sup>(2)</sup>	829	1,451

<sup>(1)</sup> Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

I certify that the above information is accurate and appropriate for use with the traffic poise analysis Prepared By: Greg Root Date: 6/12/2023 Print Name I have reviewed the information and concur that it is appropriate for use with the traffic neithy analysis.

Kyle Purvis FDOT Reviewer:

**Print Name** 

06/21/2023 | 10:23 AM EDT Date:

<sup>(2)</sup> Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook 2-lane undivided roadway with no turn lanes but only two connections (Existing) LOS C AADT volume = 19,600 4-lane divided roadway with left-turn lanes (Proposed) LOS C AADT volume = 34,300

#### Traffic Data for Noise Analysis

From Speed Limit Change to Myrtle Avenue (From Milepost 10.773 to Milepost 11.109) - Context Classification = C3R

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 10,000			AADT = 28,000	AADT = 29,000
		1	Posted Speed = 45 mph No. of Lanes = 2 No. of Vehicles	Direction		Posted Speed = 45 mph	Posted Speed = 45 mph
Demand Peak						No. of Lanes = 2	No. of Lanes = 4
Hour/LOS C	Direction	Vehicle Type			Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos	423		Autos	1,185	1,227
		Medium Trucks	12		Medium Trucks	33	35
	Peak Direction	Heavy Trucks	38	n. com	Heavy Trucks	106	109
	Peak Direction	Buses	1	Peak Direction	Buses	2	2
		Motorcycles	3		Motorcycles	9	10
PM Peak Hour		Total <sup>(1)</sup>	477		Total <sup>(1)</sup>	1,336	1,383
Demand		Autos	375	Off-Peak Direction	Autos	1,051	1,088
		Medium Trucks	11		Medium Trucks	30	31
	Off-Peak Direction	Heavy Trucks	33		Heavy Trucks	94	97
	On-Peak Direction	Buses	1		Buses	2	2
		Motorcycles	3		Motorcycles	8	9
		Total <sup>(1)</sup>	423		Total <sup>(1)</sup>	1,184	1,227
		Autos	664		Autos	664	1,451
		Medium Trucks	19		Medium Trucks	19	41
	Peak Direction	Heavy Trucks	59		Heavy Trucks	59	129
	Peak Direction	Buses	1	Peak Direction	Buses	1	3
		Motorcycles	5	1 [	Motorcycles	5	12
LOS C		Total <sup>(2)</sup>	749		Total <sup>(2)</sup>	749	1,636
103 €		Autos	589		Autos	589	1,287
		Medium Trucks	17	1 [	Medium Trucks	17	36
	Off-Peak Direction	Heavy Trucks	53	0"	Heavy Trucks	53	115
	On-reak Direction	Buses	1	Off-Peak Direction	Buses	1	3
		Motorcycles	5		Motorcycles	5	10
		Total <sup>(2)</sup>	664		Total <sup>(2)</sup>	664	1,451

<sup>(1)</sup> Peak hour peak direction volumes = AADT  $\times$  0.09  $\times$  0.53 / Peak hour off-peak direction volumes = AADT  $\times$  0.09  $\times$  (1-0.53)

I certify that the abo	ve information is accurate and appropriate	for use with the traffic noise analysis.	
Prepared By:	Greg Root	Creek (cir)	Date: 6/12/2023
	Print Name	Signature	
I have reviewed the	information and concur that it is appropriat	e for use with the traffic noise analysis.	05 (04 (0000   40 00 )
FDOT Reviewer:	Kyle Purvis	Kyle Purnis	06/21/2023   10:23 AM EDT
. The same of	Print Name	Signature 35E9D52E12B14A4	Date.

<sup>&</sup>lt;sup>(2)</sup> Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

<sup>2-</sup>lane undivided roadway with no exclusive left-turn lanes and only one right-turn lane (Existing) LOS C AADT volume = 19,600 X 0.80 = 15,700

<sup>4-</sup>lane divided roadway with left-turn lanes (Proposed) LOS C AADT volume = 34,300

Traffic Data for Noise Analysis

From Myrtle Avenue to SR 17 (From Milepost 11.109 to Milepost 11.647) - Context Classification = C3R

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
	1 1		AADT = 10,000			AADT = 28,000	AADT = 29,000
			Posted Speed = 45 mph	1		Posted Speed = 45 mph	Posted Speed = 45 mph
Demand Peak	The Country of the		No. of Lanes = 4			No. of Lanes = 4	No. of Lanes = 4
Hour/LOS C	Direction	Vehicle Type	No. of Vehicles	Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
	9 7 7 7 7 7 7 7	Autos	423		Autos	1,185	1,227
		Medium Trucks	12		Medium Trucks	33	35
	Peak Direction	Heavy Trucks	38	Deal Discotion	Heavy Trucks	106	109
	reak Direction	Buses	1	Peak Direction	Buses	2	2
		Motorcycles	3		Motorcycles	9	10
PM Peak Hour		Total <sup>(1)</sup>	477		Total <sup>(1)</sup>	1,336	1,383
Demand		Autos	375	Off-Peak Direction	Autos	1,051	1,088
	11 10	Medium Trucks	11		Medium Trucks	30	31
	Off-Peak Direction	Heavy Trucks	33		Heavy Trucks	94	97
	On-Peak Direction	Buses	1		Buses	2	2
		Motorcycles	3		Motorcycles	8.	9
		Total <sup>(1)</sup>	423		Total <sup>(1)</sup>	1,184	1,227
		Autos	1,087		Autos	1,087	1,451
		Medium Trucks	31		Medium Trucks	31	41
	Peak Direction	Heavy Trucks	97		Heavy Trucks	97	129
	Peak Direction	Buses	2	Peak Direction	Buses	2	3
		Motorcycles	9		Motorcycles	9	12
LOS C		Total <sup>(2)</sup>	1,226		Total <sup>(2)</sup>	1,226	1,636
103 C		Autos	964		Autos	964	1,287
	1 [	Medium Trucks	27		Medium Trucks	27	36
	Off-Peak Direction	Heavy Trucks	86	0" 01 0	Heavy Trucks	86	115
	On-Peak Direction	Buses	2	Off-Peak Direction	Buses	2	3
		Motorcycles	8		Motorcycles	8	10
		Total <sup>(2)</sup>	1,087		Total <sup>(2)</sup>	1,087	1,451

<sup>(1)</sup> Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

(2) Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

Prepared By:	Greg Root	Civer (a)	Date: 6/12/2023
	Print Name	Signature	
I have reviewed the	information and concur that it is appropriate	te for use with the traffocusigneon bysis.	06/21/2023   10:23 AM EDT
FDOT Reviewer:	Kyle Purvis	Kyle Purvia	Date:
	Print Name	35E9 <b>562E12B4</b> AA4	

<sup>4-</sup>Lane undivided roadway with no left-turn lanes (Existing) LOS C AADT volume = 34,300 x 0.75 = 25,700
4-lane divided roadway with left-turn lanes (Proposed) LOS C AADT volume = 34,300
I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

## SR 544 from Martin Luther King Boulevard to SR 17 (Section # 16140000) Project Development & Environment Study (FPID # 440273-1-22-01) Traffic Data for Noise Analysis

US 27 Mainline South of the On-/Off-Ramps - Context Classification = C2

			Existing Year (2019)	1		Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 39,500	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		AADT = 62,000	AADT = 62,000
			Posted Speed = 60 mph			Posted Speed = 60 mph	Posted Speed = 60 mph
Demand Peak		1.7	No. of Lanes = 6			No. of Lanes = 6	No. of Lanes = 6
Hour/LOS C	Direction	Vehicle Type	No. of Vehicles	Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos	1,338		Autos	2,886	2,886
		Medium Trucks	41		Medium Trucks	88	88
	Peak Direction	Heavy Trucks	61	Peak Direction	Heavy Trucks	132	132
	(SB)	Buses	3	(SB)	Buses	7	7
		Motorcycles	4		Motorcycles	10	10
PM Peak Hour		Total <sup>(1)</sup>	1,448		Total <sup>(1)</sup>	3,123	3,123
Demand		Autos	1,258	Off-Peak Direction (NB)	Autos	2,284	2,284
		Medium Trucks	38		Medium Trucks	70	70
	Off-Peak Direction	Heavy Trucks	58		Heavy Trucks	104	104
	(NB)	Buses	3		Buses	5	5
	A CT 1-1	Motorcycles	4		Motorcycles	8	8
		Total <sup>(1)</sup>	1,361		Total <sup>(1)</sup>	2,471	2,471
		Autos	3,011		Autos	3,011	3,042
		Medium Trucks	92		Medium Trucks	92	93
	Peak Direction	Heavy Trucks	138		Heavy Trucks	138	139
	reak Direction	Buses	7	Peak Direction	Buses	7	7
		Motorcycles	10		Motorcycles	10	10
LOS C		Total <sup>(2)</sup>	3,258		Total <sup>(2)</sup>	3,258	3,291
203 C		Autos	2,670		Autos	2,670	2,697
		Medium Trucks	81		Medium Trucks	81	82
	Off-Peak Direction	Heavy Trucks	122	000	Heavy Trucks	122	123
	Oll-Feak Direction	Buses	6	Off-Peak Direction	Buses	6	6
		Motorcycles	9		Motorcycles	9	9
		Total <sup>(2)</sup>	2,889		Total <sup>(2)</sup>	2,889	2,919

<sup>6-</sup>Lane divided roadway with left-turn lanes (Existing) LOS C AADT volume = 68,300
6-lane limited access roadway in a rural area (Proposed) LOS C AADT volume = 69,000

I certify that the above information is accurate and appropriate for use with the traffic rollse analysis.

Prepared By:

Greg Root

Print Name

Signature

Date:

Date:

Print Name

Signature

Date:

(2) Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

## SR 544 from Martin Luther King Boulevard to SR 17 (Section # 16140000) Project Development & Environment Study (FPID # 440273-1-22-01) Traffic Data for Noise Analysis

US 27 Mainline Between the On-/Off-Ramps - Context Classification = C2

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = N/A			AADT = N/A	AADT = 47,700
			Posted Speed = 60 mph No. of Lanes = 6 No. of Vehicles			Posted Speed = 60 mph	Posted Speed = 60 mph
Demand Peak		1000				No. of Lanes = 6	No. of Lanes = 6
Hour/LOS C	Direction	Vehicle Type		Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos			Autos		2,262
		Medium Trucks			Medium Trucks		68
Live was	Peak Direction	Heavy Trucks		Peak Direction	Heavy Trucks		112
	Teak Direction	Buses		(SB)	Buses		6
		Motorcycles			Motorcycles		9
PM Peak Hour		Total			Total		2,457
Demand		Autos			Autos		1,779
		Medium Trucks			Medium Trucks		59
	Off-Peak Direction	Heavy Trucks		Off-Peak Direction	Heavy Trucks		88
	On-reak Direction	Buses		(NB)	Buses		3
		Motorcycles			Motorcycles		6
		Total			Total		1,935
		Autos			Autos		3,011
		Medium Trucks		1	Medium Trucks		94
	Peak Direction	Heavy Trucks			Heavy Trucks		168
	reak Direction	Buses		Peak Direction	Buses		7
		Motorcycles			Motorcycles		11
LOS C		Total			Total		3,291
LOJC		Autos			Autos		2,670
		Medium Trucks		1 1	Medium Trucks		84
	Off-Peak Direction	Heavy Trucks			Heavy Trucks		149
	Oli-reak Direction	Buses		Off-Peak Direction	Buses		6
		Motorcycles			Motorcycles		10
		Total			Total		2,919

 $<sup>^{(1)}</sup>$  Peak hour peak direction volumes = AADT x 0.09 x 0.53 / Peak hour off-peak direction volumes = AADT x 0.09 x (1-0.53)

5-05117 11111747 4088	so rodavidy in dirarararara (rroposed) 205 e	7000 Volume = 03,000	
I certify that the abo	ve information is accurate and appropriate	for use with the traffic poise analysis.	
Prepared By:	Greg Root	() week ( not	Date: 6/12/2023
	Print Name	Signature	0/12/2023
I have reviewed the	information and concur that it is appropriat	e for use with the traffic noise analysis.	
FDOT Reviewer:	Kyle Purvis	DocuSigned by:  Kyle Puris	06/21/2023   10:23 AM EDT
-	Print Name	Signature -35E9D52E12B14A4	Date:

<sup>(2)</sup> Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook 6-lane limited access roadway in a rural area (Proposed) LOS C AADT volume = 69,000

#### Traffic Data for Noise Analysis

US 27 Ramps to/from the North- Context Classification = C2

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = N/A			AADT = N/A	AADT = 29,300
			Posted Speed = 60 mph No. of Lanes = 6 No. of Vehicles	1		Posted Speed = 60 mph	Posted Speed = 45 mph
Demand Peak				Direction		No. of Lanes = 6	No. of Lanes = 1
Hour/LOS C	Direction	Vehicle Type			Vehicle Type	No. of Vehicles	No. of Vehicles
	Peak Direction	Autos			Autos		1,190
		Medium Trucks			Medium Trucks		37
		Heavy Trucks		Donk Direction	Heavy Trucks		121
		Buses		Peak Direction	Buses		2
		Motorcycles			Motorcycles		5
PM Peak Hour		Total			Total	SB Off-Ramp	1,355
Demand		Autos			Autos		1,131
		Medium Trucks			Medium Trucks		29
	Off-Peak Direction	Heavy Trucks		Off Dark Disserting	Heavy Trucks		109
	On-Peak Direction	Buses		Off-Peak Direction	Buses		3
		Motorcycles			Motorcycles		6
		Total			Total	NB On-Ramp	1,278
		Autos			Autos		
		Medium Trucks			Medium Trucks		
	Deal Dissales	Heavy Trucks			Heavy Trucks		
	Peak Direction	Buses		Peak Direction	Buses		
		Motorcycles			Motorcycles		
1000		Total <sup>(2)</sup>			Total <sup>(2)</sup>		
LOS C		Autos			Autos		
	1 1	Medium Trucks		1	Medium Trucks		
	0" 0-1 0	Heavy Trucks		000	Heavy Trucks		
	Off-Peak Direction	Buses		Off-Peak Direction	Buses		
		Motorcycles		1	Motorcycles		
		Total <sup>(2)</sup>		1	Total <sup>(2)</sup>		

<sup>\*</sup>Note: The 2023 FDOT Multimodal Quality/Level of Service Handbook does not include LOS C volumes for interchange on-/off-ramps.

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By:

Greg Root
Print Name
Signature

I have reviewed the information and concur that it is appropriate for use with the traffic noise analysis.

O6/21/2023 | 10:23 AM EDT DocuSigned by:

Print Name

Kyle Purvis
Print Name

FDOT Reviewer:
Print Name

Signature

Date:
Date

-35E9D52E12B14A4..

Traffic Data for Noise Analysis

US 27 Ramps to/from the South - Context Classification = C2

			Existing Year (2019)		4	Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = N/A			AADT = N/A	AADT = 14,300
			Posted Speed = 60 mph			Posted Speed = 60 mph	Posted Speed = 45 mph
Demand Peak			No. of Lanes = 6 No. of Vehicles	1	F	No. of Lanes = 6	No. of Lanes = 1
Hour/LOS C	Direction	Vehicle Type		Direction	Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos			Autos		624
		Medium Trucks			Medium Trucks		20
	Peak Direction	Heavy Trucks		Danie Dinantino	Heavy Trucks		20
	Peak Direction	Buses		Peak Direction	Buses		1
		Motorcycles			Motorcycles		1
PM Peak Hour		Total			Total	SB On-Ramp	666
Demand		Autos		Off-Peak Direction	Autos		505
		Medium Trucks			Medium Trucks		11
	Off-Peak Direction	Heavy Trucks			Heavy Trucks		16
	On reak billection	Buses			Buses		2
		Motorcycles			Motorcycles		2
		Total			Total	NB Off-Ramp	536
		Autos			Autos		
	1 E	Medium Trucks			Medium Trucks		
	Peak Direction	Heavy Trucks		Peak Direction	Heavy Trucks		
	reak Direction	Buses		Peak Direction	Buses	Harman Control	
		Motorcycles			Motorcycles		
LOS C		Total <sup>(2)</sup>		1	Total <sup>(2)</sup>		
LOS C		Autos			Autos		
		Medium Trucks			Medium Trucks		
	Off-Peak Direction	Heavy Trucks		000000000000000000000000000000000000000	Heavy Trucks		
	On-Peak Direction	Buses		Off-Peak Direction	Buses		
		Motorcycles			Motorcycles		
		Total <sup>(2)</sup>			Total <sup>(2)</sup>		

reak nour peak an	ection volumes = AADT x 0.09 x 0.53 / Peak n	our off-peak direction volumes = AAD1 $\times 0.09 \times (1-0.53)$	
Note: The 2023 FDC	T Multimodal Quality/Level of Service Handbo	ook does not include LOS C volumes for interchange on-/off-ramps.	
I certify that the abo	ve information is accurate and appropriate fo	r use with the traffic poss analysis.	
Prepared By:	Greg Root	Oreg Kar	Date: 6/12/2023
	Print Name	Signature	
I have reviewed the i	information and concur that it is appropriate		
FDOT Reviewer:	Kyle Purvis	Docusigned by:  Kyla Purnia	06/21/2023   10:23 AM EDT
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Print Name	Sgn 7 wma Sgnature 35E9D52E12B14A4	

## SR 544 from Martin Luther King Boulevard to SR 17 (Section # 16140000) Project Development & Environment Study (FPID # 440273-1-22-01) Traffic Data for Noise Analysis

US 27 Mainline North of the On-/Off Ramps - Context Classification = C2

			Existing Year (2019)			Design Year (2045) No-Build Alt	Design Year (2045) Build Alt
			AADT = 46,500			AADT = 71,000	AADT = 77,000
			Posted Speed = 60 mph			Posted Speed = 60 mph	Posted Speed = 60 mph
Demand Peak		100000000000000000000000000000000000000	No. of Lanes = 6	Direction		No. of Lanes = 6	No. of Lanes = 6
Hour/LOS C	Direction	Vehicle Type	No. of Vehicles		Vehicle Type	No. of Vehicles	No. of Vehicles
		Autos	1,696		Autos	3,183	3,453
		Medium Trucks	52		Medium Trucks	97	105
PM Peak Hour Demand	Peak Direction (SB)	Heavy Trucks	115	Peak Direction (SB)	Heavy Trucks	215	233
		Buses	4		Buses	7	8
		Motorcycles	7		Motorcycles	13	14
		Total <sup>(1)</sup>	1,873		Total <sup>(1)</sup>	3,515	3,812
		Autos	1,487		Autos	2,653	2,910
		Medium Trucks	45		Medium Trucks	81	88
	Off-Peak Direction	Heavy Trucks	101	Off-Peak Direction (NB)	Heavy Trucks	180	197
	(NB)	Buses	3		Buses	6	6
		Motorcycles	6		Motorcycles	11	12
		Total <sup>(1)</sup>	1,642		Total <sup>(1)</sup>	2,930	3,213
		Autos	2,950		Autos	2,950	2,981
		Medium Trucks	90		Medium Trucks	90	91
	Peak Direction	Heavy Trucks	200	0.10	Heavy Trucks	200	202
	reak Direction	Buses	7	Peak Direction	Buses	7	7
		Motorcycles	12		Motorcycles	12	12
LOSC		Total <sup>(2)</sup>	3,258		Total <sup>(2)</sup>	3,258	3,291
LOSC		Autos	2,616		Autos	2,616	2,643
		Medium Trucks	80	1 - [	Medium Trucks	80	80
	Off-Peak Direction	Heavy Trucks	177	Off Bask Bissari	Heavy Trucks	177	179
	On-reak Direction	Buses	6	Off-Peak Direction	Buses	6	6
		Motorcycles	10		Motorcycles	10	11
		Total <sup>(2)</sup>	2,889		Total <sup>(2)</sup>	2,889	2,919

<sup>6-</sup>Lane divided roadway with left-turn lanes (Existing) LOS C AADT volume = 68,300
6-lane limited access roadway in a rural area (Proposed) LOS C AADT volume = 69,000

I certify that the above information is accurate and appropriate for use with the traffic poise analysis.

Prepared By:

Greg Root

Print Name

Signature

I have reviewed the information and concur that it is appropriate for use with the traffic noise analysis.

Docusigned by:

Kyle Purvis

Kyle Purvis

Must Purvis

Date:

06/21/2023 | 10:23 AM EDT

(2) Obtained from the 2023 FDOT Multimodal Quality/Level of Service Handbook

Print Name

## APPENDIX B VALIDATION DOCUMENTATION

#### NOISE MEASUREMENT DATA SHEET

Measurements Taken By: Robyn Hartz & Wayne Arner Date: 5-30-23

Time Run 1 Started:13:45 pmTime Run 1 Ended:13:55 pmTime Run 2 Started:14:01 pmTime Run 2 Ended:14:11 pmTime Run 3 Started:14:17 pmTime Run 3 Ended:14:27 pm

Project Identification:

Financial Project ID: 440273-1-22-01

Project Location: SR 544 Winter Haven/Haines City

Site Identification: Site 1: West side of SR 544 at Harry King Park. LD 831 100' from EOP.

Weather Conditions:

Sky: Clear Partly Cloudy X Cloudy Other

Temperature 89F Wind Speed 3 mph Wind Direction from NE Humidity 52%

Equipment:

Sound Level Meter:

Type: Larson Davis 831

Did you check the battery? Yes X No

Calibration Readings: Start 114.0 End 114.1

Response Settings: Slow Weighting: A

Calibrator:

Type: <u>LD CAL200</u>

Did you check the battery? Yes

#### TRAFFIC DATA (Run 1/Run 2/Run 3)

Roadway Identification	SR 544 E	EB	SR 544 WB		
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)	
Autos	121/94/102	43.2/44.2/44.2	113/130/142	47.2/45.6/35.2	
Medium Trucks	6/3/4	46.0/50.0/48.0	6/1/2	45.3/53.0/49.1	
Heavy Trucks	8/6/12	33.5/48.0/44.8	7/13/5	44.2/44.6/30.8	
Buses	0/2/0	na/43.0/na	1/0/2	44.5/na/33.0	
Motorcycles	0/0/0	na/na/na	0/2/0	na/39.5/na	
Duration	Three 10-minut	e sample periods	Three 10-minute sample periods		

#### RESULTS [dB(A)]

L<sub>EQ</sub> 64.0 (Run 1), 64.1 (Run 2), 63.5 (Run 3)

Primary Noise: Traffic on SR 544

Background Noise: Cars in parking lot, birds, distant mowing, flyovers.

#### NOISE MEASUREMENT DATA SHEET

Measurements Taken By: Robyn Hartz & Wayne Arner Date: 5-30-23

Time Run 1 Started:10:56 amTime Run 1 Ended:11:06 amTime Run 2 Started:11:12 amTime Run 2 Ended:11:22 amTime Run 3 Started:11:29 amTime Run 3 Ended:11:39 am

Project Identification:

Financial Project ID: 440273-1-22-01

Project Location: SR 544 Winter Haven/Haines City

Site Identification: Site 2: South side of SR 544 at 4th St S. LD 831 100' from EOP.

Weather Conditions:

Sky: Clear Partly Cloudy X Cloudy Other

Temperature 86F Wind Speed 3 mph Wind Direction from N Humidity 52%

Equipment:

Sound Level Meter:

Type: Larson Davis 831

Did you check the battery? Yes X No

Calibration Readings: Start 114.0 End 114.0

Response Settings: Slow Weighting: A

Calibrator:

Type: <u>LD CAL200</u>

Did you check the battery? Yes

#### TRAFFIC DATA (Run 1/Run 2/Run 3)

Roadway Identification	SR 544	EB	SR 544 WB		
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)	
Autos	38/48/43	42.2/41.0/43.1	50/48/47	40.3/41.6/41.9	
Medium Trucks	3/4/2	39.0/51.0/33.0	1/3/2	36.3/38.5/34.0	
Heavy Trucks	11/7/3	45.0/43.4/56.0	7/8/15	42.5/38.1/37.7	
Buses	0/0/0	na/na/na	0/0/0	na/na/na	
Motorcycles	0/0/0	na/na/na	0/0/0	na/na/na	
Duration	Three 10-min	Three 10-minute sample periods		Three 10-minute sample periods	

#### RESULTS [dB(A)] 831

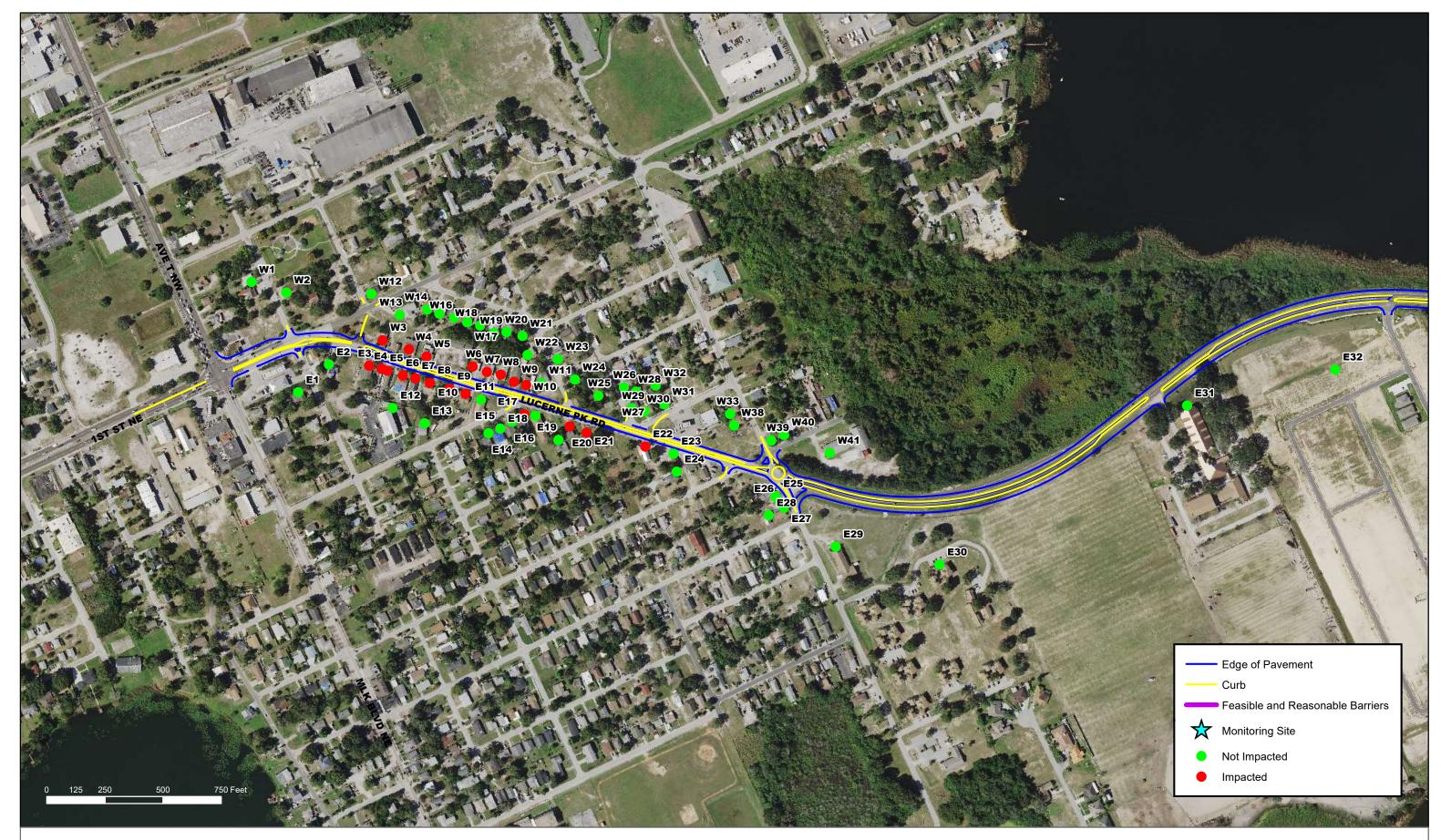
L<sub>EQ</sub> 61.4 (Run 1), 59.8 (Run 2), 60.0 (Run 3)

Primary Noise: Traffic on SR 544

Background Noise: Passbys on 4th St S., birds, distant mowing, intermittent

traffic flow.

## APPENDIX C PROJECT AERIALS

































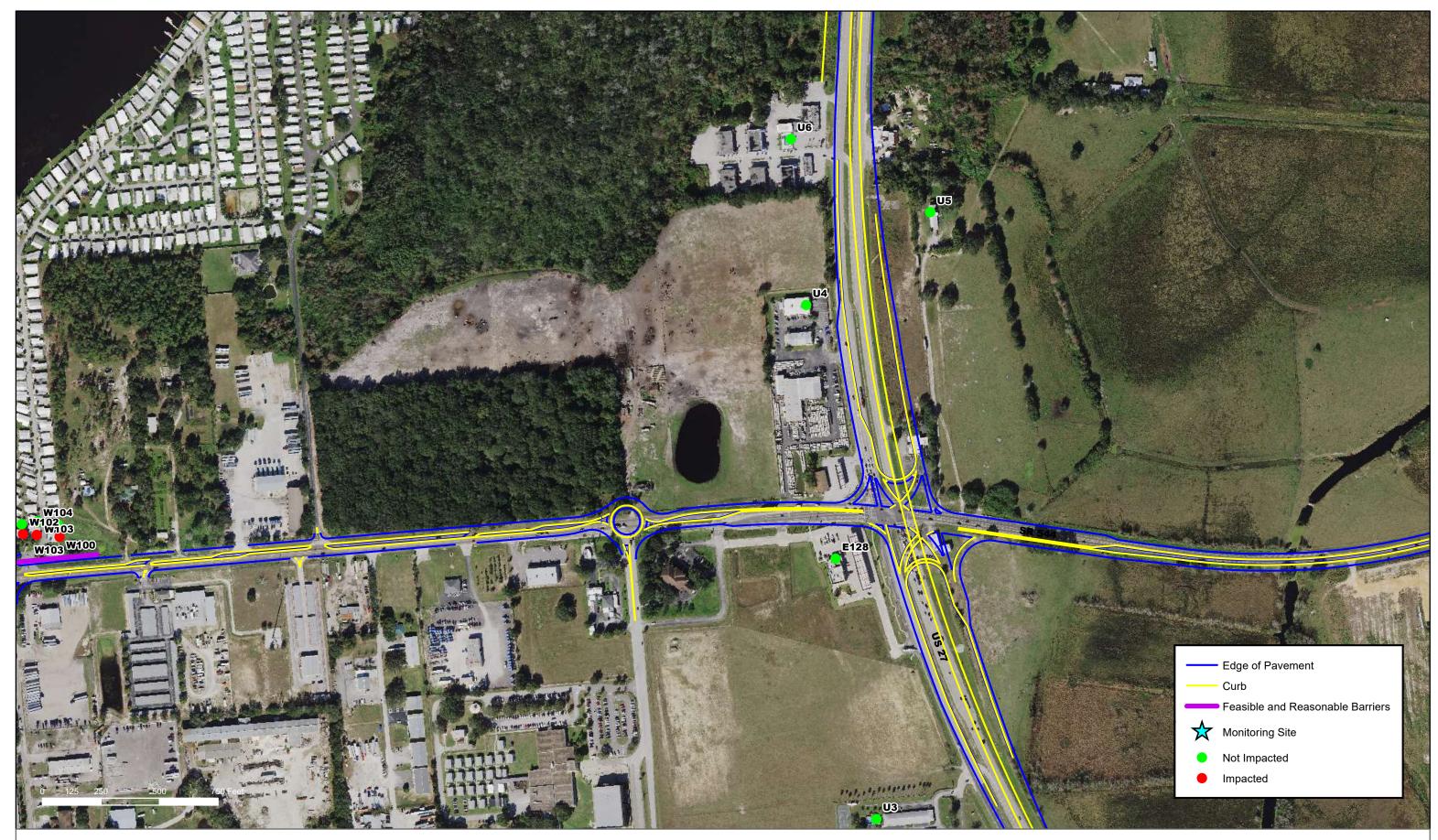


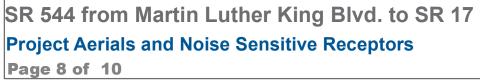










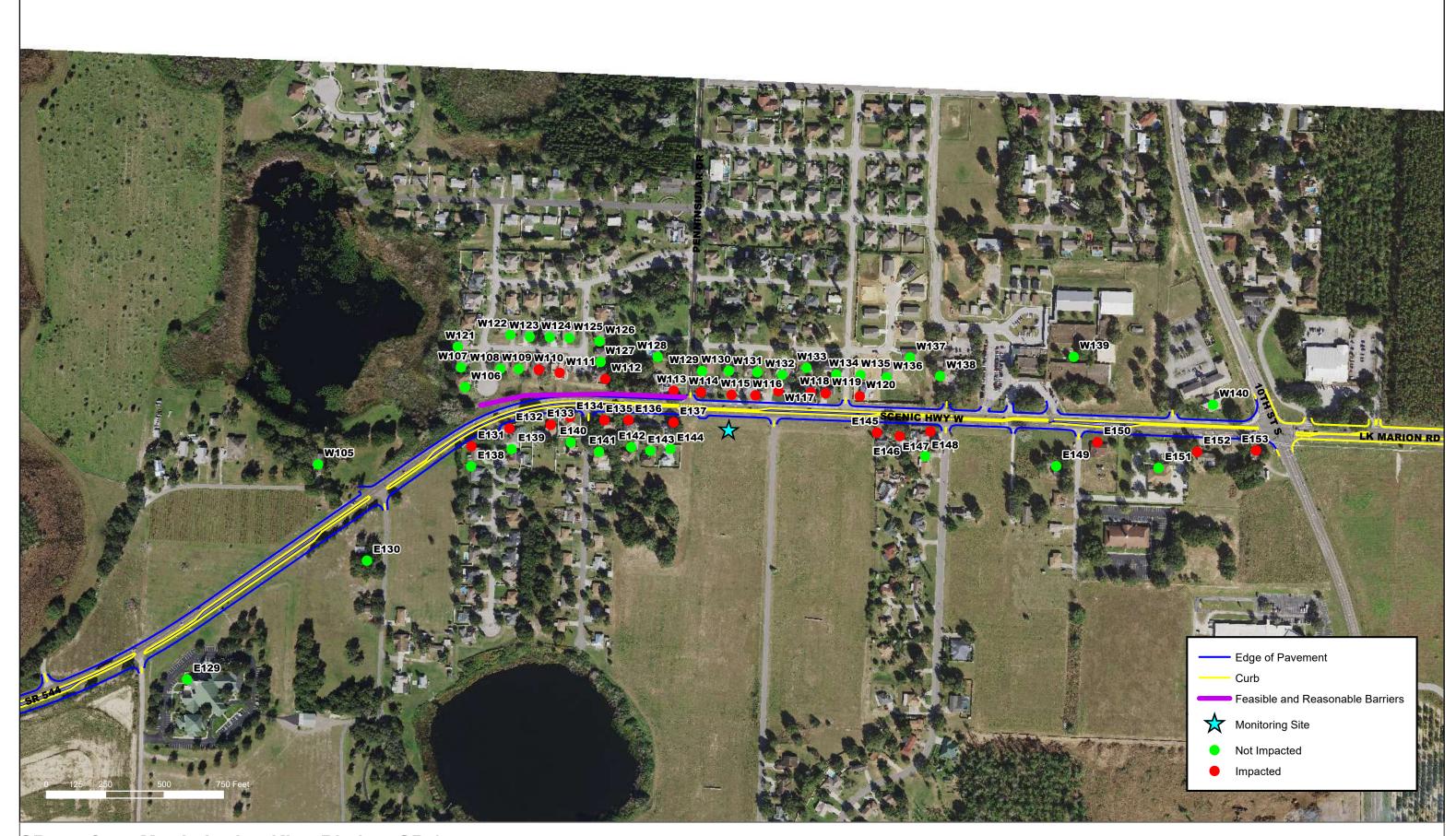












SR 544 from Martin Luther King Blvd. to SR 17
Project Aerials and Noise Sensitive Receptors
Page 10 of 10



## APPENDIX D PREDICTED TRAFFIC NOISE LEVELS

Receptor E1	Dwelling Units	NAC Category	Impact Criteria	Existing (2019) Noise Levels (dB(A)) 55.0	No Build (2045) Noise Levels (dB(A))	Build (2045) Noise Levels (dB(A)) 60.3	Increase over Existing (Build - Existing) 5.3	Impact (Yes/No)
E2	1	В	66	61.6	61.6	65.0	3.4	
E3	1	В	66	66.3	66.3	67.7	1.4	Yes
E4	2	В	66	66.5	66.6	68.3	1.4	
E5	2	В	66	66.4	66.4	68.3	1.8	Yes Yes
E6	1	В	66	66.3	66.3	68.4	2.1	Yes
E7	1		66	66.7	66.7	68.8	2.1	
E8	1	В	66	66.7	66.7	68.8	2.1	Yes
E9	1	B B	66	66.7	66.7	68.7	2.1	Yes
E10	2	В	66	66.7	66.7	68.2	1.5	Yes Yes
E11	0	D	51	41.3	41.3	42.5	1.2	163
E12	0	D	51	30.1	30.1	34.1	4.0	
E13	1	В	66	54.2	54.2	57.8	3.6	
E13	1	В	66	55.9	55.9	59.5	3.6	
E15	1	В	66	57.7	57.7	61.5	3.8	
E13	1	В	66	60.7	60.7	63.7	3.0	
E17	1	В	66	65.5	65.5	66.4	0.9	Yes
E17	0	D	51	41.3	41.3	42.1	0.9	163
E19	1	В	66	59.3	59.3	63.0	3.7	
E20	1	В	66	66.3	66.3	67.1	0.8	Yes
E21	1	В	66	65.8	65.8	66.8	1.0	Yes
E22	1	В	66	67.4	67.4	68.7	1.3	Yes
E23	0	D	51	43.2	43.2	44.6	1.4	103
E24	1	В	66	59.9	59.9	63.4	3.5	
E25	1	В	66	65.9	66.0	64.5	-1.4	
E26	1	В	66	64.6	64.7	63.5	-1.1	
E27	1	В	66	63.1	63.2	62.7	-0.4	
E28	1	В	66	59.5	59.6	60.4	0.9	
E29	0	D	51	33.2	33.3	35.1	1.9	
E30	6	В	66	55.9	56.0	60.1	4.2	
E31	0	D	51	38.3	38.4	40.9	2.6	
E32	7	В	66	56.7	56.9	60.3	3.6	
E33	2	В	66	66.7	66.8	70.6	3.9	Yes
E34	2	В	66	66.7	66.8	70.5	3.8	Yes
E35	2	В	66	66.9	67.0	70.6	3.7	Yes
E36	2	В	66	67.0	67.1	70.6	3.6	Yes
E37	2	В	66	66.9	67.1	70.4	3.5	Yes
E38	2	В	66	66.9	67.0	70.4	3.5	Yes
E39	2	В	66	52.5	52.6	56.0	3.5	
E40	2	В	66	48.4	48.5	50.9	2.5	
E41	2	В	66	48.1	48.2	51.1	3.0	
E42	2	В	66	51.3	51.4	54.0	2.7	
E43	2	В	66	47.6	47.7	50.0	2.4	
E44	2	В	66	55.6	55.8	58.8	3.2	
E45	2	В	66	55.5	55.6	58.9	3.4	
E46	2	В	66	56.7	56.8	59.9	3.2	
E47	2	В	66	58.1	58.2	61.2	3.1	
E48	2	В	66	59.6	59.7	62.6	3.0	
E49	2	В	66	55.8	55.9	59.0	3.2	
E50	2	В	66	57.1	57.2	60.2	3.1	
E51	2	В	66	58.7	58.8	61.6	2.9	
E52	2	В	66	59.8	59.9	62.5	2.7	
E53	2	В	66	61.2	61.3	63.4	2.2	
E54	2	В	66	58.3	58.4	60.9	2.6	
E55	2	В	66	67.9	67.9	68.0	0.1	Yes
E56	2	В	66	63.9	63.9	63.9	0.0	
E57	2	В	66	61.3	61.3	61.9	0.6	
E58	5	В	66	70.7	70.8	70.3	-0.4	Yes
E59	2	В	66	61.0	61.0	61.2	0.2	

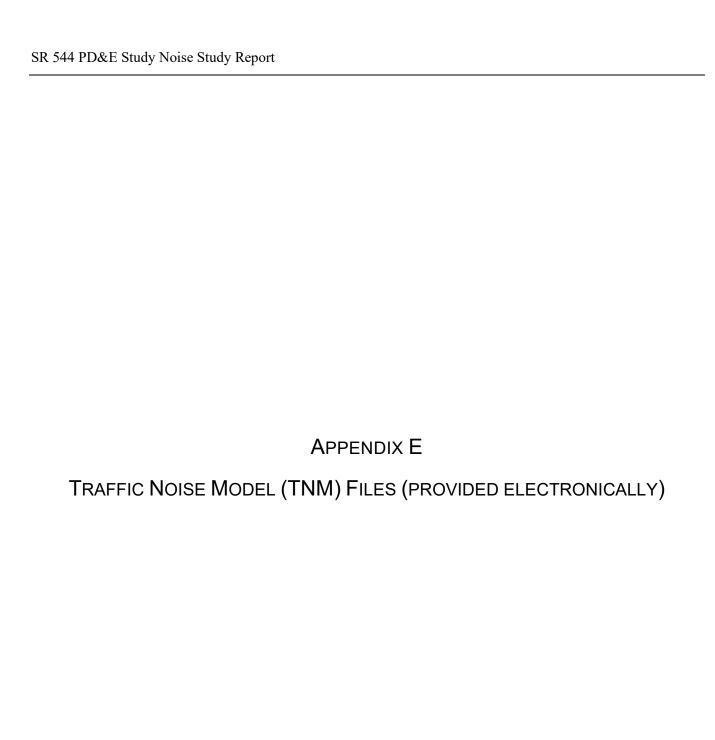
	Receptor E60	Dwelling Units	NAC Category	Impact Criteria	Existing (2019) Noise Levels (dB(A)) 65.9	No Build (2045) Noise Levels (dB(A)) 65.9	Build (2045) Noise Levels (dB(A)) 64.8	Increase over Existing (Build - Existing)	Impact (Yes/No)
	E61	2	В	66	68.7	68.7	67.4	-1.3	Yes
	E62	1	В	66	71.7	71.7	70.4	-1.3	Yes
	E63	1	В	66	70.5	70.9	69.4	-1.1	Yes
	E64	1	В	66	71.0	70.9	70.5	-0.5	Yes
	E65	1	В	66	68.7	69.1	68.6	-0.1	Yes
	E66	1	В	66	68.6	69.0	68.6	0.0	Yes
-	E67	1	В	66	70.9	71.3	70.7	-0.2	Yes
	E68	1	В	66	70.8	71.2	70.4	-0.4	Yes
	E69	1	В	66	69.4	69.9	69.0	-0.4	Yes
	E70	1	В	66	71.3	71.7	70.8	-0.5	Yes
	E71	1	В	66	66.2	66.7	65.6	-0.6	
	E72	1	В	66	64.3	64.7	64.0	-0.3	
	E73	1	В	66	64.2	64.6	64.0	-0.2	
	E74	1	В	66	64.6	65.0	64.4	-0.2	
	E75	1	В	66	65.1	65.5	64.8	-0.3	
	E76	1	В	66	65.3	65.7	64.8	-0.5	
	E77	1	В	66	64.5	64.9	63.8	-0.7	
	E78	1	В	66	62.6	63.0	61.9	-0.7	
	E79	1	В	66	60.8	61.2	61.0	0.2	
	E80	1	В	66	61.0	61.4	61.8	0.8	
	E81	1	В	66	61.4	61.9	62.1	0.7	
	E82	1	В	66	61.9	62.3	62.2	0.3	
	E83	1	В	66	61.0	61.5	61.4	0.4	
	E84	1	В	66	61.7	62.1	61.5	-0.2	
	E85	1	В	66	67.2	67.6	65.9	-1.3	
	E86	1	В	66	69.6	70.0	68.4	-1.2	Yes
	E87	1	В	66	69.5	69.9	68.1	-1.4	Yes
	E88	1	В	66	69.5	69.9	68.0	-1.5	Yes
	E89	1	В	66	69.4	69.9	68.2	-1.2	Yes
	E90	1	В	66	68.4	68.9	67.5	-0.9	Yes
	E91	1	В	66	68.4	68.8	67.7	-0.7	Yes
	E92	1	В	66	67.9	68.4	67.8	-0.1	Yes
	E93	1	В	66	68.8	69.2	68.4	-0.4	Yes
	E94	1	В	66	68.0	68.4	67.5	-0.5	Yes
	E95	1	В	66	66.8	67.3	66.4	-0.4	Yes
	E96	1	В	66	61.8	62.2	62.8	1.0	
	E97	1	В	66	61.9	62.3	61.7	-0.2	
	E98	1	В	66	58.3	58.7	59.4	1.1	
	E99	1	В	66	58.6	59.1	59.7	1.1	
	E100	1	В	66	58.5	58.9	59.8	1.3	
	E101	1	В	66	58.7	59.1	60.1	1.4	
	E102	1	В	66	58.5	58.9	60.0	1.5	
<u> </u>	E103	1	В	66	58.5	58.9	59.9	1.4	
<u> </u>	E104	1	В	66	58.5	59.0	60.0	1.5	
<u> </u>	E105	1	В	66	58.3	58.8	59.9	1.6	
<u> </u>	E106	1	В	66	58.5	59.0	60.0	1.5	
<u> </u>	E107	1	В	66	58.9	59.3	60.7	1.8	
<u> </u>	E108	0	С	66	61.6	62.1	62.3	0.7	
<u> </u>	E109	1	В	66	65.3	65.9	65.1	-0.2	
<u> </u>	E110	1	В	66	67.5	68.1	66.8	-0.7	Yes
	E111	1	В	66	68.4	68.9	67.5	-0.9	Yes
	E112	1	В	66	68.4	69.0	67.3	-1.1	Yes
<u> </u>	E113	1	В	66	68.3	68.9	67.2	-1.1	Yes
<u> </u>	E114	1	В	66	67.4	68.0	66.3	-1.1	Yes
<u> </u>	E115	1	В	66	68.5	69.0	67.5	-1.0	Yes
<u> </u>	E116	1	В	66	68.1	68.7	67.3	-0.8	Yes
I	E117	1	В	66	68.1	68.7	67.5	-0.6	Yes

Receptor	Dwelling Units	NAC Category	Impact Criteria	Existing (2019) Noise Levels (dB(A))	No Build (2045) Noise Levels (dB(A))	Build (2045) Noise Levels (dB(A))	Increase over Existing (Build - Existing)	Impact (Yes/No)
E119	1	В	66	66.3	66.9	66.0	-0.3	Yes
E120	1	В	66	65.5	66.0	65.6	0.1	
E121	1	В	66	62.3	62.9	63.6	1.3	
E122	1	В	66	62.6	63.2	63.3	0.7	
E123	1	В	66	59.1	59.7	61.3	2.2	
E124	1	В	66	59.7	60.2	61.7	2.0	
E125	1	В	66	59.4	60.0	61.5	2.1	
E126	1	В	66	59.2	59.7	61.4	2.2	
E127	1	В	66	59.8	60.3	61.9	2.1	
E128	0	С	66	68.1	69.5	65.3	-2.8	
E129	0	D	51	34.7	36.2	37.1	2.4	
E130	1	В	66	58.0	59.0	62.9	4.9	V
E131	1	В	66	68.1	70.0	73.9	5.8	Yes
E132	1	В	66	68.4 64.1	70.4	73.9 70.8	5.5	Yes
E133	1	В	66		66.3		6.7	Yes
E134	1 1	B B	66 66	68.9	71.0	73.8	4.9	Yes
E135		<del>                                     </del>	66 66	67.7 68.3	71.1	72.5	4.8	Yes
E136	1	В			72.2	72.9	4.6	Yes
E137 E138	1 1	B B	66 66	68.6 60.4	72.5 62.0	<b>72.6</b> 65.9	4.0 5.5	Yes
	1	В	66	59.3		65.2	5.9	
E139 E140	1	В	66	60.2	61.4 62.8	64.9	4.7	
		<del>                                     </del>	66	58.7				
E141	1	В			61.8	63.2	4.5	
E142 E143	1 1	B B	66 66	59.6 59.2	63.2 63.0	64.0 63.4	4.4	
E143	1	В	66	59.8	63.6		1	
E144 E145	1	В	66	68.0	72.0	63.8 <b>71.9</b>	4.0 3.9	Yes
E145	1	В	66	67.1	71.0	70.8	3.9	
E146	1	В	66	69.2	73.1	73.4	4.2	Yes Yes
E148	1	В	66	61.5	65.5	65.6	4.1	163
E149	1	В	66	61.0	65.0	65.1	4.1	
E150	1	В	66	67.6	71.6	72.2	4.6	Yes
E151	0	D	51	35.4	39.4	40.4	5.0	163
E152	1	В	66	64.4	68.3	68.9	4.5	Yes
E153	1	В	66	65.0	68.9	71.3	6.3	Yes
W1	1	В	66	52.6	52.6	57.2	4.6	103
W2	3	В	66	55.6	55.6	58.9	3.3	
W3	1	В	66	65.0	65.0	67.8	2.8	Yes
W4	1	В	66	65.6	65.6	67.7	2.1	Yes
W5	1	В	66	66.4	66.4	68.4	2.0	Yes
W6	1	В	66	64.8	64.8	66.6	1.8	Yes
W7	1	В	66	65.2	65.2	67.1	1.9	Yes
W8	1	В	66	64.6	64.6	66.5	1.9	Yes
W9	1	В	66	65.9	66.0	67.9	2.0	Yes
W10	1	В	66	65.7	65.7	67.8	2.1	Yes
W11	1	В	66	62.5	62.5	65.1	2.6	
W12	1	В	66	54.4	54.5	58.2	3.8	
W13	1	В	66	55.5	55.5	59.5	4.0	
W14	1	В	66	53.3	53.3	57.1	3.8	
W15	1	В	66	53.3	53.3	57.1	3.8	
W16	1	В	66	53.3	53.3	57.1	3.8	
W17	1	В	66	53.4	53.4	57.0	3.6	
W18	1	В	66	53.4	53.4	56.8	3.4	
W19	1	В	66	53.7	53.7	57.0	3.3	
W20	1	В	66	53.2	53.2	56.4	3.2	
W21	1	В	66	53.0	53.1	56.3	3.3	
W22	1	В	66	55.5	55.5	59.3	3.8	
W23	1	В	66	54.7	54.7	58.6	3.9	
W24	1	В	66	58.0	58.0	62.7	4.7	

Receptor	Dwelling Units	NAC Category	Impact Criteria	Existing (2019) Noise Levels (dB(A))	No Build (2045) Noise Levels (dB(A))	Build (2045) Noise Levels (dB(A))	Increase over Existing (Build - Existing)	Impact (Yes/No)
W25	1	В	66	60.9	60.9	64.7	3.8	
W26	1	В	66	56.3	56.3	61.2	4.9	
W27	1	В	66	57.9	57.9	63.0	5.1	
W28	1	В	66	55.6	55.6	60.2	4.6	
W29	1	В	66	61.7	61.7	65.5	3.8	
W30	1	В	66	61.6	61.6	65.5	3.9	
W31	1	В	66	57.4	57.4	62.7	5.3	
W32	2	В	66	54.3	54.3	58.8	4.5	
W33	1	В	66	55.9	56.0	60.5	4.6	
W34	1	В	66	58.0	58.0	63.1	5.1	
W35	1	В	66	60.1	60.2	62.6	2.5	
W36	1	В	66	58.5	58.5	60.3	1.8	
W37	0	D	51	35.8	35.9	36.0	0.2	
W38	0	С	66	65.8	65.9	66.3	0.5	Yes
W39	1	В	66	57.7	57.8	59.9	2.2	
W40	1	В	66	63.4	63.5	63.9	0.5	
W41	1	В	66	59.8	60.0	61.3	1.5	
W42	1	В	66	63.9	64.3	64.7	0.8	
W43 W44	1	В	66	61.3	61.8	62.4	0.7	
	1	В	66	59.8	60.2	60.5	ł	
W45	1	В	66	58.2 61.5	58.6	59.2	1.0	
W46	1	В	66		61.9	62.0	0.5	
W47 W48		B B	66 66	61.8 62.4	62.2	62.3 62.9	0.5 0.5	
W48 W49	1 1	В	66	62.4	62.8 63.3	63.4	0.5	
W50	1	В	66	63.5	63.9	63.9	0.5	
W50 W51	1	В	66	64.1	64.5	64.6	0.4	
W51 W52	1	В	66	64.5	64.9	65.3	0.8	
W52 W53	1	В	66	66.7	67.1	68.2	1.5	Yes
W54	1	В	66	67.6	68.0	69.6	2.0	Yes
W55	1	В	66	67.5	67.9	69.5	2.0	Yes
W56	1	В	66	54.8	55.2	56.0	1.2	163
W57	1	В	66	55.9	56.3	57.1	1.2	
W58	1	В	66	56.7	57.1	58.4	1.7	
W59	1	В	66	57.3	57.7	58.8	1.5	
W60	1	В	66	59.1	59.5	60.5	1.4	
W61	1	В	66	65.2	65.6	65.5	0.3	
W62	1	В	66	63.9	64.3	65.5	1.6	
W63	1	В	66	59.3	59.8	61.1	1.8	
W64	1	В	66	57.3	57.7	59.6	2.3	
W65	1	В	66	61.5	62.0	59.2	-2.3	
W66	0	С	66	58.2	58.6	58.2	0.0	
W67	0	D	51	31.7	32.3	32.9	1.2	
W68	1	В	66	57.3	57.7	62.3	5.0	
W69	1	В	66	58.7	59.1	63.9	5.2	
W70	1	В	66	59.1	59.5	64.5	5.4	
W71	1	В	66	59.9	60.3	65.5	5.6	
W72	1	В	66	60.6	60.9	66.2	5.6	Yes
W73	1	В	66	61.1	61.3	66.7	5.6	Yes
W74	1	В	66	62.1	62.3	68.6	6.5	Yes
W75	1	В	66	62.8	62.9	70.1	7.3	Yes
W76	1	В	66	63.5	63.6	71.0	7.5	Yes
W77	1	В	66	64.3	64.3	71.6	7.3	Yes
W78	1	В	66	65.2	65.3	72.1	6.9	Yes
W79	1	В	66	66.1	66.1	72.2	6.1	Yes
W80	1	В	66	65.7	65.7	70.8	5.1	Yes
W81	1	В	66	67.8	67.8	72.5	4.7	Yes
W82	1	В	66	66.6	66.6	69.9	3.3	Yes
W83	1	В	66	53.0	53.5	57.6	4.6	

Receptor	Dwelling Units	NAC Category	Impact Criteria	Existing (2019) Noise Levels (dB(A))	No Build (2045) Noise Levels (dB(A))	Build (2045) Noise Levels (dB(A))	Increase over Existing (Build - Existing)	Impact (Yes/No)
W84	1	В	66	53.8	54.2	58.7	4.9	
W85	1	В	66	55.5	55.9	60.3	4.8	
W86	1	В	66	56.9	57.2	61.9	5.0	
W87	1	В	66	57.6	57.9	62.7	5.1	
W88	1	В	66	58.2	58.4	63.2	5.0	
W89	1	В	66	59.3	59.4	64.2	4.9	
W90	1	В	66	59.0	59.1	63.3	4.3	
W91	1	В	66	59.5	59.6	63.5	4.0	
W92	1	В	66	57.8	57.9	62.4	4.6	
W93	1	В	66	61.5	61.5	65.6	4.1	
W94	1	В	66	59.6	59.7	64.3	4.7	
W95	1	В	66	59.7	59.7	64.7	5.0	
W96	1	В	66	60.2	60.3	66.0	5.8	Yes
W97	1	В	66	63.4	63.4	68.7	5.3	Yes
W98	1	В	66	61.6	61.6	66.8	5.2	Yes
W99	1	В	66	62.0	62.0	66.6	4.6	Yes
W100	1	В	66	62.8	62.8	66.2	3.4	Yes
W101	1	В	66	59.0	59.0	64.7	5.7	
W102	1	В	66	59.4	59.5	64.8	5.4	
W103	1	В	66	59.5	59.6	64.3	4.8	
W104	1	В	66	60.3	60.4	64.4	4.1	
W105	1	В	66	57.3	59.4	61.8	4.5	
W106	1	В	66	59.0	61.1	64.4	5.4	
W107	1	В	66	52.8	55.0	58.2	5.4	
W108	1	В	66	58.1	60.2	63.9	5.8	
W109	1	В	66	59.3	61.4	65.0	5.7	
W110	1	В	66	60.4	62.6	66.1	5.7	Yes
W111	1	В	66	61.8	63.9	67.3	5.5	Yes
W112	1	В	66	61.5	64.3	69.0	7.5	Yes
W113	1	В	66	66.2	70.2	72.4	6.2	Yes
W114	1	В	66	67.8	71.7	72.8	5.0	Yes
W115	1	В	66	68.4	72.3	73.4	5.0	Yes
W116	1	В	66	68.2	72.2	73.2	5.0	Yes
W117	1	В	66	66.4	70.4	71.0	4.6	Yes
W118	1	В	66	66.5	70.5	71.0	4.5	Yes
W119	1	В	66	66.5	70.5	71.0	4.5	Yes
W120	1	В	66	63.8	67.8	68.3	4.5	Yes
W121	1	В	66	53.1	55.2	58.6	5.5	
W122	1	В	66	53.8	56.0	59.5	5.7	
W123	1	В	66	54.3	56.5	60.0	5.7	
W124	1	В	66	55.1	57.3	60.6	5.5	
W125	1	В	66	55.6	57.9	60.9	5.3	
W126	1	В	66	55.8	58.6	61.1	5.3	
W127	1	В	66	55.3	58.0	60.8	5.5	
W128	1	В	66	57.3	60.9	62.7	5.4	
W129	1	В	66	60.7	64.6	65.1	4.4	
W130	1	В	66	60.5	64.4	64.5	4.0	
W131	1	В	66	61.3	65.3	65.2	3.9	
W132	1	В	66	62.0	66.0	65.7	3.7	
W133	1	В	66	60.3	64.2	63.5	3.2	
W134	1	В	66	60.7	64.7	64.4	3.7	
W135	1	В	66	58.9	62.8	63.1	4.2	
W136	1	В	66	58.5	62.5	63.1	4.6	
W137	1	В	66	56.8	60.7	61.3	4.5	
W138	0	D	51	35.4	39.4	40.1	4.7	
W139	0	С	66	56.7	60.6	61.8	5.1	
W140	0	D	51	39.0	43.0	45.3	6.3	
U1	1	В	66	55.9	58.9	58.6	2.7	
U2a	0	С	66	68.3	71.4	69.8	1.5	Yes

Receptor	Dwelling Units	NAC Category	Impact Criteria	Existing (2019) Noise Levels (dB(A))	No Build (2045) Noise Levels (dB(A))	Build (2045) Noise Levels (dB(A))	Increase over Existing (Build - Existing)	Impact (Yes/No)
U2b	0	D	51	42.9	46.1	45.5	2.6	
U3	0	E	71	57.4	59.7	57.5	0.1	
U4	0	D	51	43.5	45.2	43.9	0.4	
U5	1	В	66	62.6	64.0	65.8	3.2	
U6	0	E	71	63.1	64.6	64.7	1.6	



# APPENDIX D Florida Master Site File Forms

**CRAS Addendum** 

FPID No.: 440273-1-22-01

#### Page 1

☐ Original ☑ Update



## HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO03077
Field Date	5-19-2023
Form Date	6-2-2023
Recorder #	

**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) _2208 Peninsular Drive  Survey Project Name _CRAS SR 544 fr Avenue T NW to SR 17.  National Register Category (please check one) \_Building \_structure \_c  Ownership: _private-profit _private-nonprofit \_private-individual _private-nonspecific	listrict site object
Address: 2208 Direction Street Name Peninsular	Street Type Suffix Direction
Cross Streets (nearest / between)         USGS 7.5 Map Name         WINTER HAVEN         USGS           City / Town (within 3 miles)         Haines City         In City Limits? ☑y           Township         27S         Range         27E         Section         32         1/4 section: ☐NW           Tax Parcel         #         27-27-32-800000-000153         Subdivision Name         Totten & Maddox           UTM Coordinates:         Zone         ☐16 ☑17         Easting 4 3 8 1 3 4         Northing           Other Coordinates:         X:         Y:         Coordinates	□SW         □SE         □NE         Irregular-name:         □         □         Landgrant         □         □         Block         □         Lot         □
Name of Public Tract (e.g., park)	
HISTO	RY
Current Use         From           Other Use         From           Moves:         □yes ☒no □unknown Date:         Original addl           Alterations:         ☑yes □no □unknown Date:         Nature □R           Additions:         □yes ☒no □unknown Date:         Nature □R	(year):       1915       To (year):       CURR         (year):       To (year):       To (year):         (year):       To (year):       To (year):         coofing, partially encl. porch       Description:         uilder (last name first):       Description:
Is the Resource Affected by a Local Preservation Ordinance?  per property p	⊠unknown Describe
DESCRIP	TION
Roof Material(s) 1. Composition shingles 2.  Roof secondary strucs. (dormers etc.) 1. Hip dormer	3 3
Windows (types, materials, etc.)  DHS, wood, single, paired, 1/1; Picture, wood, singunits	gle, central fixed pane flanked w/ 1/1 SHS
Distinguishing Architectural Features (exterior or interior ornaments)  Wide overhanging eaves w/ boxed rafter tails, corne foundation lattice  Ancillary Features / Outbuildings (record outbuildings, major landscape features; use of the corne foundation in the corne features is a corne feature of the corne features of the corne features is a corne feature of the corne features of the corne fea	
Non-historic detached garage	,
DUD HOE ONLY	
DHR USE ONLY OFFICIAL EVA	
NR List Date SHPO – Appears to meet criteria for NR listing: ☐yes ☐  KEEPER – Determined eligible: ☐yes ☐	

☐Owner Objection

NR Criteria for Evaluation: ☐a ☐b ☐c

d (see National Register Bulletin 15, p. 2)

#### HISTORICAL STRUCTURE FORM

Site #8 **PO03077** 

DESCRIPTION (continued)
Chimney: No. 1 Chimney Material(s): 1. Brick 2.
Structural System(s):         1. Wood frame         2
Foundation Type(s): 1. Piers 2
Foundation Material(s): 1. Other 2. Rusticated concrete  Main Entrance (stylistic details)
E ELEV: single wooden door w/ inset rectangular light and screen door, beneath a half hip roof
Porch Descriptions (types, locations, roof types, etc.)
E/ENTRANCE: open, wrap-around, beneath a half hip roof w/ squared column supports and balustrade (S ELEV segment of porch enclosed)
Condition (overall resource condition): ☑ excellent ☐ good ☐ fair ☐ deteriorated ☐ ruinous  Narrative Description of Resource
A 2.5-story Colonial Revival style building w/ minimal material alterations. A segment of the wrap around porch (S ELEV) has been enclosed; however, this does not detract from the overall design and massing of the residence.
Archaeological Remains
RESEARCH METHODS (select 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
Soldier methods (describe) USDA historic aerial photographs (PALMM)  Piblic graphic Defendance (vi. FMOE array with the last of the start of the st
Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)
Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/
OPINION OF RESOURCE SIGNIFICANCE
Appears to meet the criteria for National Register listing individually?  Appears to meet the criteria for National Register listing as part of a district?  Explanation of Evaluation (required, whether significant or not; use separate sheet if needed)
The resource appears eligible for listing in the NRHP under Criterion C in the area of Architecture as a minimally altered example of a Colonial Revival style residence in Haines
City & contributes to the Haines City MPL (Survey No. 6287).  Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. <u>Architecture</u> 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 All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097
2) Document type Maintaining organization
Document description File or accession #'s
RECORDER INFORMATION
Recorder Name Savannah Y. Finch Affiliation Archaeological Consultants Inc
Recorder Contact Information 8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net

## Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE

When submitting an image, it must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.



#### **PHOTOGRAPHS**



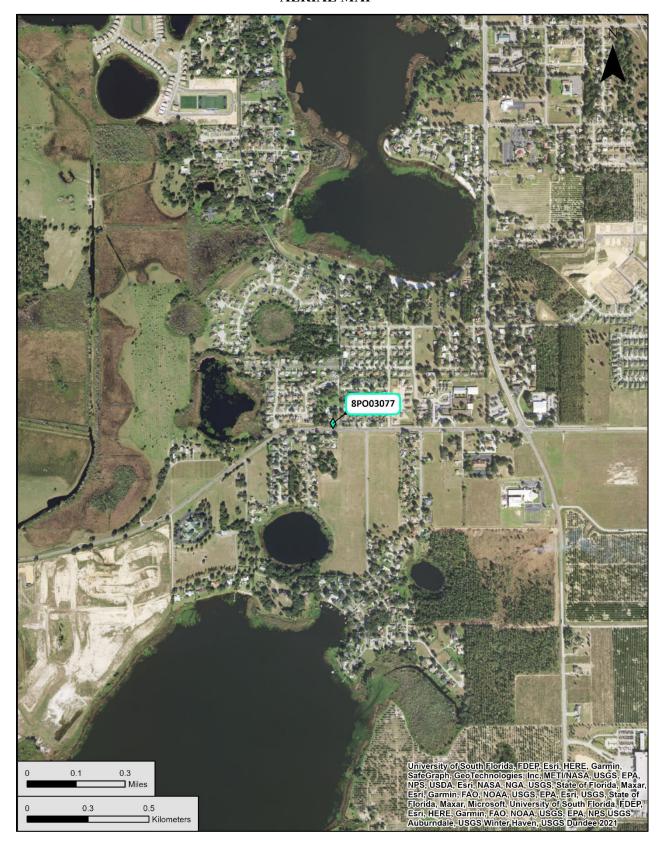








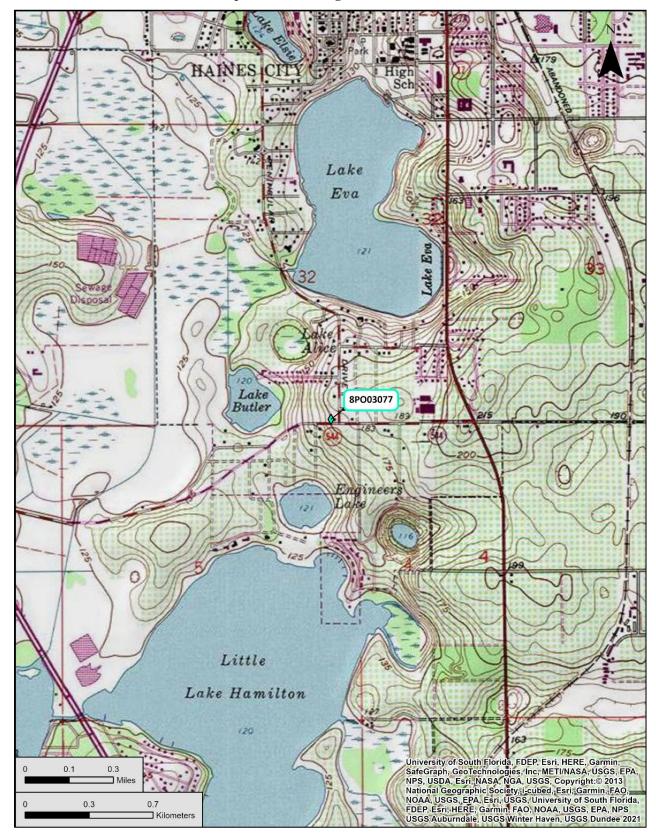
# **AERIAL MAP**







USGS Winter Haven Township 27 South, Range 27 East, Section 32



#### Page 1

☐ Original ☑ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO03079
Field Date	5-19-2023
Form Date	6-2-2023
Recorder #	

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

Survey Project Name CRAS SR 544 fr Avenue T NW National Register Category (please check one) ■ building structure structure structure building structure st	Multiple Listing (DHR only)  Survey # (DHR only)  Tucture
0: 11 1	ΓΙΟΝ & MAPPING Street Type Suffix Direction
Address: 128 Scenic	Highway
Cross Streets (nearest / between)	HCCC Data 1050 Plat or Other Man, DD 10 / DC 40
City / Town (within 2 miles) Haines City In City	USGS Date 1959 Plat or Other Map PB 12 / PG 40 Limits? ⊠yes □no □unknown County Polk
Township 285 Pango 27F Section 5 1/ cond	ion: NW SW SE NE Irregular-name:
Tay Parcel # 27-27-32-800000-000153	I andgrapt
Subdivision Name Daugherty's Subdivision	Landgrant Lot 1
UTM Coordinates: Zone 16 ×17 Easting 4 3 8 0 5	7 Northing 3 1 1 0 6 6 6 9 6
Other Coordinates: X: Y:	Coordinate System & Datum
Name of Public Tract (e.g., park)	
, .	
	HISTORY
	From (year): 1925 To (year): CURR  From (year): To (year): To (year): To (year):
Architect (last name first):	Builder (last name first):
Ownership History (especially original owner, dates, profession, etc.)	
Julia Hodges (1983); Julia Herring (1980);	Arlis & Julia Herring (1979); Steven C. Owen
Is the Resource Affected by a Local Preservation Ordinance?	
D	ESCRIPTION
Style Craftsman Ext	erior Plan Irregular Number of Stories 2
Exterior Fabric(s) 1. Novelty siding 2.	3
Roof Type(s) 1. Clipped gable 2.	Gable 3
Roof Material(s) 1. Composition shingles 2.	3
Roof secondary strucs. (dormers etc.) 1.	2
Windows (types, materials, etc.)  DHS, wood, single, paired, grouped (3), 1/	1, 3/1, 6/1, 8/1
Distinguishing Architectural Features (exterior or interior ornaments)  Overhanging eaves w/ exposed rafter tails,	
gable vents, wood porch supports on brick	wooden brackets, wood window/door trim, rectangular piers
	piers
Ancillary Features / Outbuildings (record outbuildings, major landscape Historic detached garage	piers
Ancillary Features / Outbuildings (record outbuildings, major landscape	piers
Ancillary Features / Outbuildings (record outbuildings, major landscape Historic detached garage	piers

DESCRIPTION (continued)
Chimney: No. 1 Chimney Material(s): 1. Brick 2. Structural System(s): 1. Wood frame 2. 3. Foundation Type(s): 1. Continuous 2. Foundation Material(s): 1. Brick 2. Main Entrance (stylistic details)  N ELEV: single wooden door w/ 9 inset lights and screen door, beneath a clipped gable roof
Porch Descriptions (types, locations, roof types, etc.)  N/ENTRANCE: open, wrap-around, beneath a clipped gable roof w/ wooden porch supports on brick piers and lined w/ brick half walls
Condition (overall resource condition): ■ excellent □ good □ fair □ deteriorated □ ruinous  Narrative Description of Resource
A two-story Craftsman style building w/ a porte-cochere on the E ELEV with a second story room above. The building has not been significantly altered and appears to retain most of the original materials/design features.
Archaeological Remains Check if Archaeological Form Completed
RESEARCH METHODS (select 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) ☐ USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/
OPINION OF RESOURCE SIGNIFICANCE
Appears to meet the criteria for National Register listing individually?  Appears to meet the criteria for National Register listing as part of a district?  Explanation of Evaluation (required, whether significant or not; use separate sheet if needed)  The resource appears eligible for listing in the NHRP under Criterion C in the area of
Architecture as a minimally altered example of a Craftsman style residence in Haines City & contributes to the Haines City MPL (Survey No. 6287).
Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)  1. Architecture  3
2 4 6
DOCUMENTATION
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  Document type All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097
2) Document type Maintaining organization Document description File or accession #'s
RECORDER INFORMATION
Recorder Name Savannah Y. Finch Affiliation Archaeological Consultants Inc  Recorder Contact Information (address/phone / fax / e-mail)  Affiliation Archaeological Consultants Inc  Sarasota, FL/ 34240 /aciflorida@comcast.net

# Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE

When submitting an image, it must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.



# **PHOTOGRAPHS**



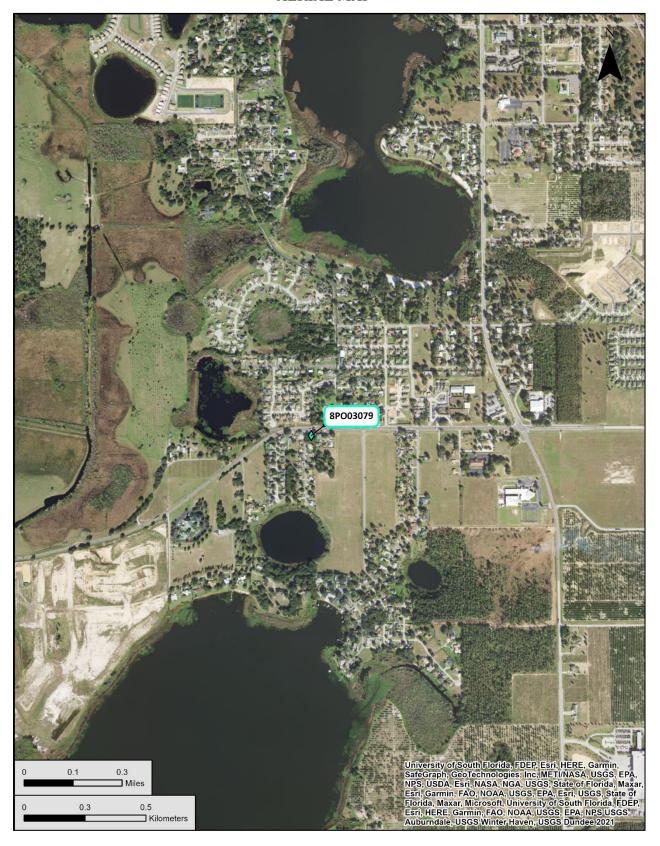








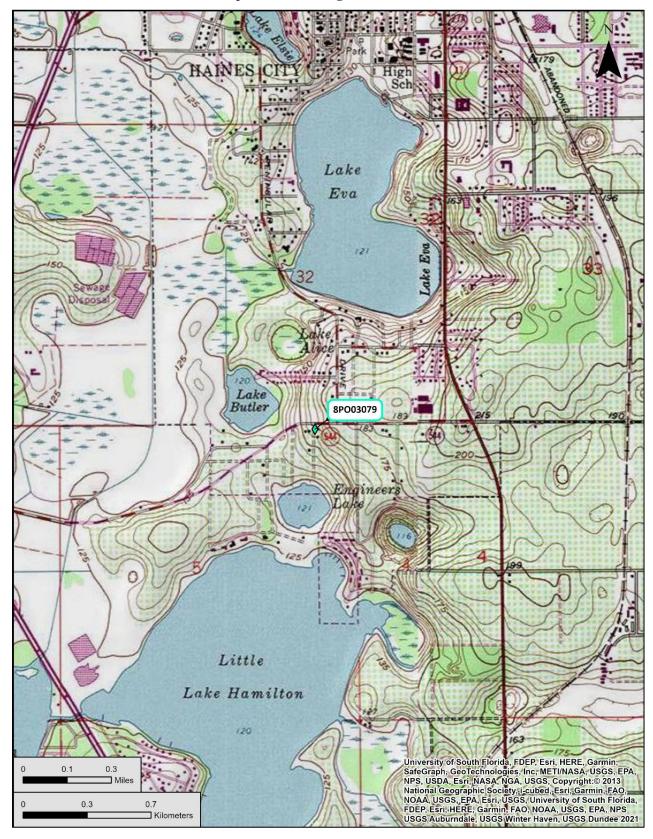
# **AERIAL MAP**







### USGS Winter Haven Township 28 South, Range 27 East, Section 5



#### Page 1



# RESOURCE GROUP FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site #81	2009983
Field Date_	5-19-2023
Form Date	5-31-2023
Recorder#	

Consult the Guide to the Resource Group Form for additional instructions

NOTE: Use this form to document districts, landscapes, building complexes and linear resources as described in the box below. Cultural resources contributing to the Resource Group should also be documented individually at the Site File. Do not use this form for National Register multiple property submissions (MPSs). National Register MPSs are treated as Site File manuscripts and are associated with the individual resources included under the MPS cover using the Site File manuscript number.

	Check ONE box that best describes the Resource Group:		
Historic district (NR category "district"): buildings and NR structures only: NO archaeological sites  Archaeological district (NR category "district"): archaeological sites only: NO buildings or NR structures  Mixed district (NR category "district"): includes more than one type of cultural resource (example: archaeological sites and buildings)  Building complex (NR category usually "building(s)"): multiple buildings in close spatial and functional association  Designed historic landscape (NR category usually "district" or "site"): can include multiple resources (see National Register Bulletin #18, page 2 for more detailed definition and examples: e.g. parks, golf courses, campuses, resorts, etc.)  Rural historic landscape (NR category usually "district" or "site"): can include multiple resources and resources not formally designed (see National Register Bulletin #30, Guidelines for Evaluating and Documenting Rural Historic Landscapes for more detailed definition and examples: e.g. farmsteads, fish camps, lumber camps, traditional ceremonial sites, etc.)  Linear resource (NR category usually "structure"): Linear resources are a special type of structure or historic landscape and can include canals, railways, roads, etc.			
Project NameCRAS National Register Cate Linear Resource Type	me_Florence Citrus Growers Association		
LOCATION & MAPPING			
County or Counties (d Name of Public Tract 1) Township 2) Township 3) Township 4) Township USGS 7.5' Map(s) 1) Plat, Aerial, or Other M Landgrant Verbal Description of	les) _Winter Haven In Current City Limits? ⊠yes □no □unknown (do not abbreviate) _Polk		
	rest, Ware Avenue NE to the north, and 2nd Street NE to the east.	Railioau	
- DUD I	AFFIGURE EVALUATION DUD HOT ONLY		
DHR U	USE ONLY OFFICIAL EVALUATION DHR USE ONLY		
NR List Date	SHPO – Appears to meet criteria for NR listing: noinsufficient info In KEEPER – Determined eligible: In Date No.	it	

Owner Objection

NR Criteria for Evaluation: 

a 

b 

c 

d (see National Register Bulletin 15, p. 2)

HISTORY & DESCRIPTION
Construction Year: approximately year listed or earlier year listed or later  Architect/Designer: Builder:
Architect/Designer: Builder:
Narrative Description (National Register Bulletin 16A pp. 33-34; attach supplementary sheets if needed)  See continuation sheet.
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 ☐ historic photos ☐ interior inspection ☐ HABS/HAER record search ☑other methods (specify) ☐ USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF Manuscript # if relevant) Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/
OPINION OF RESOURCE SIGNIFICANCE
Potentially eligible individually for National Register of Historic Places?     Syes
Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)  1
DOCUMENTATION
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  Document type All materials at one location  Document description Files, photos, research, document  File or accession #'s P19097
2) Document type Maintaining organization File or accession #'s
RECORDER INFORMATION
Recorder Name Savannah Y. Finch Affiliation Archaeological Consultants Inc  Recorder Contact Information (address/phone/fax/e-mail)  Affiliation Archaeological Consultants Inc  Sarasota, FL/ 34240 /aciflorida@comcast.net

# Required Attachments

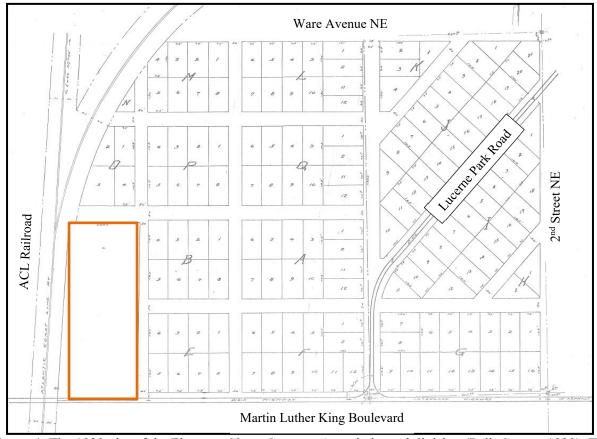
- **1** PHOTOCOPY OF USGS 7.5' MAP WITH DISTRICT BOUNDARY CLEARLY MARKED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP WITH RESOURCES MAPPED & LABELED
- **3 TABULATION OF ALL INCLUDED RESOURCES -** Include name, FMSF #, contributing? Y/N, resource category, street address or other location information if no address.
- **4** PHOTOS OF GENERAL STREETSCAPE OR VIEWS (Optional: aerial photos, views of typical resources) When submitting images, they must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital images must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

8PO09983: The Florence Citrus Growers Association Historic District is located in Sections 16 and 17 of Township 28 South, Range 26 East in the Florence Villa community of Winter Haven, Florida (USGS 1959). The proposed boundary for the Florence Citrus Growers Association Historic District was loosely set during the Cultural Resource Assessment Survey (CRAS) in order to determine where the project improvements entered and left the historic district within the project APE. The proposed boundary for the district is bounded by Martin Luther King Boulevard to the south, Ware Avenue NE to the north, 2<sup>nd</sup> Street NE to the east, and the former Atlantic Coast Line (ACL) Railroad to the west, which follows the 1920 subdivision plat (Figure 1). Within the APE, the historic district spans approximately 200 ft from either side of SR 544 (Lucerne Park Road) from Martin Luther King Boulevard in the south to 2<sup>nd</sup> Street NE to the north. During the CRAS, 29 contributing resources (8PO09999 through 8PO10027) were identified within the historic district, as contained within the APE, as well as six non-contributing resources. This was a preliminary determination based on the limited information available at the time. For the purposes of the CRAS, contributing resources included any that were considered historic (constructed in or prior to 1977), while non-historic resources (constructed after 1977) were considered non-contributing. Following additional research, it was determined that there are 11 contributing resources (8PO09999, 8PO10000, 8PO10005, 8PO10007 – 8PO10012, 8PO10014, 8PO10015) contained within the APE for the corridor and ponds. The revised period of significance established for the CRAS Addendum spans from the establishment of the Florence Villa Citrus Growers Association in 1909 to the sale of the Florence Villa Citrus Growers Association facility to General Foods-Birdseye Corporation (GFBC) in 1959. The contributing resources include seven Masonry Vernacular style buildings (8PO10007 - 8PO10012, 8PO10015), three Frame Vernacular style buildings (8PO09999, 8PO10000, 8PO10014), and one Industrial Vernacular style building (8PO10005), constructed between circa (ca.) 1920 – 1958. The remaining 24 buildings within the APE are considered non-contributing resources and include 6 non-historic buildings, five historic resources that have been significantly altered (8PO10002, 8PO10003, 8PO10004, 8PO10016, 8PO10019), and 13 buildings that were constructed outside of the period of significance (8PO10001, 8PO10006, 8PO10013, 8PO10017, 8PO10018, 8PO10020 - 8PO10027). The resources are summarized in Table 1.

**Table 1.** Historic resources within the Florence Citrus Growers Association Historic District (8PO09983) as contained within the APE.

FMSF No.	Address/Site Name	Address/Site Name Year Built Style/Type		Contributing or Non-Contributing
8PO09999	130 Avenue U NE	ca. 1941	Frame Vernacular	Contributing
8PO10000	131 Martin Luther King Blvd NE	ca. 1920	Frame Vernacular	Contributing
8PO10001	105 Martin Luther King Blvd NW	ca. 1960	Commercial	Non-contributing
8PO10002	125 Martin Luther King Blvd NW	ca. 1930	Frame Vernacular	Non-contributing (Altered)
8PO10003	2106 NE 1st Street	ca. 1924	Frame Vernacular	Non-contributing (Altered)
8PO10004	2114 Lucerne Park Road	ca. 1935	Frame Vernacular	Non-contributing (Altered)
8PO10005	2101 1st Street N	ca. 1958	Industrial Vernacular	Contributing
8PO10006	2130 Lucerne Park Road	ca. 1963	Masonry Vernacular	Non-contributing
8PO10007	2206 Lucerne Park Road (Building 1)	ca. 1952	Masonry Vernacular	Contributing
8PO10008	2206 Lucerne Park Road (Building 2)	ca. 1952	Masonry Vernacular	Contributing
8PO10009	2208 Lucerne Park Road	ca. 1947	Masonry Vernacular	Contributing
8PO10010	2220 Lucerne Park Road	ca. 1952	Masonry Vernacular	Contributing
8PO10011	2222 Lucerne Park Road	ca. 1952	Masonry Vernacular	Contributing
8PO10012	2244 Lucerne Park Road	ca. 1952	Masonry Vernacular	Contributing

FMSF No.	Address/Site Name	Year Built	Style/Type	Contributing or Non-Contributing
8PO10013	2250 Lucerne Park Road/ Pentecostal Church of God	ca. 1968	Masonry Vernacular	Non-contributing
8PO10014	2137 Lucerne Park Road	ca. 1925	Frame Vernacular	Contributing
8PO10015	0 Lucerne Park Road	ca. 1953	Masonry Vernacular	Contributing
8PO10016	101 Avenue V NW	ca. 1930	Frame Vernacular	Non-contributing (Altered)
8PO10017	2255 1st Street N	ca. 1969	Ranch	Non-contributing
8PO10018	2207 Lucerne Park Road	ca. 1965	Masonry Vernacular	Non-contributing
8PO10019	2219 Lucerne Park Road	ca. 1935	Masonry Vernacular	Non-contributing (Altered)
8PO10020	2221 Lucerne Park Road (Building 1)	ca. 1974	Masonry Vernacular	Non-contributing
8PO10021	2221 Lucerne Park Road (Building 2)	ca. 1974	Masonry Vernacular	Non-contributing
8PO10022	2245 Lucerne Park Road	ca. 1964	Masonry Vernacular	Non-contributing
8PO10023	2247 Lucerne Park Road	ca. 1963	Masonry Vernacular	Non-contributing
8PO10024	2209 Lucerne Park Road	ca. 1965	Masonry Vernacular	Non-contributing
8PO10025	2211 Lucerne Park Road	ca. 1965	Masonry Vernacular	Non-contributing
8PO10026	2213 Lucerne Park Road	ca. 1965	Masonry Vernacular	Non-contributing
8PO10027	244 Ware Avenue NE	ca. 1965	Masonry Vernacular	Non-contributing



**Figure 1.** The 1920 plat of the Florence Citrus Growers Association subdivision (Polk County 1920). The orange rectangle represents the existing Florence Citrus Growers Association packing house lot.

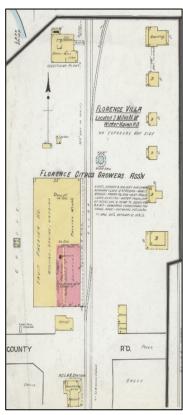
#### **Historic Overview**

The following history includes a variety of similar-sounding names. For the sake of clarity, the town (which was later incorporated into the City of Winter Haven as a neighborhood) will be discussed as "Florence Villa", the agricultural business will be referred to as the "Florence Villa Fruit Company" (FVFC), and the local cooperative will be referred to as the "Florence Villa Citrus Growers Association" (FVCGA) with the understanding that multiple names have been used throughout the years to describe each and that some terms were used to refer to both the company and the local cooperative.

In 1884, the community historically known as Florence Villa was settled approximately 1.5 miles north of Winter Haven. The town, originally called Wahneta, was established by Ohioans Dr. Frederick W. Inman and his wife Florence Jewett Inman (for whom the area was later named). Their exact arrival date is unclear, but an article published in the local Courier Informant newspaper in March of 1891 stated that the couple had been living in central Florida for six years and most sources agree that they were living in the area by 1886 (Courier Informant 1891). At that time, the area was composed only of "a little flag station near Winter Haven", which at the time was generally referred to as "Florence Station" (The Tampa Times 1894; Winter Haven Notes 1893, 1894). Shortly after arriving, Inman began experimenting with the agricultural potential of the area (Winter Haven Herald 1950). In addition, he and his wife constructed a 10-room residence on Spring Lake in 1887, about 0.3-mile southwest of the district, which they eventually developed into the Florence Villa Hotel, welcoming guests such as Henry B. Plant (Johnston 1997).

It was reported that by 1891, Inman had 40 private acres and 136 acres "for other parties" (Courier Informant 1891). As his small operation grew, Inman hired Dan Laramore, a Black man, to manage his citrus fields as his first field foreman. Laramore was a talented horticulturist who had learned Japanese farming techniques after living in California for some time to escape the intense racial segregation of the South (Johnson III 2010). It is unclear what percentage of Inman's employees were Black; however, research indicates that Black homesteaders began arriving in the area between 1881 and 1885. During that time, many Black settlers were entering into the citrus industry across the state, a trend which continued into the 20<sup>th</sup> Century (Johnson III 2010). During the late 1800s, Florence Inman's sister, Mary B. Jewett, purchased and subdivided land bounded by Avenue T to the north, Avenue O to the south, and 1<sup>st</sup> Street and 8<sup>th</sup> Street to the east and west. This area was intended as a segregated Black community (Kelly 2005).

The community of Florence Villa thrived in its early years due to the citrus and hospitality businesses created by the Inmans. By the mid-1890s, new families were moving into the area, swelling the size of the community for the first time (PCHC Archives 1897). Inman heavily diversified his crops, growing tomatoes, pineapples, oranges, peaches, melons, grapefruit, tangerines, and apples, many of which were considered delicacies at the turn of the nineteenth century. Much of his success was also attributed to his chosen location. In 1901, Inman had approximately 175 acres exclusively for "bearing trees" (Courier Informant 1901; PCHC Archives 1900). The layout of the property at that time indicates that Inman was not using the land within the historic district for growing or processing. According to one journalist:



**Figure 1.** View of the original FVFC plant located west of the railroad and north of modern-day SR 544. Note the buildings present to the east of the tracks.

The buildings [were] located on the southeast corner of the cultivated fields, only a few hundred yards to the west of the railroad tract, so that they and the orange groves lying north from them and parallel to the road came into plain view of the passengers on the trains (Courier Informant 1901) (Figure 2).

For reasons unknown, Dr. Inman decided to sell the Florence Hotel and 695 acres of land in 1906. The new owners were not named, but it was reported that they planned to add 300 acres of orange and grapefruit trees while maintaining the popularity of the hotel and keeping Inman as the hotel manager (Courier Informant 1906). At the time of sale, agricultural products grown on the property were being sold; however, it is unclear if Inman or the new owners were selling at the private or corporate level.

In 1908, the Florence Citrus League was established (Lakeland Ledger 1959). The following year, the Florida Citrus Exchange (FCE) was established by Fred W. Inman, Sidney Curtis Inman, and John H. Ross along with other local citrus growers. According to the 1911 *Proceedings of the Florida State Horticultural Society*:

The theory of the organization [was], that the grower manages his own affairs, by first coming together in various communities organizing associations electing representatives who organize sub-exchanges, who in turn elect their representatives who constitute the Board of Directors of the central organization (Burton 1911).

This organization also hoped to standardize and regulate the statewide citrus packing and marketing system to ensure high-quality products.

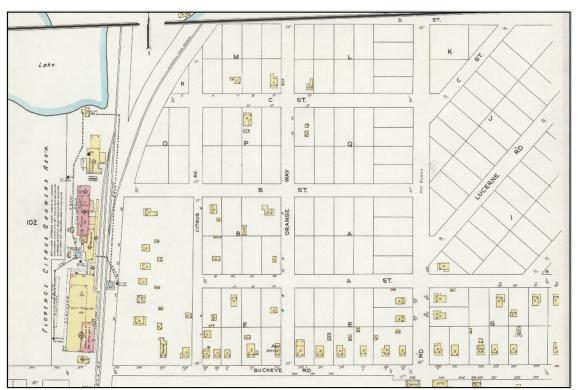
By improving the state's reputation, the organizers hoped to increase profitability for all growers (Burton 1911; Padgett 2018). Following its establishment, many localized exchanges were created to help maximize regional benefits and bolster the statewide effort. This included the FVCGA which was convened in the first FVFC plant, located at 303 Avenue T NW immediately west of the historic district and railroad tracks (Johnston 1997) (**Figure 2**). However, larger companies refrained from joining out of concern that greater cooperation between citrus companies would lead to a drop in their individual profit margin (Padgett 2018). Ultimately, as the political and financial power of the statewide cooperative grew, many citrus giants begrudgingly joined. Because the Haines City CGA was also established in 1909, it is not currently possible to determine if the FVCGA is Florida's oldest CGA as some have suggested, but it is undoubtedly one of the state's first (Lakeland Ledger 1959, Kelly 2009).

In 1910, Inman fell suddenly ill and passed away (The Weekly Tribune 1910). Hoping to continue his legacy, Inman's sister-in-law Mary B. Jewett, Eugene Holtsinger, and R. Gunsby formed the FVFC in 1911 (PCHC 1911). Based on available information, this act was largely to formalize and expand the operation, given the fact that the FVFC was mentioned in newspapers as early as January 1908, but no articles of incorporation could be located before 1911 (The Weekly Tribune 1908). The town of Florence Villa was incorporated in 1917 and in 1923 it was merged with the city of Winter Haven (Gernert Jr. 2014).

As the popularity of the FVFC, Florence Villa Hotel, and the circa (ca.) 1924 Villa Golf Course grew, the need for workers boomed. Many of the employees hired after the mid-1920s appear to have been Black due to the fact that the community of Florence Villa had largely become a segregated Black neighborhood of Winter Haven (Vickers 2010). According to one local, the living conditions were far

inferior to her White counterparts living in Winter Haven, with no paved roads or "decent places to live, just some huts up on First Street" (Johnson III 2010).

Since Inman's arrival in the 1880s, the area along SR 544 had been largely vacant. In 1920, the land was formally platted, and by the mid-1920s a few residences and businesses had been constructed mostly along Buckeye Road (later Avenue T and present-day Martin Luther King Boulevard) (Polk County 1920; Sanborn Insurance Company 1924) (**Figure 3**). The original wood frame packing house constructed on Avenue T (now Martin Luther King Boulevard), west of the railroad tracks was supplemented by a large masonry building constructed in 1930 on the east side of the railroad tracks. The new masonry building was one of the largest buildings constructed in Winter Haven during the Great Depression (Faux 2024). In 1942, the Florence Villa Hotel was sold to G.L. Ayers who began dismantling and parsing out the building for salvage (Winter Haven Herald 1942). This largely brought an end to the tourism economy in Florence Villa and caused the agricultural economy to move to the forefront.

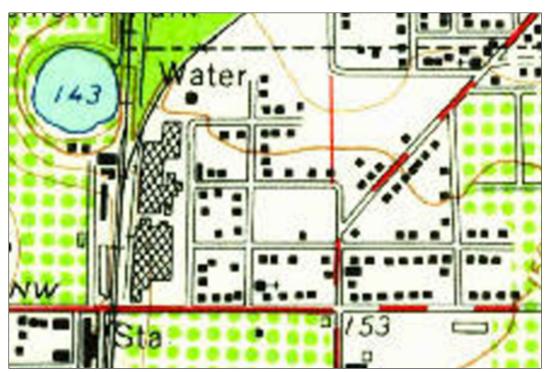


**Figure 2.** View of the general area in 1924 before the construction of the new plant in ca. 1930 (Sanborn Insurance Company 1924).

By ca. 1941, development within the vicinity of the FVCGA packing house had become more dense through the infill of formerly vacant lots; however, it remained concentrated between what is now Martin Luther King Boulevard and Avenue U and along 2<sup>nd</sup> Street (USDA 1941) (**Figure 4**). Light development had occurred along the north side of Lucerne Park Road (SR 544) by this time, but the south side of the road remained undeveloped. With the increased capacity and strong financial profits, the facility was expanded in 1949 and 1953 by the addition of a concentrate factory and a cold storage facility, respectively. The overall facility, which included a frozen orange juice plant, fresh fruit packing house, warehouse, and icehouse, was sold to General Foods-Birdseye Corporation (GFBC) in 1959 (Johnston 1997). Shortly after the transfer of ownership, the GFBC determined that the business had outgrown the plant and decided to move its operation elsewhere (Lakeland Ledger 1959). By 1959, residential development had spread to both the north and south sides of Lucerne Park Road (SR 544) within the subdivision (USGS 1959) (**Figure 5**).



**Figure 3.** A historic aerial photograph from 1941 depicting the FVCGA subdivision (USDA 1941). The southern edge of Lucerne Park Road (SR 544) remained undeveloped at this time. Note the absence of citrus groves within the boundary of the historic district (depicted in red).



**Figure 5.** A 1959 topographic map depicting the increase in development along the south side of Lucerne Park Road (SR 544) (USGS 1959). Most of the development between the plant and Lucerne Park Road (SR 544) had occurred by 1941 as shown in Figure 4.

Beginning in the early 1960s, the expansion of 1<sup>st</sup> Avenue, urban renewal, and general development led to the demolition of many buildings in the Florence Villa neighborhood (Houts 1979). As more duplexes and apartment buildings were constructed, early twentieth century buildings within the Black community were slowly demolished (Cribb 1961). Since 1990, several companies under the parent company "Belvedere Vodka" have used the historic FVCGA plant for distilling alcohol (Faux 2024). As of 2021, the buildings appear to be vacant.

#### **Evaluation of Significance**

Based on the information gathered, the historic district appears eligible for listing in the NRHP under Criterion A in the areas of Ethnic Heritage (Black) and Industry. The FVCGA was one of the first to be convened as part of the FCE and was established by a key founder and the first president of the groundbreaking cooperative, making it a forerunner in the industry. The period of significance includes the years between the establishment of the FVCGA in 1909 and the sale of the plant to GFBC in 1959; thus, it reflects the evolution of citrus processing throughout the early to mid-twentieth century and demonstrates the significance of the citrus industry in communities throughout Florida. The historic district is also culturally significant for its role in developing the historically Black community that remains today. Through the development of the FVCGA, the associated FVCGA subdivision, the employment opportunities provided by the FVCGA, and the continuous development of surrounding subdivisions and neighborhoods outside of, but adjacent to, the historic district, the overarching Florence Villa community has become one of Winter Haven's largest historically Black communities. Although the historic district was established as a result of Dr. Fredrick Inman's life's work, his role in the development of this specific area does not provide sufficient merit for listing in the NRHP under Criterion B. No evidence was found to suggest that Inman cultivated citrus or other agricultural products within the district boundary, and the available historic maps and aerial images do not suggest that the land was ever used for farming. None of the resources located within the district were built by Inman or constructed during his lifetime, making the affiliation with the person of significance indirect. Furthermore, the majority of the buildings located within the historic district boundaries were constructed after the period of significance and a significant number of early twentieth century residences within the district have been demolished. The remaining buildings within the historic district have been altered and are not significant embodiments of a type, period, or method of construction and thus do not gain their historic significance from architectural design. Although the FVCGA subdivision is associated with the FVCGA and FVFC, there is no evidence to suggest that the residences within the subdivision were built specifically by the company. Research suggests that although the subdivision is named for the FVCGA, the residential development within the subdivision and surrounding area occurred organically as people moved to the area for employment opportunities. Thus, the historic district is not an example of a planned company town. As such, the historic district does not appear eligible for listing in the NRHP under Criterion C due to the lack of historic integrity and lack of planned, intentional design.

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#### Polk County

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- 1900 "Florence Villa." Unnamed Newspaper, February 14, 1900, Accessed March 6, 2024. Archived at Polk County History Center & Genealogical Library (Bartow, Fl).
- "Notice." Unnamed Newspaper, May 11, 1911, Accessed March 6, 2024. Archived at Polk County History Center & Genealogical Library (Bartow, Fl).

Sanborn Fire Insurance Map from Winter Haven, Polk County, Florida. Sanborn Map Company, Nov. 1924. Retrieved from the Library of Congress, https://www.loc.gov/item/sanborn01365 003/.

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#### Vickers, Lu

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- "Orange Growers See Experiments." The Weekly Tribune, Tampa Fl. January 30, 1908. Accessed March 11, 2024. https://www.newspapers.com/image/328095182/.
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#### Winter Haven Herald

- "Florence Villa Hotel Building Sale Announced." Winter Haven Herald, Winter Haven Fl. August 1942. Accessed March 6, 2024. Archived at Polk County History Center & Genealogical Library (Bartow, Fl).
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- 1894 Untitled Article. Winter Haven Notes, Winter Haven Fl. February 7, 1894. Accessed March 6, 2024. Archived at Polk County History Center & Genealogical Library (Bartow, Fl).



# **PHOTOGRAPHS**





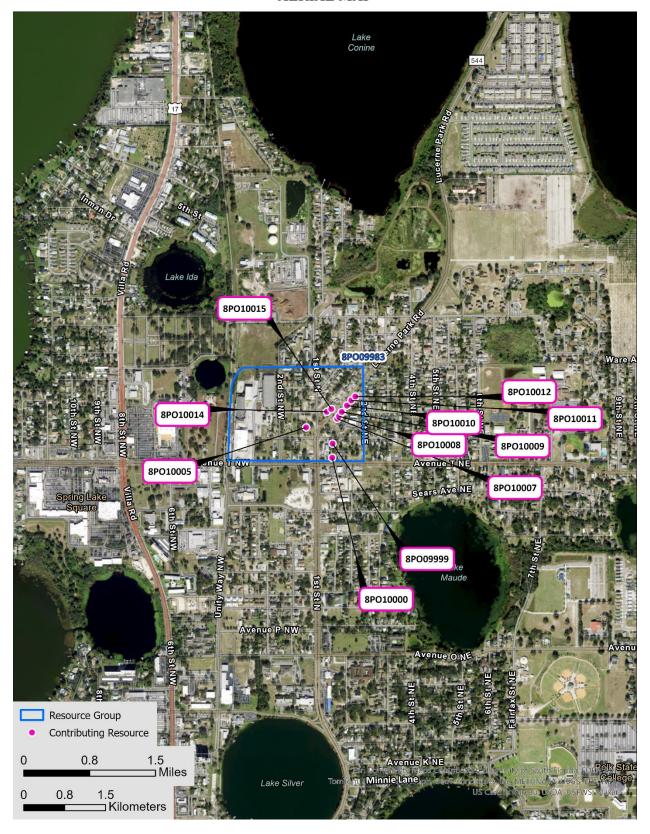






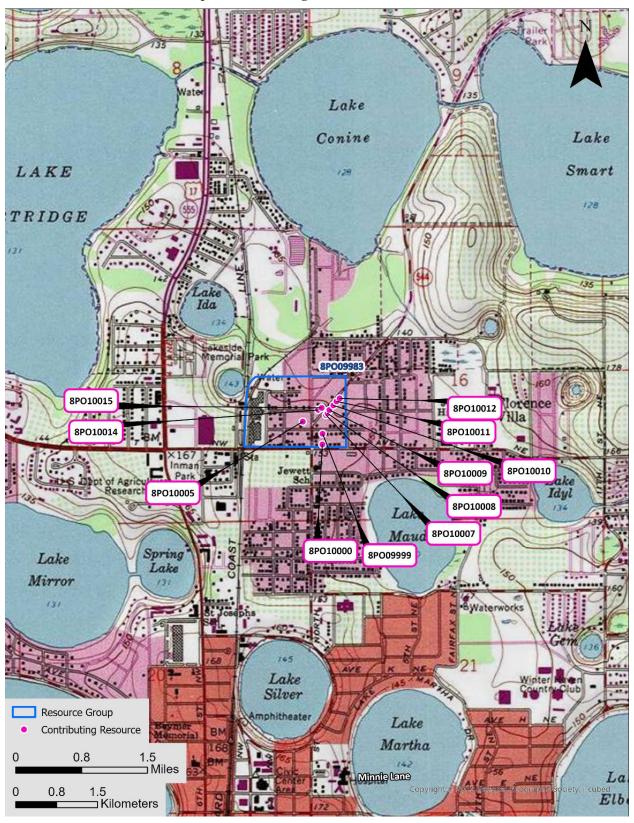


#### **AERIAL MAP**





USGS Winter Haven
Township 28 South, Range 26 East, Sections 16 and 17



#### Page 1

☑ Original
☐ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO09999
Field Date	3-23-2022
Form Date	5-30-2023
Recorder #	

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

Site Name(s) (address if Survey Project Name _ National Register Cate Ownership: private-pro	CRAS SR 544 fr gory (please check one)	Avenue T  Suilding	NW to SR 1 □structure [	7, Polk □district □site	e 🔲 object	, ,	y)
		LO	CATION &	& MAPPIN	G		
Address: Street Number 130 Cross Streets (nearest / B	A	reet Name venue U			et Type	Suffix Direction  NE	
USGS 7.5 Map Name_ City / Town (within 3 miles Township 28S Ray Tax Parcel # 26-28	ange 26E Section	on <u>17</u> 1/4	section: \( \subseteq N\)	N □SW □S	SE □NE In	regular-name:	
Tax Parcel # _26-28 Subdivision Name_F10 UTM Coordinates: Zon Other Coordinates: X: Name of Public Tract (6	e □16 ⊠17 Eas	sting 4 2 8 6 Y:	3 0 <b>N</b> orthir <b>C</b> c	g 3 1 0 2 3	6 9		
			HIST	ORY			
Construction Year:1 Original UseReside Current Use Other Use Moves:yesIr Alterations:yesIr Additions:yesIr Architect (last name first): Ownership History (esp Deshisha Holton Ruth & Vincent Is the Resource Affecte	ence, private  no  unknown Date no  unkn	es, profession, etc.) Tierra C Mary & Jo	ear listed or ea From From From From From From From From	rlier	918 To	o (year): CURR o (year): 0 (year): CURR ndows, encl. po	orch
			DESCRI	PTION			
Style Frame Verna Exterior Fabric(s) 1. S Roof Type(s) 1. G Roof Material(s) 1. C Roof secondary s Windows (types, materials SHS, metal, sin	Stucco Sable Composition shi trucs. (dormers etc.) 1 s, etc.)	ngles	Exterior Plan 2. 2. Shed 2.	Rectangula		Number 3 3 3	
Distinguishing Architect Overhanging eav detail, stucco	res w/ partiall window/door tr	y exposed im	rafter tai			e vent, stucco	diamond
Ancillary Features / Ou Non-historic ut		uldings, major land:	scape features; us	e continuation shee	t if needed.)		
DHR U	SE ONLY	0	FFICIAL EV	ALUATION		DHR USE	ONLY
NR List Date	SHPO – Appears to me KEEPER – Determined		R listing: □yes □yes		icient info	Date	Init

☐Owner Objection

# HISTORICAL STRUCTURE FORM

Site #8 PO09999

DESCRIPTION (continued)
Chimney: No. 0         Chimney Material(s): 1.         2.           Structural System(s): 1.         Wood frame         2.           3.         3.
Structural System(s): 1 Wood frame 2
Foundation Type(s): 1. Piers 2.
Foundation Material(s): 1. Concrete, Generic 2.
Main Entrance (stylistic details)
N ELEV: single door w/ metal frame storm door
Porch Descriptions (types, locations, roof types, etc.)
Condition (overall resource condition): ☐excellent ☐good ☑fair ☐deteriorated ☐ruinous  Narrative Description of Resource
A one-story Frame Vernacular style building $w/$ an enclosed porch on the N ELEV. A shed roof segment is located on the S ELEV.
Archaeological RemainsCheck if Archaeological Form Complete
RESEARCH METHODS (select 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) USDA historic aerial photographs (PALMM)
Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)
Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/
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?
Explanation of Evaluation (required, whether significant or not; use separate sheet if needed)
The building is not a significant embodiment of a type, period, or method of construction; and
has no known significant historic associations. The resource is a contributing resource w/in the Florence Citrus Growers Association Hist. District (8P009983).
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
DOCUMENTATION
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
Document type All materials at one location Maintaining organization Archaeological Consultants Inc
Document description Files, photos, research, document File or accession #'s P19097
2) Document type Maintaining organization
Document description File or accession #'s
RECORDER INFORMATION
Recorder Name Savannah Y. Finch Affiliation Archaeological Consultants Inc
Recorder Contact Information 8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net

# Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE

When submitting an image, it must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.



# **PHOTOGRAPHS**





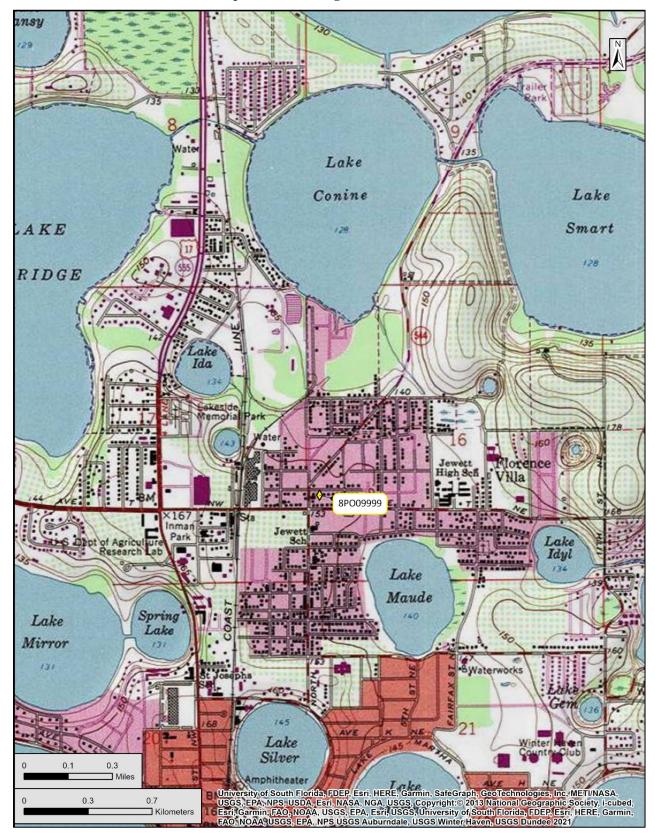


# **AERIAL MAP**





### USGS Winter Haven Township 28 South, Range 26 East, Section 16



#### Page 1

☑ Original
☐ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10000
Field Date	3-23-2022
Form Date	3-28-2022
Recorder #	2

**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)       131       Martin       Luther       King       Blvd       NE         Survey Project Name       CRAS       SR       544       fr       Avenue       T       NW       to       SR       17       Polk         National Register Category (please check one)       ⊠ building       □ structure       □ district       □ site       □ object         Ownership: □private-profit       □private-nonprofit       ☑ private-individual       □private-nonspecific       □city       □county       □ state	<b>S</b> urvey # (DHR only)
LOCATION & MAPPING	
Address: 131 Street Name Martin Luther King Boulevard  Cross Streets (nearest / between)  USGS 7.5 Map Name WINTER HAVEN USGS Date 1959 Plat or Off City / Town (within 3 miles) Winter Haven In City Limits? Dyes Dno Munknown Company 28S Range 26E Section 17 1/4 section: DNW SW SE DNE Tax Parcel # 26-28-17-547500-007110 Landgrant Subdivision Name Florence Citrus Growers Block  UTM Coordinates: Zone 16 16 17 Easting 4 2 8 6 2 8 Northing 3 1 0 2 3 1 0	ther Map PB 6 / PG 11  County Polk  Irregular-name:  Lot
Other Coordinates: X: Y: Coordinate System & Datum	
Name of Public Tract (e.g., park)	
HISTORY	
Construction Year:	To (year): To (year): To (year): vindows, awnings ELEV)  e Campbell (1962); J.S. &
DESCRIPTION	
	_ 3
DHR USE ONLY OFFICIAL EVALUATION	DHR USE ONLY
NR List Date  SHPO – Appears to meet criteria for NR listing: ☐yes ☐no ☐insufficient info  KEEPER – Determined eligible: ☐yes ☐no	Date Init Date

☐Owner Objection

### HISTORICAL STRUCTURE FORM

Site #8 **PO10000** 

DESCRIPTION (continued)						
Chimney: No. 0 Chimney Material(s): 1. 2.  Structural System(s): 1. Wood frame 2. 3.  Foundation Type(s): 1. Piers 2.  Foundation Material(s): 1. Concrete, Generic 2.  Main Entrance (stylistic details)  S ELEV: single wooden door w/ two inset stained glass lights						
Porch Descriptions (types, locations, roof types, etc.)						
Condition (overall resource condition): ☐ excellent ☐ good ☑ fair ☐ deteriorated ☐ ruinous  Narrative Description of Resource						
A one-story Frame Vernacular style building w/ shed roof additions on the E & W ELEV. The porch on the S ELEV has been enclosed, as have multiple windows. The siding has been patched & window mounted A/C units have been installed.						
Archaeological Remains \_Check if Archaeological Form Completed						
RESEARCH METHODS (select all that apply)						
☑FMSF record search (sites/surveys) □Iibrary research □building permits □Sanborn maps □FL State Archives/photo collection □city directory □occupant/owner interview □plat maps □public Lands Survey (DEP) □cultural resource survey (CRAS) □historic photos □interior inspection □HABS/HAER record search ☑other methods (describe) USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at:						
OPINION OF RESOURCE SIGNIFICANCE						
Appears to meet the criteria for National Register listing individually?   Appears to meet the criteria for National Register listing as part of a district?   Explanation of Evaluation (required, whether significant or not; use separate sheet if needed)  The building is not a significant embodiment of a type, period, or method of construction; and has no known significant historic associations. The resource is a contributing resource w/n the Florence Citrus Growers Association Hist. District (8P009983).						
Area(s) of Historical Significance (see <i>National Register Bulletin 15</i> , p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)  1						
DOCUMENTATION						
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  1) Document type All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097  2) Document type Maintaining organization File or accession #'s File or accession #'s						
RECORDER INFORMATION						
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information (address/phone / fax / e-mail)  Affiliation Archaeological Consultants Inc  Sarasota, FL/ 34240 /aciflorida@comcast.net						

# Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE

When submitting an image, it must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.



# **PHOTOGRAPHS**





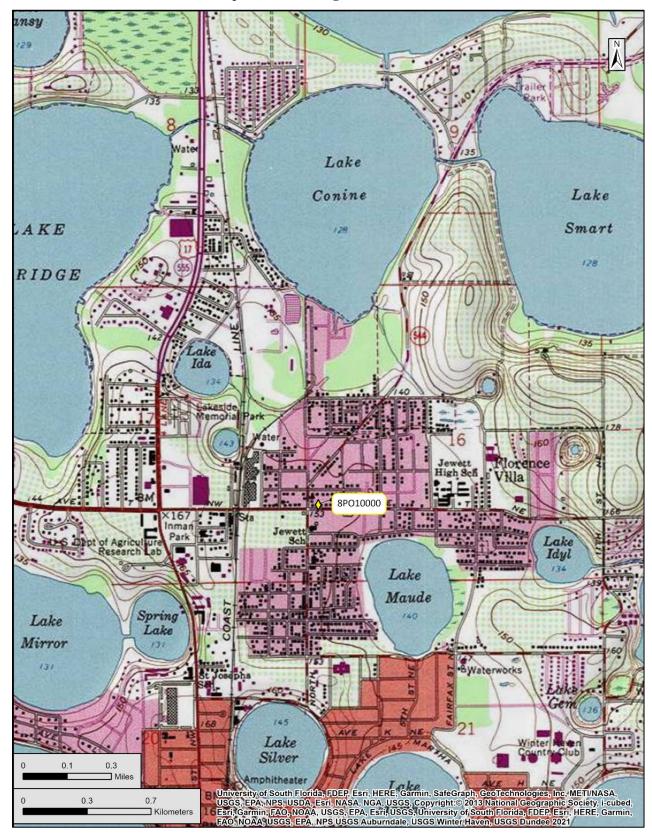


# **AERIAL MAP**





### USGS Winter Haven Township 28 South, Range 26 East, Section 17



#### Page 1

☑ Original
☐ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10005
Field Date	5-19-2023
Form Date	5-30-2023
Recorder #	

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

Survey Project Name _ National Register Cate	none) 2101 1st Street CRAS SR 544 fr Avenu GOTY (please check one) ⊠build fit □private-nonprofit ☑private-indi	e T NW to SR 1	7, Polk ]district □site □	object	y)
Street Number	er <u>Direction</u> <u>Street Name</u>	LOCATION &	z MAPPING Street Type	Suffix Direction	
Address: 2101	1st		Street	N	
	between)				
USGS 7.5 Map Name_	WINTER HAVEN s) Winter Haven	USO	GS Date 1959 Plat	or Other Map PB 6 / PC	3 11
Township 28S R	ange 26E Section 17	¼ section: ∐N\	V ∟SW ∟SE ∟I	NE Irregular-name:	
Tax Parcel # 26-28	-17-547500-001020 orence Citrus Growers		Landgrant		
Subdivision Name F10	orence Citrus Growers	S Note to the state of the stat	Block	A Lot	2 & 11
	ie □16 区17 Easting 4 2				
	Y:			atum	
Name of Public Tract (	e.g., park)				
		HISTO	DRY		
Construction Year: 1	L958	□vear listed or ear	lier <b> </b> vear listed c	or later	
	ilding			To (year): CURR	
Current Use		Fro			
Other Use				To (year):	
	no 🔲 unknown Date:	Original ac	dress		
Alterations:	no □unknown Date:	Nature	Roofing, siding	g, windows	
Additions:	no Dunknown Date:	Nature	Shed roof (W EI	LEV)	
Architect (last name first):					
Ownership History (esp	ecially original owner, dates, profession	on, etc.)			
	2022); Darlene Melend	lez (2018); Lon	nie & Earnestin	ne Washington (1973)	; John &
Marjorie Evans					
Is the Resource Affects	ed by a Local Preservation Ord	dinance? □yes □r	o Xunknown Descr	ribe	
		DESCRI	PTION		
Style Industrial	Vernacular	Exterior Plan	Irregular	Number	of Stories 1
	Metal				
Roof Type(s) 1. G				3	
	Sheet metal:corrugate			3.	
	trucs. (dormers etc.) 1.		2		
Windows (types, materials					
Casement, metal	, grouped (4), 4-lig	ht; Awning, me	tal, single, 2-	stacked	
Distinguishing Architec	tural Factures (sutarias anintarias				
	ctural Features (exterior or interior res w/ boxed rafter t		, garage bay w/	sliding metal door	c .
Ancillary Features / Ou	utbuildings (record outbuildings, ma	ior landecane feeturee:	continuation about if read	ad )	
Anomary i catules / Ou	touriumgs (record outbuildings, ma	joi iailuscape leatules, US	Gondination Sheet ii fleed	оu. <i>)</i>	
DHR U	SE ONLY	OFFICIAL EV	ALUATION	DHR USE	ONLY
NR List Date	SHPO – Appears to meet criteria KEEPER – Determined eligible:				

☐Owner Objection

☐d (see National Register Bulletin 15, p. 2)

NR Criteria for Evaluation: ☐a ☐b ☐c

### HISTORICAL STRUCTURE FORM

Site #8 **PO10005** 

DESCRIPTION (continued)						
Chimney: No0_ Chimney Material(s): 1						
Porch Descriptions (types, locations, roof types, etc.)						
Condition (overall resource condition):     Condition (overall resource condition):   Description of Resource						
the E ELEV. Shed roof segments are located on the N & W ELEV. The shed roof on the W ELEV is an addition.						
Archaeological Remains Check if Archaeological Form Completed						
RESEARCH METHODS (select all that apply)						
☑FMSF record search (sites/surveys) ☐ Ilibrary research ☐ building permits ☐ Sanborn maps ☐ Jocupant/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) ☐ USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at:						
http://palmm.fcla.edu/						
OPINION OF RESOURCE SIGNIFICANCE						
Appears to meet the criteria for National Register listing individually?   Appears to meet the criteria for National Register listing as part of a district?   Explanation of Evaluation (required, whether significant or not; use separate sheet if needed)  The building is not a significant embodiment of a type, period, or method of construction; and has no known significant historic associations. The resource is a contributing resource w/n the						
Florence Citrus Growers Association Hist. District (8P009983).  Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)						
1						
DOCUMENTATION						
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  1) Document type All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097						
2) Document type Maintaining organization File or accession #'s						
RECORDER INFORMATION						
Recorder Name Savannah Y. Finch Affiliation Archaeological Consultants Inc  Recorder Contact Information (address/phone/fax/e-mail) 8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net						

# Required Attachments

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# **PHOTOGRAPHS**





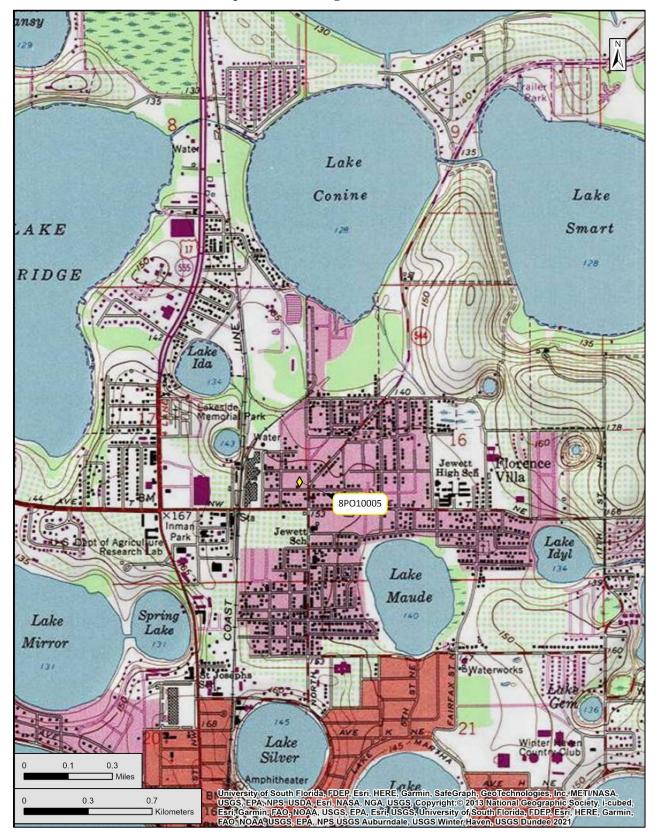








### USGS Winter Haven Township 28 South, Range 26 East, Section 17



○ Original 
 □ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10007
Field Date	3-23-2022
Form Date	3-28-2022
Recorder #	7

**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) 2206 Lucerne Park Road (Building 1)  Survey Project Name CRAS SR 544 fr Avenue T NW to SR 17, Polk  National Register Category (please check one)  building structure district site object  Ownership: private-nonprofit private-nonprofit private-individual private-nonprofit control of the con	
LOCATION & MAPPING	
Street Number Direction Street Name Street Type Suffix Direction  Address: 2206 Lucerne Park Road  Cross Streets (nearest / between)	
USGS 7.5 Map Name WINTER HAVEN USGS Date 1959 Plat or Other Map PB 6 / PG 11  City / Town (within 3 miles) Winter Haven In City Limits? Dyes Dno Wunknown County Polk	
Township 28S Range 26E Section 17 1/2 section: NW SW SE NE Irregular-name: Landgrant	
Tax Parcel # 26-28-17-547500-009070 Landgrant Subdivision Name_Florence Citrus Growers Block Lot	
UTM Coordinates: <b>Z</b> one ☐16 図17 Easting 4 2 8 6 5 0 <b>N</b> orthing 3 1 0 2 4 7 2	
Other Coordinates: X: Y: Coordinate System & Datum	
Name of Public Tract (e.g., park)	
HISTORY	
Construction Year:1952	
Original Use Duplex From (year): 1952 To (year): CURR	
Current Use To (year): To (year):	
Other Use From (year): To (year):	
Moves:  yes  no  unknown  Date:  Original address  Alterations:  yes  no  unknown  Date:  Nature  Roofing, windows	
Additions: Nature Shed roof	
Architect (last name first):Builder (last name first):	
Ownership History (especially original owner, dates, profession, etc.)	
United Investments 2020 One, LLC (2020); SSJ Fanani, LLC (2015); Lucerne Park Road, Inc. (2009); D&J Financial Services, LLC (2007); Clarence Peart	
Is the Resource Affected by a Local Preservation Ordinance?     Services   Fine (2007); Clarence Feart	
DESCRIPTION	
Style     Masonry     Vernacular     Exterior Plan     Rectangular     Number of Stories     1       Exterior Fabric(s)     1. Stucco     2. Wood/Plywood     3.	
Roof Type(s)         1. Gable         2. Shed         3.	
Roof Material(s) 1. Composition shingles 2. 3.	
Roof secondary strucs. (dormers etc.) 1 2	
Windows (types, materials, etc.)	
SHS, metal, single, paired, 2/2	
Distinguishing Architectural Features (exterior or interior ornaments)	
Overhanging eaves w/ boxed rafter tails, concrete windowsills, rectangular gable vents	
Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.)	
70 10 10 Maganese Wassers and an atral a dumlar (0.00010000)	
ca. 1952 Masonry Vernacular style duplex (8PO10008)	
ca. 1952 Masonry Vernacular Style duplex (8PO10008)	
DHR USE ONLY OFFICIAL EVALUATION DHR USE ONLY	

## HISTORICAL STRUCTURE FORM

Site #8 **PO10007** 

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)
N ELEV: single door per unit, beneath a shed roof
Porch Descriptions (types, locations, roof types, etc.)
N/ENTRANCE: open, full width, beneath a shed roof w/ squared wooden porch supports
Condition (overall resource condition): ☐ excellent ☐ good ☑ fair ☐ deteriorated ☐ ruinous  Narrative Description of Resource
A one-story Masonry Vernacular style building w/ two residential units. A shed roof addition was constructed on the N ELEV.
Archaeological Remains Check if Archaeological Form Completed
RESEARCH METHODS (select 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) USDA historic aerial photographs (PALMM)
Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)
Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/
OPINION OF RESOURCE SIGNIFICANCE
Appears to meet the criteria for National Register listing individually?  ☐ yes ☐ insufficient information
Appears to meet the criteria for National Register listing as part of a district?     Syes   Incommendation
The building is not a significant embodiment of a type, period, or method of construction; and has no known significant historic associations. The resource is a contributing resource w/n the Florence Citrus Growers Association Hist. District (8P009983).
Area(s) of Historical Significance (see <i>National Register Bulletin 15</i> , p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. 3.
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 All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097
2) Document type Maintaining organization File or accession #'s
RECORDER INFORMATION
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information 8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net

# Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE





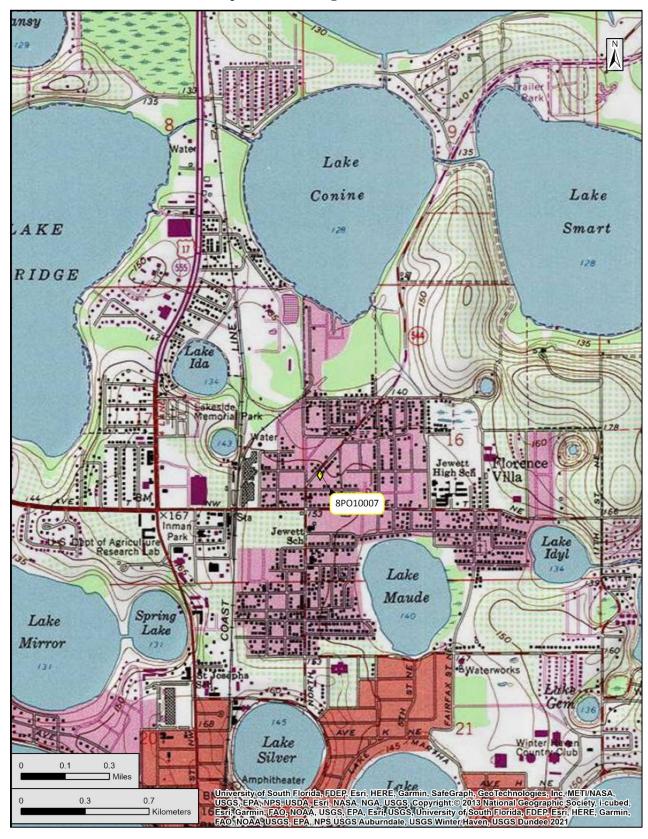








### USGS Winter Haven Township 28 South, Range 26 East, Section 17



☑ Original
☐ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10008
Field Date	3-23-2022
Form Date	3-28-2022
Recorder #	8

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

te Name(s) (address if none) 2206 Lucerne Park Road (Building 2) Multiple Listing (DHR only)
Street Number Direction Street Name Street Type Suffix Direction  didress: 2206
HISTORY
Instruction Year: 1952
DESCRIPTION
yle Masonry Vernacular  kterior Fabric(s) 1. Stucco  cof Type(s) 1. Gable  cof Material(s) 1. Composition shingles  Roof secondary strucs. (domers etc.) 1.  indows (types, materials, etc.)  SHS, metal, single, paired, 2/2
stinguishing Architectural Features (exterior or interior ornaments)  Overhanging eaves w/ boxed rafter tails, concrete windowsills, rectangular gable vents, vall-mounted A/C unit  Incillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.)  Ea. 1952 Masonry Vernacular style duplex (8PO10007)
DHR USE ONLY OFFICIAL EVALUATION DHR USE ONLY
NR List Date SHPO – Appears to meet criteria for NR listing:

☐Owner Objection

☐d (see National Register Bulletin 15, p. 2)

NR Criteria for Evaluation: □a □b □c

### HISTORICAL STRUCTURE FORM

Site #8 **PO10008** 

DESCRIPTION (continued)	
Chimney: No. 0 Chimney Material(s): 1. 2. 3. 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)  S ELEV: single door per unit, beneath a shed roof	
Porch Descriptions (types, locations, roof types, etc.)  S/ENTRANCE: open, full width, beneath a shed roof w/ squared wooden porch supports	
Condition (overall resource condition):	
Archaeological Remains Check if Archaeological Form Completed	
RESEARCH METHODS (select 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 ☐ with the methods (describe) ☐ USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/	
OPINION OF RESOURCE SIGNIFICANCE	
Appears to meet the criteria for National Register listing individually?	
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 5 6.	
DOCUMENTATION	
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  Document type All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #s P19097  Document type Maintaining organization File or accession #s  Document description File or accession #s	
RECORDER INFORMATION	
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information 8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net	

# Required Attachments

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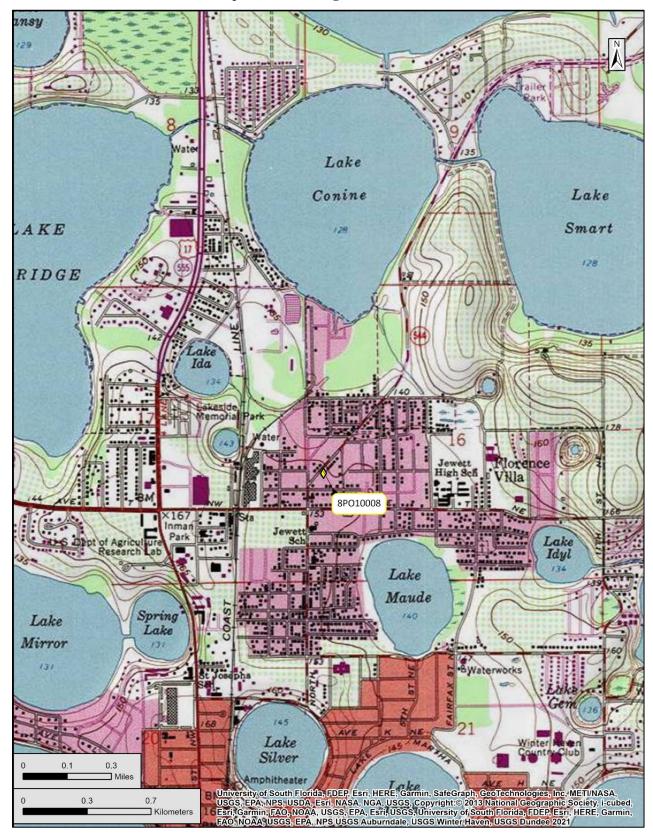








### USGS Winter Haven Township 28 South, Range 26 East, Section 17



☑ Original
☐ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10009
Field Date	3-23-2022
Form Date	3-29-2022
Recorder #	9

**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) 2208 Lucerne Park Road  Survey Project Name CRAS SR 544 fr Avenue T NW to SR 17, Polk  National Register Category (please check one)  building structure district site object  Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state	Survey # (DHR only)
LOCATION & MAPPING  Street Number Direction Street Name Street Type  Address: 2208 Lucerne Park Road  Cross Streets (nearest / between)  USGS 7.5 Map Name WINTER HAVEN USGS Date 1959 Plat or Othe  City / Town (within 3 miles) Winter Haven In City Limits? □yes □no ⊠unknown Cou  Township 28S Range 26E Section 17 ¼ section: □NW □SW □SE □NE Irre  Tax Parcel # 26-28-17-547500-009060 Landgrant Subdivision Name Florence Citrus Growers Block  UTM Coordinates: Zone □16 ☑17 Easting 4 2 8 6 6 9 Northing 3 1 0 2 5 0 0  Other Coordinates: X: Y: Coordinate System & Datum Name of Public Tract (e.g., park)	egular-name: Lot
HISTORY	
Construction Year: 1947	(year):
Is the Resource Affected by a Local Preservation Ordinance?	
DESCRIPTION	
StyleMasonryVernacularExterior PlanIrregularExterior Fabric(s)1. Brick2.3Roof Type(s)1. Gable2.3Roof Material(s)1. Composition shingles2.3Roof secondary strucs. (domers etc.) 1. Hip extension2.Windows (types, materials, etc.)SHS, metal, single, paired, 2/2, 3/3, 6/6, 8/8; Picture, metal, single flanked w/ 4/4 SHS; Jalousie, metal, grouped (7), 10+	3 3
Distinguishing Architectural Features (exterior or interior ornaments)  Overhanging eaves w/ boxed rafter tails, concrete windowsills, decora supports/railing/shutters (floral)  Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.)	tive metal porch
Non-historic utility shed	
DHR USE ONLY OFFICIAL EVALUATION	DHR USE ONLY
NR List Date  SHPO – Appears to meet criteria for NR listing:   WEEPER – Determined eligible:   WR Criteria for Evaluation:   NR Criteria for NR listing:   Wes   NR Criteria for Evaluation:   Wes   NR Criteria for Evaluation:   WEEPER – Determined eligible:   Wes   NR Criteria for Evaluation:   NR Criteria for Evaluation:   NR Criteria for Evaluation:   NR Criteria for Evaluation:   NR Criteria for NR listing:   Wes   NR Criteria for Evaluation:   NR Criteria for NR listing:   NR C	Date Init Date

# HISTORICAL STRUCTURE FORM

Site #8 **PO10009** 

DESCRIPTION (continued)
Chimney: No0_ Chimney Material(s): 1
supports & matching railing
Porch Descriptions (types, locations, roof types, etc.)
Condition (overall resource condition): ☐ excellent ☑ good ☐ fair ☐ deteriorated ☐ ruinous  Narrative Description of Resource
A one-story Masonry Vernacular style building w/ multiple additions on the E ELEV that are obscured from the public R.O.W. A one-car garage w/ a segmental door & inset lights is located on the N end of the W ELEV.
Archaeological Remains Check if Archaeological Form Completed
RESEARCH METHODS (select all that apply)
☑FMSF record search (sites/surveys) □Ibrary research □building permits □Sanborn maps □FL State Archives/photo collection □city directory □cupant/owner interview □plat maps □public Lands Survey (DEP) □cultural resource survey (CRAS) □historic photos □interior inspection □HABS/HAER record search ☑other methods (describe) USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/
OPINION OF RESOURCE SIGNIFICANCE
Appears to meet the criteria for National Register listing individually?
1
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 All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097  2) Document type Maintaining organization File or accession #'s File or accession #'s File or accession #'s
RECORDER INFORMATION
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information 8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net

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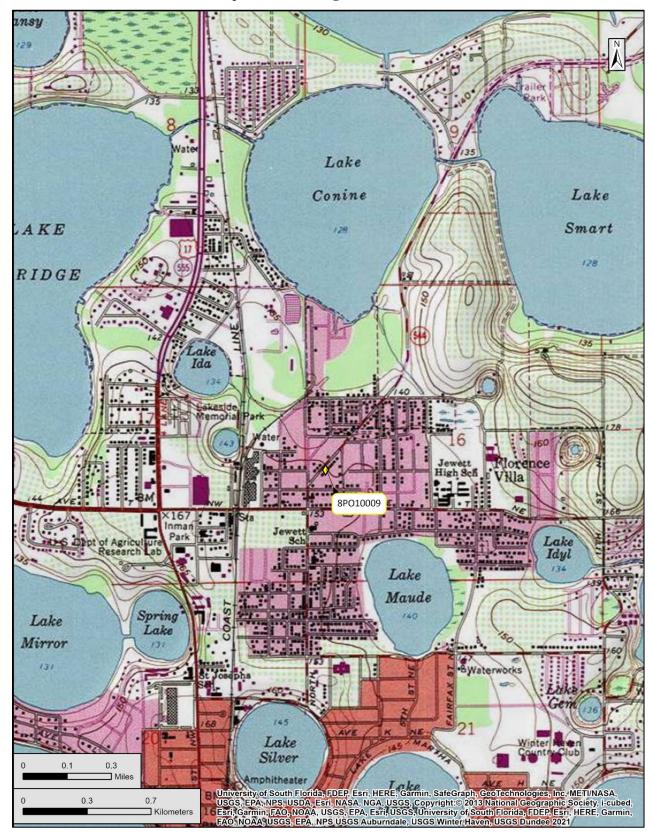








### USGS Winter Haven Township 28 South, Range 26 East, Section 17



☑ Original
☐ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

**Version 5.0** 3/19

Site#8	PO10010
Field Date	3-23-2022
Form Date	3-29-2022
Recorder #	1.0

**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) 2220 Lucerne Park Road  Survey Project Name CRAS SR 544 fr Avenue T NW to SR 17, Polk  National Register Category (please check one)  Survey Project Name Park Road  Survey Project Name ORAS SR 544 fr Avenue T NW to SR 17, Polk  Survey # (DHR only)  Survey # (DHR only)  Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown
Street Number   Direction   Street Name   Street Type   Suffix Direction
HISTORY
Construction Year:
Is the Resource Affected by a Local Preservation Ordinance?
DESCRIPTION
Style Masonry Vernacular Exterior Plan Irregular Number of Stories 1   Exterior Fabric(s) 1. Artif masonry veneer 2. Stucco 3.   Roof Type(s) 1. Gable 2. Shed 3.   Roof Material(s) 1. Composition shingles 2. 3.   Roof secondary strucs. (dormers etc.) 1. 2.   Windows (types, materials, etc.)   SHS, metal, single, 1/1
Distinguishing Architectural Features (exterior or interior ornaments)  Overhanging eaves w/ boxed rafter tails, rectangular gable vents
Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.)  Non-historic detached metal carport
DHR USE ONLY OFFICIAL EVALUATION DHR USE ONLY

DESCRIPTION (continued)
Chimney: No. 0 Chimney Material(s): 1. 2. 3. Structural System(s): 1. Concrete block 2. 3. Foundation Type(s): 1. Continuous 2. 5. Condition Material(s): 1. Concrete Block 2. 5. Main Entrance (stylistic details)
W ELEV: single door w/ metal frame storm door, beneath a shed roof
Porch Descriptions (types, locations, roof types, etc.)  W/ENTRANCE: open, partial width, beneath a shed roof w/ squared wooden porch supports
Condition (overall resource condition): ☐ excellent ☐ good ☑ fair ☐ deteriorated ☐ ruinous  Narrative Description of Resource
A one-story Masonry Vernacular style building w/ artificial masonry veneer siding along the W ELEV. An addition is located on the E ELEV and obscured from the public R.O.W.
Archaeological RemainsCheck if Archaeological Form Completed
RESEARCH METHODS (select all that apply)
☑FMSF record search (sites/surveys) ☐Iibrary research ☐ building permits ☐ Sanborn maps ☐ plat maps ☑ plat maps ☑ property appraiser / tax records ☐ newspaper files ☐ neighbor interview ☐ ultural resource survey (CRAS) ☐ historic photos ☐ interior inspection ☑ occupant/owner interview ☐ Public Lands Survey (DEP) ☐ ultural resource survey (CRAS) ☐ historic photos ☐ interior inspection ☐ HABS/HAER record search ☑ other methods (describe) ☐ USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at:
http://palmm.fcla.edu/
OPINION OF RESOURCE SIGNIFICANCE
Appears to meet the criteria for National Register listing individually?   Appears to meet the criteria for National Register listing as part of a district?   Explanation of Evaluation (required, whether significant or not; use separate sheet if needed)  The building is not a significant embodiment of a type, period, or method of construction; and has no known significant historic associations. The resource is a contributing resource w/n the
Florence Citrus Growers Association Hist. District (8P009983).  Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)  1.
2. 4. 6.
DOCUMENTATION
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  Document type All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097  Maintaining organization File or accession #'s F
RECORDER INFORMATION
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information (address / phone / fax / e-mail)  8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net

# Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE





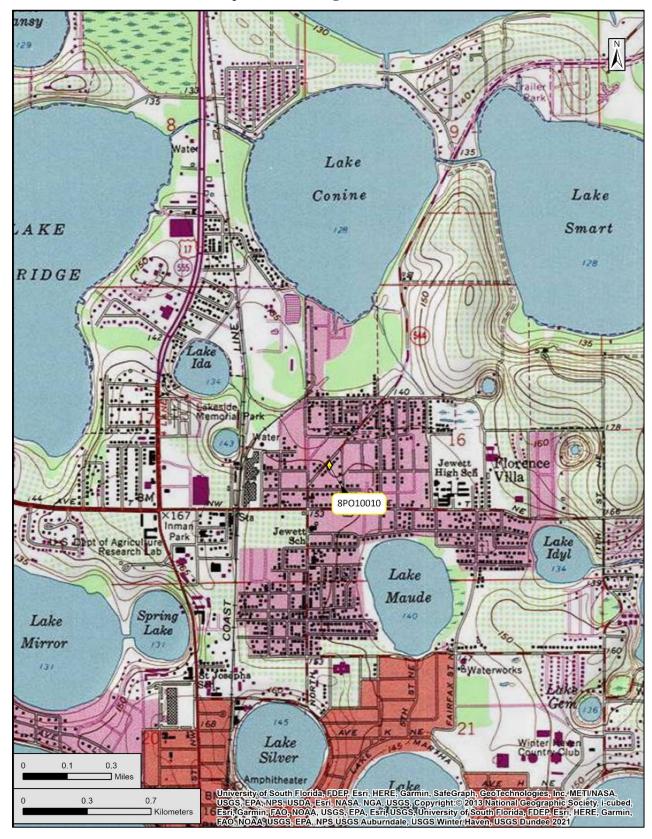








### USGS Winter Haven Township 28 South, Range 26 East, Section 17



☑ Original
☐ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10011
Field Date	3-23-2022
Form Date	3-29-2022
Recorder #	11

**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) 2222 Lucerne Park Survey Project Name CRAS SR 544 fr Avenue T National Register Category (please check one) ☑ building Ownership: ☐ private-profit ☐ private-nonprofit ☑ private-individual	NW to SR 17, Polk  ☐ structure ☐ district ☐ site ☐ object	_ <b>S</b> urvey # (DHR only)
Street Number Direction Street Name	CATION & MAPPING Street Type	Suffix Direction
Address: 2222 Lucerne P Cross Streets (nearest / between)	ark Road	
USGS 7.5 Map Name WINTER HAVEN City / Town (within 3 miles) Winter Haven Ir	USGS Date 1959 Plat or Othen City Limits? □ves □no ⊠unknown Cou	er Map <u>PB 6 / PG 11</u> unty Polk
Township 28S Range 26E Section 17 1/2	4 section: □NW □SW □SE □NE Irre	egular-name:
Tax Parcel # 26-28-17-547500-009030 Subdivision Name Florence Citrus Growers	Landgrant	Lot
UTM Coordinates: Zone 16 ×17 Easting 4 2 8 7	7 0 9 <b>N</b> orthing 3 1 0 2 5 4 7	Lot
Other Coordinates: X: Y:	Coordinate System & Datum _	
Name of Public Tract (e.g., park)		
	HISTORY	
Original Use Residence, private Current Use	From (year): To	(year):
Other Use  Moves: ☐yes ☒no ☐unknown Date:	From (year): To Original address	o (year):
Alterations:   yes □no □unknown Date:	NatureRoofing, windows, s	iding, encl. porch
Additions:    yes   no   unknown Date:  Architect (last name first):		
Ownership History (especially original owner, dates, profession, etc.		
Felicia Mitchell (2017); Sarah Brown (2	2009); Ada Collins (1979); Bets	y Lee Graham
Is the Resource Affected by a Local Preservation Ordinance	ce?  yes  no  unknown  Describe	
	DESCRIPTION	
Style Masonry Vernacular	Exterior Plan Irregular	Number of Stories 1
Exterior Fabric(s) 1. Concrete block	2. Metal	B
Roof Type(s) 1. Gable Roof Material(s) 1. Composition shingles		
Roof secondary strucs. (dormers etc.) 1.	2	J
Windows (types, materials, etc.)		
SHS, metal, single, paired, 2/2; Fixed,	wood, single, one-light	
Distinguishing Architectural Features (exterior or interior orname	ents)	
Overhanging eaves w/ boxed rafter tails		L
Ancillary Features / Outbuildings (record outbuildings, major land	dscape features; use continuation sheet if needed.)	
DHR USE ONLY C	OFFICIAL EVALUATION	DHR USE ONLY
DHR USE ONLY  NR List Date  SHPO – Appears to meet criteria for NI KEEPER – Determined eligible:		DHR USE ONLY  Date Init Date

DESCRIPTION (continued)
Chimney: No. 1 Chimney Material(s): 1. Brick 2. 3. Foundation Type(s): 1. Concrete block 2. 3. Foundation Material(s): 1. Concrete Block 2. Main Entrance (stylistic details)  W ELEV: single door w/ paneling
Porch Descriptions (types, locations, roof types, etc.)
Condition (overall resource condition):     Condition (overall resource condition):   Dexcellent   Description of Resource
Archaeological Remains Check if Archaeological Form Completed
RESEARCH METHODS (select 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)       ☐USDA historic aerial photographs (PALMM)         Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)         Publication of Archival Library and Museum Materials (PALMM), accessible online at:
http://palmm.fcla.edu/
OPINION OF RESOURCE SIGNIFICANCE
Appears to meet the criteria for National Register listing individually?  Appears to meet the criteria for National Register listing as part of a district?  Explanation of Evaluation (required, whether significant or not; use separate sheet if needed)  The building is not a significant embodiment of a type, period, or method of construction; and has no known significant historic associations. The resource is a contributing resource w/n the Florence Citrus Growers Association Hist. District (8P009983).
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 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 All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097
2) Document type Maintaining organization File or accession #'s
RECORDER INFORMATION
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc
Recorder Contact Information 8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net (address/phone/fax/e-mail)

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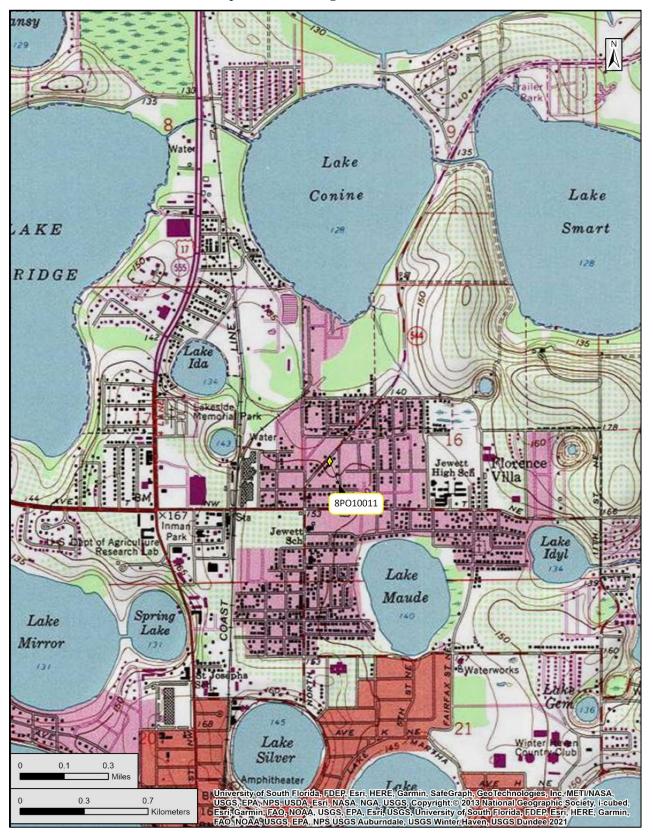








### USGS Winter Haven Township 28 South, Range 26 East, Section 17



☑ Original
☐ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10012
Field Date	3-23-2022
Form Date	3-29-2022
Recorder #	12

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

Survey Project Name National Register Cat	if none) 2244 Lucerne Park Road  CRAS SR 544 fr Avenue T NW to SR 17, Polk  tegory (please check one)  building  structure  district  si rofit  private-nonprofit  private-individual  rocket	te 🔲 object
	LOCATION & MAPPIN	NG
USGS 7.5 Map Name City / Town (within 3 mil Township 28S I Tax Parcel # 26-2 Subdivision Name F	ber <u>Direction</u> <u>Street Name</u> <u>Street Name</u>	Plat or Other Map PB 6 / PG 11  Junknown County Polk  SE NE Irregular-name:  Lot
Other Coordinates: X	K: Y: Coordinate Syste	em & Datum
	(e.g., park)	
	HICTORY	
	HISTORY	
Original Use Residence Current Use Duplot Other Use Moves: yes Alterations: yes Additions: yes Architect (last name first	From (year):           Gno         ☐unknown         Date:         Original address           ☐no         ☐unknown         Date:         Nature         Roofing, and address           ☐no         ☐unknown         Date:         Nature         E ELEV (Galler)	1952
Alternative As	ssets, LLC (2021); Patrick Polarchy (2013); Id	della Robinson (2005); Daisy & Frank
	(1962); Joseph & Concettina Maisano	
Is the Resource Affect	cted by a Local Preservation Ordinance? ☐yes ☐no ☑unknown	Describe
	DESCRIPTION	
Roof secondary Windows (types, materia	Stucco  Gable Composition shingles Strucs. (dormers etc.) 1. Gable extension  als, etc.)  2. Shed 2. Shed 2. Shed	3 3
SHS, vinyl, si	.ngle, 1/1	
Distinguishing Archite	ectural Features (exterior or interior ornaments)	
	aves w/ boxed rafter tails, stucco quoins & tr	rim
Ancillary Features / C	Outbuildings (record outbuildings, major landscape features; use continuation she	et if needed.)
DHR U	USE ONLY OFFICIAL EVALUATION	DHR USE ONLY
NR List Date	SHPO – Appears to meet criteria for NR listing:     SHPO – Appears to meet criteria for NR listing:    SHPO	fficient info Date Init

☐Owner Objection

NR Criteria for Evaluation: ☐a ☐b ☐c

d (see National Register Bulletin 15, p. 2)

### HISTORICAL STRUCTURE FORM

Site #8 **PO10012** 

DESCRIPTION (continued)
Chimney: No0_ Chimney Material(s): 1
Porch Descriptions (types, locations, roof types, etc.)  W/ENTRANCE: open, partial width, beneath a shed roof w/ squared wooden porch supports
Condition (overall resource condition): ☐excellent ☐good ☒fair ☐deteriorated ☐ruinous  Narrative Description of Resource
A one-story Masonry Vernacular style building w/ replacement siding and the inclusion of stucco quoins and trim. A gable roof extension addition was constructed on the E ELEV.
Archaeological Remains
RESEARCH METHODS (select all that apply)
☑FMSF record search (sites/surveys) ☐Ibrary research ☐ building permits ☐ occupant/owner interview ☐ plat maps ☑ property appraiser / tax records ☐ newspaper files ☐ neighbor interview ☐ cultural resource survey (CRAS) ☐ historic photos ☐ interior inspection ☑ the methods (describe) ☐ USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/
OPINION OF RESOURCE SIGNIFICANCE
Appears to meet the criteria for National Register listing individually?
Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)  1
DOCUMENTATION
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  1) Document type All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097  2) Document type Maintaining organization File or accession #'s File or accession #'s
RECORDER INFORMATION
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information (address/phone/fax/e-mail)  Affiliation Archaeological Consultants Inc  Sarasota, FL/ 34240 /aciflorida@comcast.net

# Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
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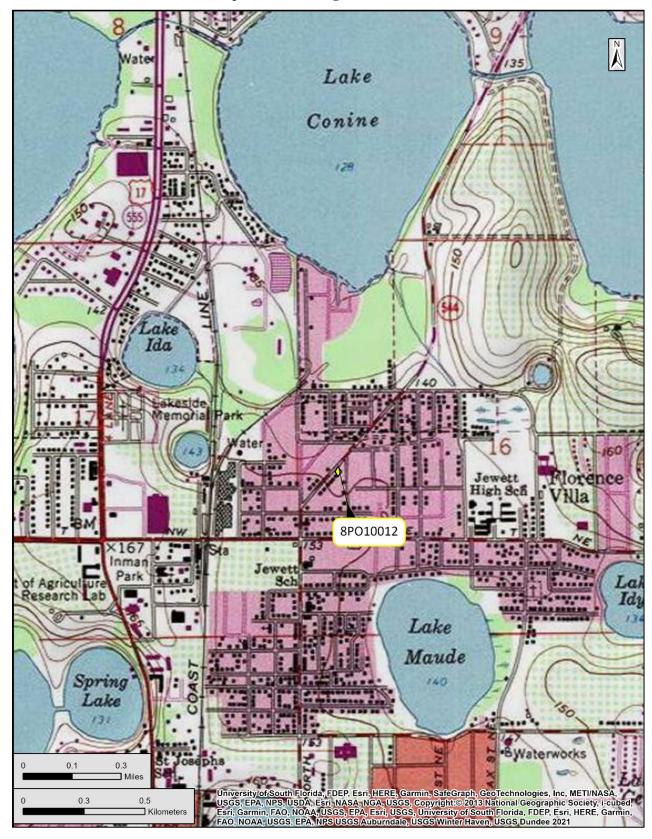








USGS Winter Haven Township 28 South, Range 26 East, Section 17



☑ Original
☐ Update



# HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10014
Field Date	3-23-2022
Form Date	4-6-2022
Recorder #	101

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

National Register Cat	if none) 2137 Lucerne Par CRAS SR 544 fr Avenue (egory (please check one) 🗷 buildir rofit 🔲 private-nonprofit 🖼 private-individual	ng □ structure □ district	☐ site ☐ object		
USGS 7.5 Map Name City / Town (within 3 mi Township 28S Tax Parcel # 26-2 Subdivision Name F UTM Coordinates: 20 Other Coordinates: >	ber <u>Direction</u> <u>Street Name</u>	USGS Date _ In City Limits? □yes □ _ 1/₄ section: □NW □S _ L  8 6 0 7 Northing 3 1 _ Coordinate	Street Type  Road  Plat or Othe Ino Sunknown Cot SW SE NE Irre andgrant Block J  0 2 5 0 1 e System & Datum  Road	egular-name: Lot	11 & 12
		HISTORY			
Original Use Resi Current Use Other Use Moves: Jyes Alterations: Jyes Additions: Jyes Architect (last name firs Ownership History (es	approximately dence, private  Ino Unknown Date: It): Ino Unknown Date: Ino	From (year From (year From (year From (year Original address Nature Roofi Nature Builder etc.)	r): 1925 To r): To r): To comp, siding, with (last name first): ); Charles P. W	ndows Woodall	
	,	DESCRIPTIO			
Exterior Fabric(s) 1. Roof Type(s) 1. Roof Material(s) 1. Roof secondary Windows (types, material SHS, vinyl, si	Composition shingles strucs. (dormers etc.) 1. Gable eals, etc.)  Ingle, paired, 1/1  Ectural Features (exterior or interior on	Exterior Plan Irres 2. 2. 2. 2. extension	gular (	3	
Overhanging ea	oves w/ exposed rafter Outbuildings (record outbuildings, major	tails, rectangular		wood window surr	rounds
DHRI	JSE ONLY	OFFICIAL EVALUA	TION	DHR USE O	NI Y
NR List Date	SHPO – Appears to meet criteria for KEEPER – Determined eligible:			Date	nit

☐Owner Objection

NR Criteria for Evaluation: □a □b □c □d (see National Register Bulletin 15, p. 2)

### HISTORICAL STRUCTURE FORM

Site #8 **PO10014** 

DESCRIPTION (continued)
Chimney: No1_ Chimney Material(s): 1. Brick 2
Porch Descriptions (types, locations, roof types, etc.)  S/ENTRANCE: open, partial width, beneath a gable roof w/ screening & half wall, accessed by ramp
Condition (overall resource condition):
by this siding which is damaged in places, revealing the underside of the house.
Archaeological Remains Check if Archaeological Form Completed
RESEARCH METHODS (select 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)       USDA historic aerial photographs (PALMM)         Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)         Publication of Archival Library and Museum Materials (PALMM), accessible online at:
OPINION OF RESOURCE SIGNIFICANCE
Appears to meet the criteria for National Register listing individually?
Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)  1
DOCUMENTATION
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  1) Document type All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097  2) Document type Maintaining organization File or accession #'s
RECORDER INFORMATION
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information (address / phone / fax / e-mail)  Affiliation Archaeological Consultants Inc  Sarasota, FL/ 34240 /aciflorida@comcast.net

# Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE







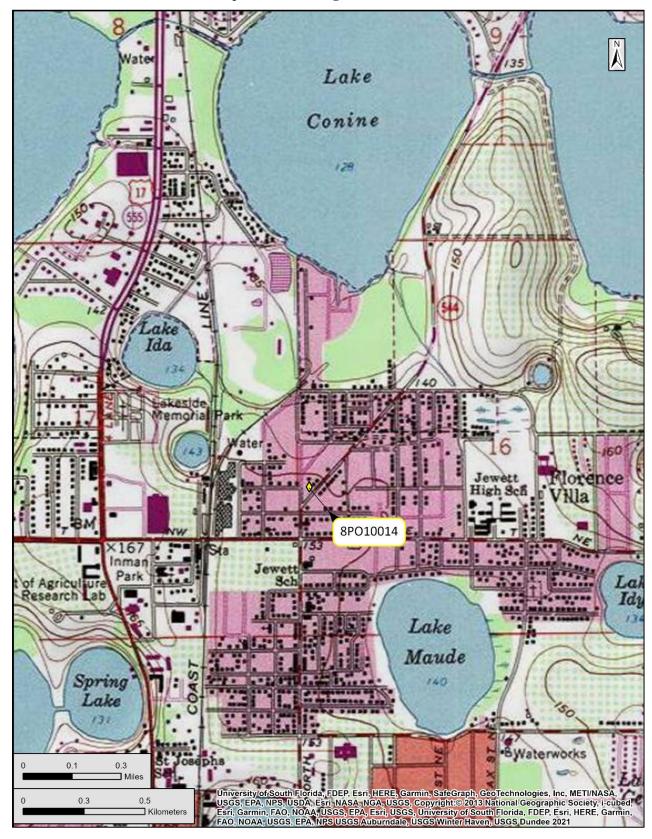








#### USGS Winter Haven Township 28 South, Range 26 East, Section 17



#### Page 1

○ Original 
 □ Update



### HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10015
Field Date	3-23-2022
Form Date	4-6-2022
Recorder #	100

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

Survey Project Name <u>C</u> National Register Categor	ory (please check one) 🗷 building	NW to SR 17, Po]  ☐structure ☐district	☐ site ☐ object	Multiple Listing (DHR only) Survey # (DHR only)  deral   Native American   foreign   unknown
	LO	CATION & MAI	PPING	
Cross Streets (nearest / bei USGS 7.5 Map Name _ W City / Town (within 3 miles)_	Direction Street Name Lucerne Pa  tween)  VINTER HAVEN  Winter Haven In	uSGS Date City Limits? □yes □	Street Type  Road  1959 Plat or Other  no ⊠unknown Cou	Suffix Direction  Map PB 6 / PG 11  nty Polk gular-name:
Tax Parcel # 26-28- Subdivision Name_Floa UTM Coordinates: Zone Other Coordinates: X:_	17-547500-010120 rence Citrus Growers	La E	andgrant	Lot 12
		HISTORY		
Construction Year:				
		DESCRIPTIO	N	
Style Masonry Vernacular Exterior Plan Rectangular Number of Stories 1  Exterior Fabric(s) 1. Concrete block 2. 3.  Roof Type(s) 1. Gable 2. 3.  Roof Material(s) 1. Sheet metal:3V crimp 2. 3.  Roof secondary strucs. (dormers etc.) 1. 2.  Windows (types, materials, etc.)  SHS, wood, single, 1/1; Jalousie, metal, single, 10+ stacked  Distinguishing Architectural Features (exterior or interior ornaments)  Overhanging eaves w/ boxed rafter tails, stepped concrete block parapet  Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.)				
DHR US	E ONLY O	FFICIAL EVALUA	TION	DHR USE ONLY
NR List Date S	SHPO – Appears to meet criteria for NF SEPER – Determined eligible: IR Criteria for Evaluation: □a □b	R listing: □yes □no □yes □no	□insufficient info	Date Init

DESCRIPTION (continued)			
Chimney: No. 0 Chimney Material(s): 1. 2. 3. Structural System(s): 1. Concrete block 2. 3. Foundation Type(s): 1. Slab 2. Foundation Material(s): 1. Concrete, Generic 2. Main Entrance (stylistic details)			
S ELEV: single wooden door w/ inset rectangular light			
Porch Descriptions (types, locations, roof types, etc.)			
Condition (overall resource condition):     Condition (overall resource condition):   Condition   Cond			
A one-story Masonry Vernacular style building w/ a gable roof fronted by a stepped concrete block parapet. Remnants of wooden bracing for a shed roof awning are on the S ELEV. The building appears to be abandoned and has no known address (number).			
Archaeological Remains Check if Archaeological Form Completed			
RESEARCH METHODS (select all that apply)			
☑FMSF record search (sites/surveys) ☐Ibitrary research ☐ building permits ☐ 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) ☐ USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/			
OPINION OF RESOURCE SIGNIFICANCE			
Appears to meet the criteria for National Register listing individually?			
1 3 5 5 6.			
DOCUMENTATION			
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  1) Document type All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097  2) Document type Maintaining organization File or accession #'s File or accession #'s			
RECORDER INFORMATION			
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information 8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net			

# Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE

When submitting an image, it must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.



#### **PHOTOGRAPHS**





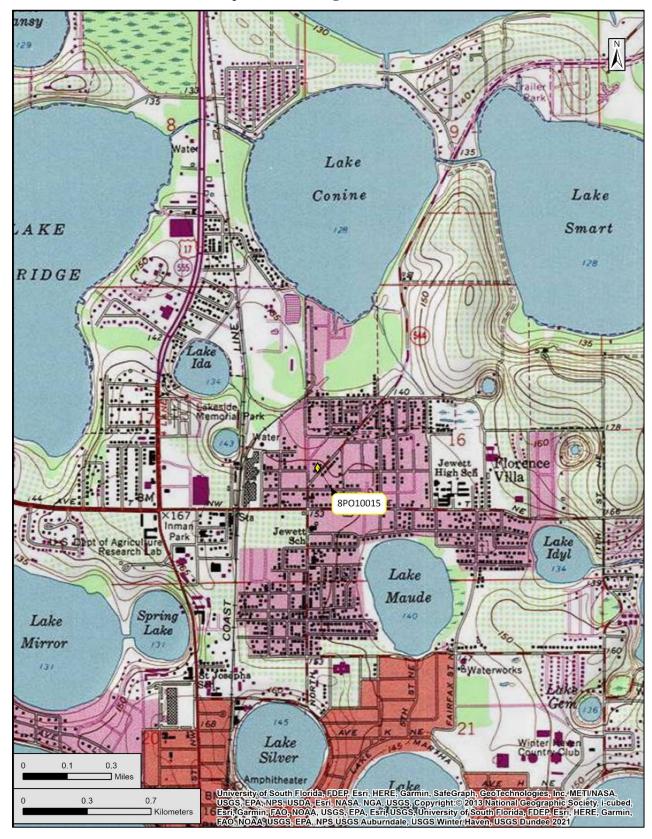


#### **AERIAL MAP**





#### USGS Winter Haven Township 28 South, Range 26 East, Section 17



#### Page 1



### RESOURCE GROUP FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site #81	2010093
Field Date_	3-23-2022
Form Date	4-13-2022
Recorder#	5.0

Consult the Guide to the Resource Group Form for additional instructions

NOTE: Use this form to document districts, landscapes, building complexes and linear resources as described in the box below. Cultural resources contributing to the Resource Group should also be documented individually at the Site File. Do not use this form for National Register multiple property submissions (MPSs). National Register MPSs are treated as Site File manuscripts and are associated with the individual resources included under the MPS cover using the Site File manuscript number.

	Check ONE b	ox that best describe	s the Resource Group:	
Check ONE box that best describes the Resource Group:  ☐ Historic district (NR category "district"): buildings and NR structures only: NO archaeological sites ☐ Archaeological district (NR category "district"): archaeological sites only: NO buildings or NR structures ☐ Mixed district (NR category "district"): includes more than one type of cultural resource (example: archaeological sites and buildings) ☑ Building complex (NR category usually "building(s)"): multiple buildings in close spatial and functional association ☐ Designed historic landscape (NR category usually "district" or "site"): can include multiple resources (see National Register Bulletin #18, page 2 for more detailed definition and examples: e.g. parks, golf courses, campuses, resorts, etc.) ☐ Rural historic landscape (NR category usually "district" or "site"): can include multiple resources and resources not formally designed (see National Register Bulletin #30, Guidelines for Evaluating and Documenting Rural Historic Landscapes for more detailed definition and examples: e.g. farmsteads, fish camps, lumber camps, traditional ceremonial sites, etc.) ☐ Linear resource (NR category usually "structure"): Linear resources are a special type of structure or historic landscape and can include canals, railways, roads, etc.				
Resource Group Name Alta Vista Elementary School Multiple Listing [DHR only]				
	L	OCATION & M	APPING	
County or Counties (do Name of Public Tract (do 1) Township	Haines City not abbreviate) Polk	1¼ section: □NW1¼ section: □NW1¼ section: □NW	SW SE NE SW SE NE	Suffix Direction Sunown Irregular-name:
USGS 7.5' Map(s) 1) NameDUNDEE USGS Date1953_				
2) Name USGS Date Plat, Aerial, or Other Map (map's name, originating office with location) Landgrant Verbal Description of Boundaries (description does not replace required map)				
Located within Polk County Parcel ID #27-27-32-800000-000092; north of Lucerne Park Road, south of Lake Villa Way, west of SR 17 (S 10th St), & east of Walsdorf Way				
DHR U	SE ONLY	OFFICIAL EVALU	IATION	DHR USE ONLY
NR List Date	SHPO – Appears to meet criteria for	r NR listing: ☐yes ☐no		Date Init

☐ Owner Objection

NR Criteria for Evaluation: 

a 

b 

c 

d (see National Register Bulletin 15, p. 2)

HISTORY & DESCRIPTION			
Construction Year:1962approximatelyyear listed or earlieryear listed or later Architect/Designer:			
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 ☐ historic photos ☐ interior inspection ☐ HABS/HAER record search ☑ other methods (specify) ☐ USDA historic aerial photographs (PALMM) ③ bibliographic References (give FMSF Manuscript # if relevant) Publication of Archival Library and Museum Materials (PALMM), accessible online at: <a href="http://palmm.fcla.edu/">http://palmm.fcla.edu/</a>			
OPINION OF RESOURCE SIGNIFICANCE			
Potentially eligible individually for National Register of Historic Places?   Syes Ino Insufficient information Insufficient Insuffi			
Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)  Architecture  3.			
DOCUMENTATION			
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents    Document type All materials at one location   Maintaining organization   Archaeological Consultants Inc			
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc Recorder Contact Information (address / phone / fax / e-mail)  Affiliation Archaeological Consultants Inc Sarasota, FL/ 34240 /aciflorida@comcast.net			

# Required Attachments

- **1** PHOTOCOPY OF USGS 7.5' MAP WITH DISTRICT BOUNDARY CLEARLY MARKED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP WITH RESOURCES MAPPED & LABELED
- **3 TABULATION OF ALL INCLUDED RESOURCES -** Include name, FMSF #, contributing? Y/N, resource category, street address or other location information if no address.
- **4** PHOTOS OF GENERAL STREETSCAPE OR VIEWS (Optional: aerial photos, views of typical resources) When submitting images, they must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital images must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

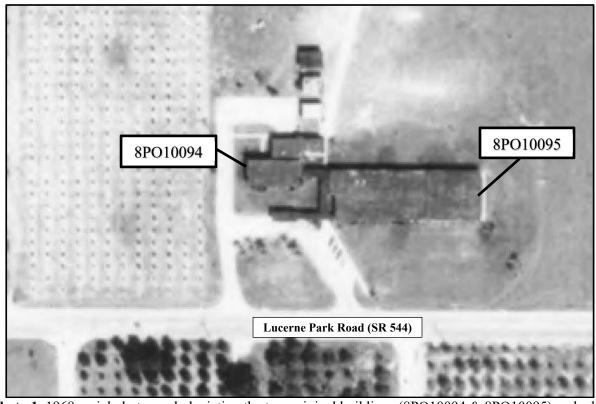
Alta Vista Elementary School is a building complex resource group located at 801 Scenic Highway S in Section 32 of Township 27 South, Range 27 East (USGS 1953). Alta Vista Elementary School was one of three air-conditioned elementary schools opened in Polk County in 1962 (Tampa Tribune 1962). Within the boundaries of the resource group, as contained within the APE, there are two contributing resources. These include two International style buildings (8PO10094 & 8PO10095), constructed in ca. 1962. It was beyond the scope of work for this CRAS to identify all resources within the entire resource group, and only permanent structures within the APE visible from the right-of-way were evaluated.

In 1961, the Polk County School Board introduced plans for the county's first climate-controlled school in Mulberry (Dobert 1961). The proposition led to significant controversy amongst the public as it was feared the costs would be high, therefore increasing taxes, and at the time there was little evidence that climate-controlled environments were more conducive to learning. Many believed the school board should wait for more detailed information from "an experimental air-conditioned school" located in Pinellas County (Dobert 1961). Those in favor argued that the costs would not be significant and that criminals are provided air-conditioned jail cells - the children should be afforded the same amenities. The issue of climate-controlled schools was topic of debate in several surrounding counties in 1961, including Hillsborough County, Sarasota County, and Pinellas County (Tampa Tribune 1961a). A major opponent of the Polk County efforts - the Polk County Property Owners League - referred to the efforts to construct climate-controlled schools as an "unsubstantiated expenditure of our school funds for an experiment which no one has proven will aid our children's education" (Tampa Tribune 1961b). Plans were not limited to one school, however, as a total of three were planned for opening in time for the 1962-1963 school year -Kingsford Elementary in Mulberry, Lake Elbert Elementary in Winter Haven, and Alta Vista Elementary in Haines City (Tampa Tribune 1961b). The approval of these schools set the precedent for future school construction in Polk County, ending the nearly yearlong controversy, with two additional "compact, full air-conditioned" elementary schools approved and planned for construction in 1962 (Orlando Sentinel 1961).

Alta Vista Elementary was the first set to be completed in February 1962 at an approximate cost of \$255,000 (Orlando Sentinel 1961). The original design was equipped to handle 360 elementary students with a total of 12 classrooms, office space, and a cafetorium (a combined cafeteria and auditorium space) and could be expanded with an additional 12 classrooms in future without destroying the original design (Orlando Sentinel 1961). To decrease construction costs and improve the efficiency of the air-conditioning, a compact version of the "finger-type" school design was utilized at Alta Vista, as well as Lake Elbert and Kingsford (Tampa Tribune 1961c). This school design was prominent throughout the United States following World War II. In order to accommodate the post-WWII "baby boom" and building boom, school design became more lightweight in construction compared to previous multi-story, grand brick buildings. Similar to the Ranch style houses popular at the time, schools became more spread out in plan with flat roofs, decreased ornamentation, and often used brick or concrete with glass or metal window wall systems often in the International style (ICON Architecture, Inc. 2003; Baker 2012). The popular "finger plan" often had an E-shaped footprint with rows of classrooms (the "fingers") along covered, open air corridors separated by grassy courts (Icon Architecture, Inc. 2003). With this design, classrooms were provided direct access to the school grounds with entrances along covered walkways, as well as maximum circulation of fresh air and natural light (Baker 2012). In addition, the segmented design allowed for the schools to be expanded as needed without significantly altering the design of the campus – an important feature during a time of increasing population growth.

Overall, the Alta Vista Elementary Resource Group (8PO10093) appears eligible for listing in the NRHP under Criteria A and C in the areas of Education and Architecture as the first air-conditioned school in Polk County. Although the overall design of Alta Vista Elementary is typical of this era, the approval and construction of this campus set the precedent for future construction of air-conditioned schools throughout Polk County from 1962 onward. The resource demonstrates the importance of architectural design and the application of new technology in improving the learning environment – and resulting success

- of students.



**Photo 1.** 1968 aerial photograph depicting the two original buildings (8PO10094 & 8PO10095) and what appear to be portable classrooms to the north (USDA 1968).



**Photo 2.** 2021 aerial photograph depicting the current configuration of Alta Vista Elementary School (FMSF) (Google Earth 2022). The two original buildings (8PO10094 and 8PO10095) are the only resources located within the APE.

#### **REFERENCES**

#### Baker, Lindsay

2012 A History of School Design and its Indoor Environmental Standards, 1900 to Today. National Clearinghouse for Educational Facilities – National Institute of Building Sciences.

#### Dobert, Earl

"Air- Conditioned School Issue Unsolved in Polk." *The Tampa Tribune*, March 9, 1961. Accessed April 13, 2022. https://www.newspapers.com.

#### ICON Architecture, Inc.

2003 An Honor and An Ornament: Public School Buildings in Michigan. State Historic Preservation Office, Michigan Historical Center. Inland Press, Detroit.

#### The Orlando Sentinel

"County's First Air Conditioned School To Open." *The Orlando Sentinel*, December 31, 1961. Accessed April 13, 2022. https://www.newspapers.com.

#### The Tampa Tribune

1961a "Cool Schools – Easier Learning, Lower Costs?" *The Tampa Tribune*, June 25, 1961. Accessed April 13, 2022. https://www.newspapers.com.

1961b "Opposition To Air-Conditioned Schools Urged." *The Tampa Tribune*, May 10, 1961. Accessed April 13, 2022. https://www.newspapers.com.

1961c "Polk Board Votes To Build 2 Air-Conditioned Schools." *The Tampa Tribune*, December 29, 1961. Accessed April 13, 2022. https://www.newspapers.com.

"Work Resumes on School With 'Climate Control'." *The Tampa Tribune*, February 12, 1962. Accessed April 13, 2022. https://www.newspapers.com.

United States Department of Agriculture (USDA)

1968 Aerial Photograph. 2-12-68, CTU-4JJ-64. PALMM, Gainesville.

United States Geological Survey (USGS)

1953 Dundee, Fla. Photorevised 1970.



#### **PHOTOGRAPHS**



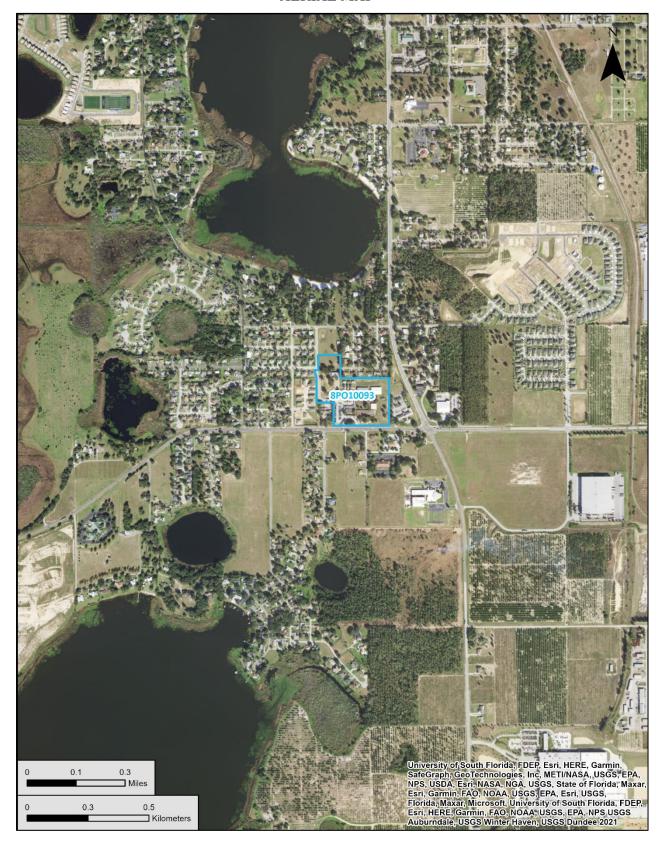






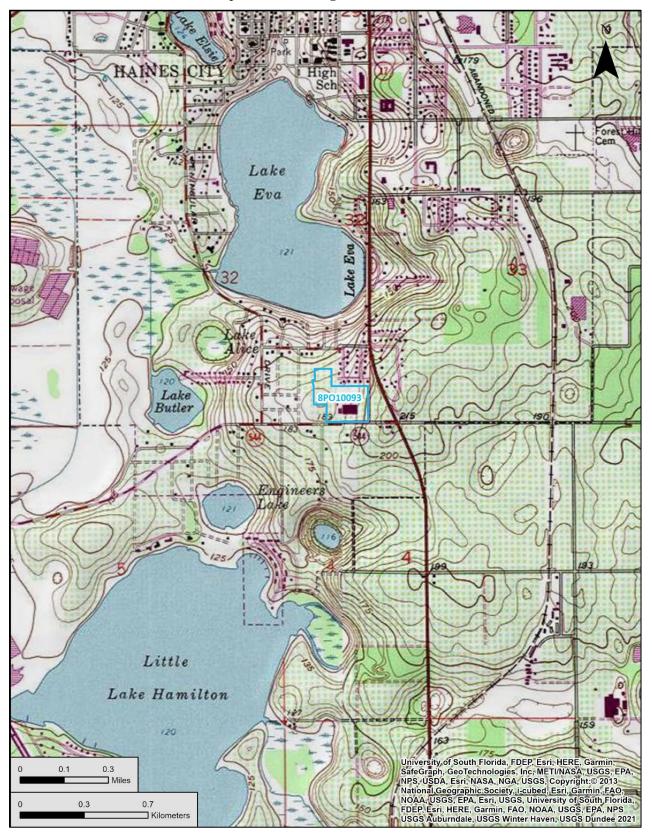


#### **AERIAL MAP**





#### USGS Dundee Township 27 South, Range 27 East, Section 32



#### Page 1

☑ Original
☐ Update



### HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

 Site#8
 PO10094

 Field Date
 3-23-2022

 Form Date
 4-13-2022

 Recorder #
 52

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

Survey Project Name <u>CRAS SR 544 fr Avenue T NW to SR</u> National Register Category (please check one) ■ building □ structure	Multiple Listing (DHR only)  17, Polk Survey # (DHR only)  district site object pecific city Scounty state federal Native American foreign unknown
LOCATION	& MAPPING
Address: Street Number Direction Street Name  Scenic  Cross Streets (nearest / between)	Street Type Highway Suffix Direction S
USGS 7.5 Map Name DUNDEE City / Town (within 3 miles) Haines City In City Limits? Township 27S Range 27E Section 32 1/4 section:  Tax Parcel # 27-27-32-800000-000092 Subdivision Name Totten & Maddox UTM Coordinates: Zone 16 17 Easting 4 3 8 5 9 8 North	NW □SW □SE □NE Irregular-name:            Landgrant            Block
	Coordinate System & Datum
HIS	ΓORY
Current Use Other Use  Moves:	From (year): 1962 To (year): CURR From (year): To (year): From (year): To (year): address  Roofing, siding, windows Flat roof (S ELEV)  Builder (last name first):
Is the Resource Affected by a Local Preservation Ordinance?  yes	□no 図unknown DescribeRIPTION
Style _ International         Exterior Plant           Exterior Fabric(s) 1. Brick         2	Irregular
Distinguishing Architectural Features (exterior or interior ornaments)  Flat roof w/ sheet metal fascia overhang, brick  Ancillary Features / Outbuildings (record outbuildings, major landscape features)  Alta Vista Elementary School (8P010093; 8P01009)	use continuation sheet if needed.)
DHR USE ONLY OFFICIAL I	EVALUATION DHR USE ONLY
NR List Date  SHPO – Appears to meet criteria for NR listing:   KEEPER – Determined eligible:   ye	s

☐Owner Objection

NR Criteria for Evaluation:  $\Box$ a  $\Box$ b  $\Box$ c  $\Box$ d (see *National Register Bulletin 15*, p. 2)

DESCRIPTION (continued)
Chimney: No0_ Chimney Material(s): 1
Porch Descriptions (types, locations, roof types, etc.)
Condition (overall resource condition): ☐excellent ☑good ☐fair ☐deteriorated ☐ruinous  Narrative Description of Resource
A one-story International style school building w/ a ca. 1990s flat roof addition on the S ELEV. The majority of the building is obscured from the public R.O.W.; however, it is a common style/type of mid- to late-20th century schools in Florida.
Archaeological Remains Check if Archaeological Form Completed
RESEARCH METHODS (select all that apply)
☑FMSF record search (sites/surveys) ☐Ibrary research ☐ building permits ☐ Sanborn maps ☐ plat maps ☑ property appraiser / tax records ☐ newspaper files ☐ neighbor interview ☐ cultural resource survey (CRAS) ☐ historic photos ☐ interior inspection ☑ other methods (describe) ☐ USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/
OPINION OF RESOURCE SIGNIFICANCE
Appears to meet the criteria for National Register listing individually?  Appears to meet the criteria for National Register listing as part of a district?  Explanation of Evaluation (required, whether significant or not; use separate sheet if needed)  The building is not a significant embodiment of a type, period, or method of construction; and has no known significant historic associations; however, it is a contributing resource to the NRHP-eligible Alta Vista Elementary (FMSF#) resource group.
Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)  1. Architecture  3. 5. 6.
DOCUMENTATION
Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents  1) Document type All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097  2) Document type Maintaining organization File or accession #'s File or accession #'s
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information (address / phone / fax / e-mail)  Affiliation Archaeological Consultants Inc  Sarasota, FL/ 34240 /aciflorida@comcast.net

# Required Attachments

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- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE

When submitting an image, it must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.



#### **PHOTOGRAPHS**









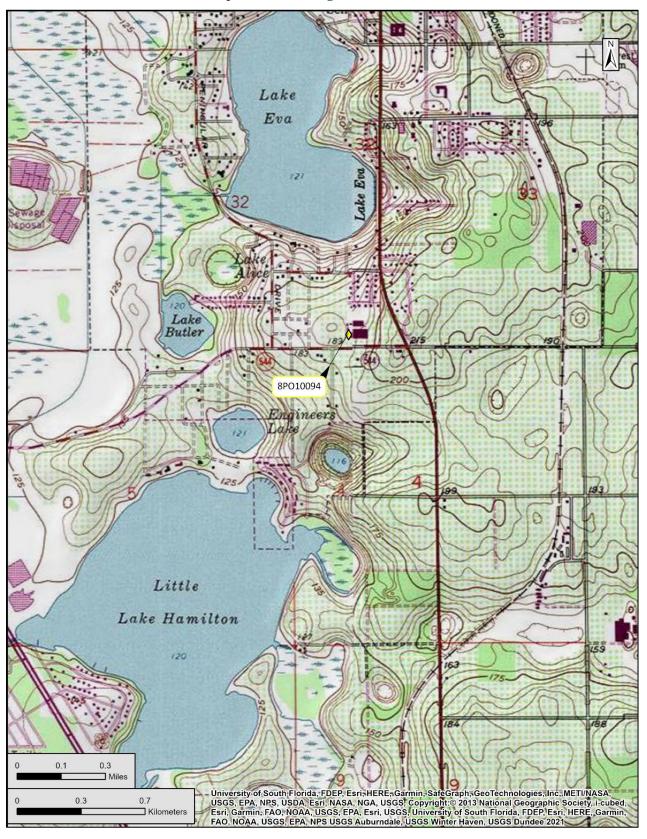


#### **AERIAL MAP**





USGS Dundee Township 27 South, Range 27 East, Section 32



#### Page 1

○ Original 
 □ Update



### HISTORICAL STRUCTURE FORM FLORIDA MASTER SITE FILE

Version 5.0 3/19

Site#8	PO10095
Field Date	3-23-2022
Form Date	4-13-2022
Recorder #	51

**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) Alta Vista Survey Project Name CRAS SR 544 fr National Register Category (please check one) Ownership: private-profit private-nonprofit p	Avenue T NW to SR 17, P  ■ Building ■ structure ■ district	olk Sur ct □site □object	vey # (DHR only)
Ctract Number Direction Ctrac	LOCATION & MA	APPING Street Type	offin Direction
	USGS Da In City Limits? □yes	Highway  te 1953 Plat or Other Map  □no ⊠unknown County	S  D PB 1 / PG 23  Polk  r-name:
Tax Parcel # 27-27-32-800000-0000 Subdivision Name_Totten & Maddox UTM Coordinates: Zone ☐16 ☑17 Easti Other Coordinates: X:	ing 4 3 8 6 6 5 <b>N</b> orthing 3 Y: Coordina	Landgrant Block 1 0 6 7 8 9	Lot
Name of Public Tract (e.g., park)			
	HISTORY		
Current Use Other Use Moves:	From (ye From (ye Original address Nature Nature Builde	ar): 1962 To (yea ar): To (yea	r): r):
Is the Resource Affected by a Local Preserva	tion Ordinance? ☐yes ☐no ☒	unknown Describe	
	DESCRIPTION	ON	
Style International Exterior Fabric(s) 1. Brick Roof Type(s) 1. Flat Roof Material(s) 1. Built-up Roof secondary strucs. (domers etc.) 1 Windows (types, materials, etc.)  Awning, metal, paired, 5-stack	2 2 2	3 3	
Distinguishing Architectural Features (exterior of Flat roof w/ sheet metal fasci  Ancillary Features / Outbuildings (record outbuild Alta Vista Elementary School (	.a overhang, wall-mounte dings, major landscape features; use contin	uation sheet if needed.)	panel window detail
DHR USE ONLY	OFFICIAL EVALU	ATION	DHR USE ONLY
KEEPER – Determined	et criteria for NR listing: □yes □no eligible: □yes □no on: □a □b □c □d (see <i>N</i> a	Date	e Init e )

#### HISTORICAL STRUCTURE FORM

Site #8 **PO10095** 

DESCRIPTION (continued)			
Chimney: No0_ Chimney Material(s): 1			
Single door w/ cransom w sideright, beheath the rasera overhang (per crassroom)			
Porch Descriptions (types, locations, roof types, etc.)			
Condition (overall resource condition): ☐ excellent ☑ good ☐ fair ☐ deteriorated ☐ ruinous  Narrative Description of Resource			
A one-story International style school building w/ multiple classroom entrances along the S ELEV. The majority of the building is obscured from the public R.O.W.; however, it is a common style/type of mid- to late-20th century schools in Florida.			
Archaeological Remains Check if Archaeological Form Completed			
RESEARCH METHODS (select all that apply)			
☑FMSF record search (sites/surveys) □Iibrary research □building permits □Sanborn maps □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) USDA historic aerial photographs (PALMM) Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Publication of Archival Library and Museum Materials (PALMM), accessible online at: http://palmm.fcla.edu/			
OPINION OF RESOURCE SIGNIFICANCE			
Appears to meet the criteria for National Register listing individually?   Appears to meet the criteria for National Register listing as part of a district?   Explanation of Evaluation (required, whether significant or not; use separate sheet if needed)  The building is not a significant embodiment of a type, period, or method of construction; and has no known significant historic associations; however, it is a contributing resource to the NRHP-eligible Alta Vista Elementary (FMSF#) resource group.  Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)			
1. <u>Architecture</u> 3 5			
2. Education 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 All materials at one location Maintaining organization Archaeological Consultants Inc  Document description Files, photos, research, document File or accession #'s P19097  2) Document type Maintaining organization File or accession #'s			
RECORDER INFORMATION			
Recorder Name Savannah Young Affiliation Archaeological Consultants Inc  Recorder Contact Information 8110 Blaikie Court, Ste. A / Sarasota, FL/ 34240 /aciflorida@comcast.net			

# Required Attachments

- **1** USGS 7.5' MAP WITH STRUCTURE LOCATION CLEARLY INDICATED
- 2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- **3** PHOTO OF MAIN FACADE, DIGITAL IMAGE FILE

When submitting an image, it must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.



#### **PHOTOGRAPHS**



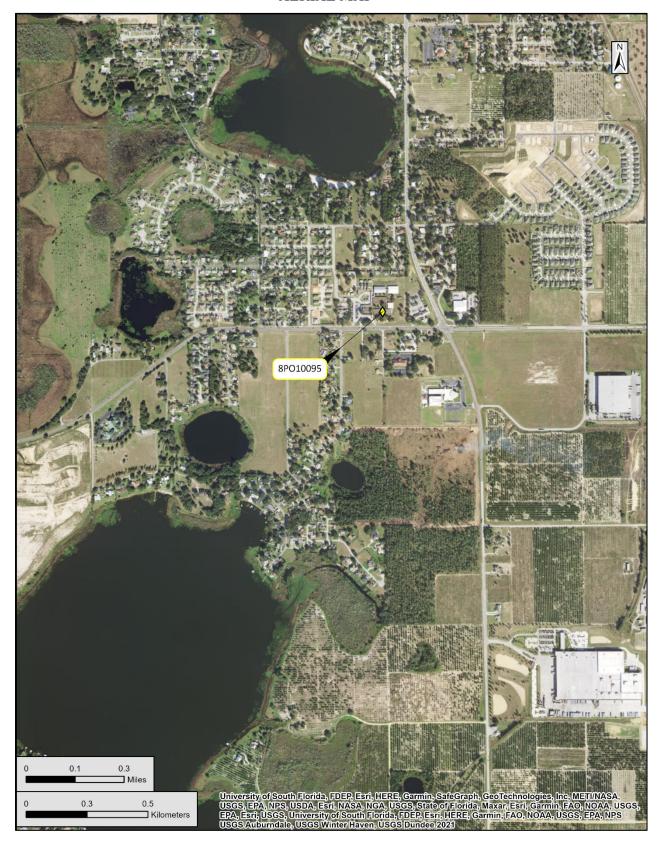






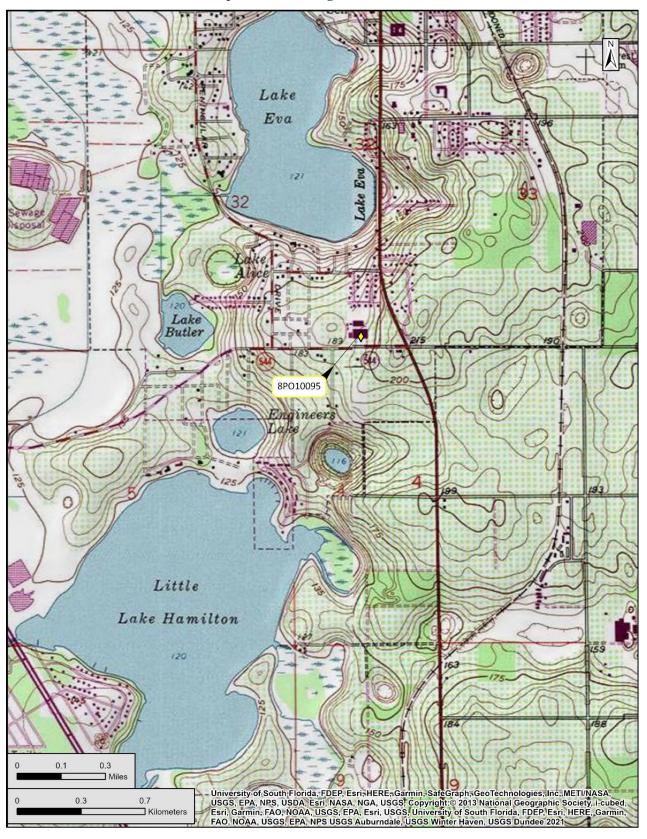


#### **AERIAL MAP**





USGS Dundee Township 27 South, Range 27 East, Section 32



APPENDIX E
Survey Log

CRAS Addendum

FPID No.: 440273-1-22-01

# Survey Log Sheet Florida Master Site File Version 5.0 3/19

**S**urvey # (FMSF only) \_\_\_\_\_

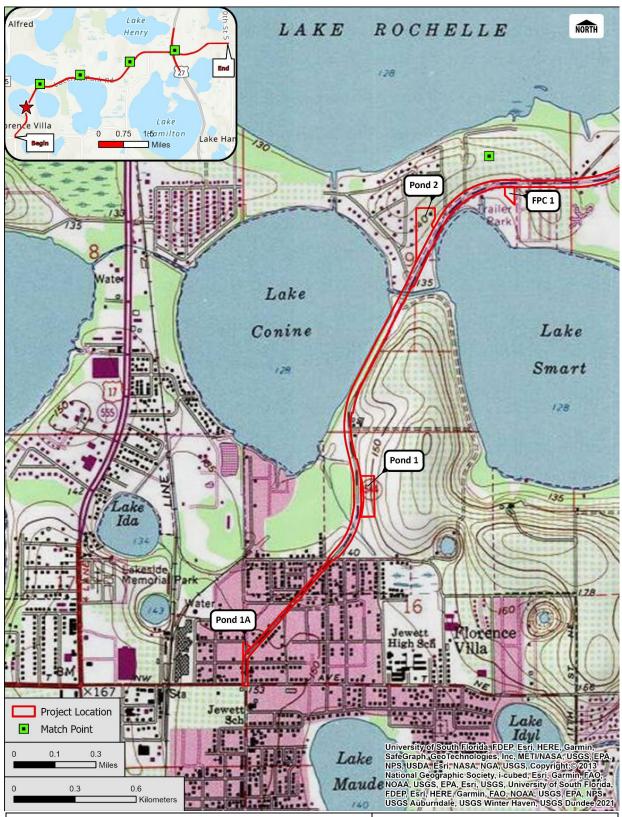
Consult Guide to the Survey Log Sheet for detailed instructions.

Manuscript Information			
Survey Project (name and project phase)			
SR 544, Polk County, Phase I			
Report Title (exactly as on title page)			
		nt and Environment (PD&E) Study State evard to SR 17, Polk County, Florida;	
Report Authors (as on title page) 1. Kimberl	y M. Irby	3	
2		4	
Publication Year 2024 Number of P	ages in Report (do not include site forn	ns)	
Publication Information (Give series, number in series,	publisher and city. For article or chapter,	cite page numbers. Use the style of American Antiquity.)	
ACI, Sarasota, P19143C.15			
Supervieure of Fieldwork (even if some securities) N	lamas		
Supervisors of Fieldwork (even if same as author) N Affiliation of Fieldworkers: Organization Archaeolog			
<b>Key Words/Phrases (Don't use county name, or commo</b>			
·	•,	W 7. South 10th Street	
2. SR 544 4. Lucerne Pa			
		<u> </u>	
Survey Sponsors (corporation, government unit, organiz			
Name FDOT District 1			
Address/Phone/E-mail 801 North Broadway		Date Log Sheet Completed 5-26-2023	
Recorder of Log Sheet Crystal Wright			
Is this survey or project a continuation of a previ	ous project? 🗵 NO 🗀 Yes: 🖪	'revious survey #s (FMSF only)	
	Project Area Mapping		
<b>C</b> ounties (select every county in which field survey was	done: attach additional shoot if necessary	1	
·	-		
1. Polk       3.         2       4.		6.	
USGS 1:24,000 Map Names/Year of Latest Revis	sion (attach additional sheet if necessary	)	
1. Name DUNDEE		Year	
2. Name WINTER HAVEN		Year	
3. Name	Year 6. Name	Year	
Field Dates and Project Area Description			
Fieldwork Dates: Start 2-23-2024 End 2-	-28-2024 <b>Total Area Surveyed</b>	(fill in one) hectares 152.00 acres	
Number of Distinct Tracts or Areas Surveyed	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
· —		gth:kilometers8.00_miles	

Page 2 Survey Log Sheet Survey #\_\_\_\_

Research and Field Methods								
Types of Survey (select all that apply):	□archaeological	□archaeological □architectural ☑historical/archival		chival [	□underwater			
	damage assessment	☐monitoring report	other(describ	e):				
Scope/Intensity/Procedures								
Background research, onlin	ne research, archiv	val research a	t the Polk Co	unty Hist	ory Center &			
Genealogical Library Archi								
Preliminary Methods (select as many	as apply to the project as a	whole)						
	Ilibrary research- <i>local public</i>		rty or tax records	<b>⊠</b> other historic				
	Ilibrary-special collection	⊠newspaper		soils maps of				
			windshield s	•				
•	local informant(s)	nant(s) Sanborn Insurance maps Saerial			grapny			
other (describe):								
Anahaaalaniaal Mathada ( )								
Archaeological Methods (select as m		is a whole)						
☑Check here if <b>NO</b> archaeological methodsurface collection, controlled	oas were usea. Ishovel test-other screen siz	,, DI	look avacuation (at les	not 2v2 ml	metal detector			
surface collection, controlled	water screen	_	□block excavation (at least 2x2 m) □soil resistivity		other remote sensing			
Shovel test-1/4"screen	posthole tests				pedestrian survey			
shovel test-1/8" screen	auger tests		— · — —		unknown			
shovel test 1/16"screen	□ coring □ ground penetra			ır (GPR)	_			
shovel test-unscreened	☐test excavation (at least 1)	(2 m) □l	IDAR					
other (describe):								
Historical/Architectural Methods (s  Check here if NO historical/architectur  building permits  commercial permits  interior documentation  other (describe):  Deed and plat	al methods were used.  □demolition permits  ⊠windshield survey  ⊠local property records	□r □c	□neighbor interview □occupant interview □occupation permits		⊠subdivision maps ⊠tax records □unknown			
Survey Results								
Resource Significance Evaluated?	⊠Yes □No	-						
3		Count of N	owly Dogordod D	000111000	15			
Count of Previously Recorded Resources 2 Count of Newly Recorded Resources 15								
List Previously Recorded Site ID#s with Site File Forms Completed (attach additional pages if necessary)								
PO03077, PO03079								
List Newly Recorded Site ID#s (att	ach additional nages if neces	cary)						
P009983, P009999, P010000,		-	010014 PO100	115 PO100	93 PO10094 and			
PO10095	1010003, 1010007	10100012, 1	010011, 10100	13, 10100	55, 1010051, and			
Site Forms Used: ☐Site File P	aper Forms ⊠Site Fi	le PDF Forms						
REQUIRED: Attach Map of Survey or Project Area Boundary								
IILQUIII	LD. Attabil Map	or our voy or	. rojout Alb	u Dounu	ui <b>y</b>			
SHDU IISE UNI V		SHEU IIZE UNI A			SHPO LISE ONLY			

SHPO USE ON	LY	SHPO USE ON	LY	SHPO USE ONLY		
Origin of Report: □872 □	Public Lands  UW	□1A32 #		Contract Avocational		
Grant Project # Compliance Review: CRAT #						
Type of Document: Archae	eological Survey 🔲 Hist	torical/Architectural Survey 🔲 Ma	rine Survey	☐Monitoring Report		
□Overview □Excavation Report □Multi-Site Excavation Report □Structure Detailed Report □Library, Hist. or Archival Doc						
□Deskto	op Analysis  MPS	☐MRA ☐TG ☐Other:				
Document Destination: Plot	table Projects	Plotability: _				



Township 27 South, Range 27 East, Sections 32 and 33 Township 28 South, Range 26 East, Sections 1, 2, 3, 9-12, 16, and 17

Township 28 South, Range 27 East, Sections 4, 5, and 6 USGS Winter Haven 2021, USGS Dundee 2021 Polk County, Florida

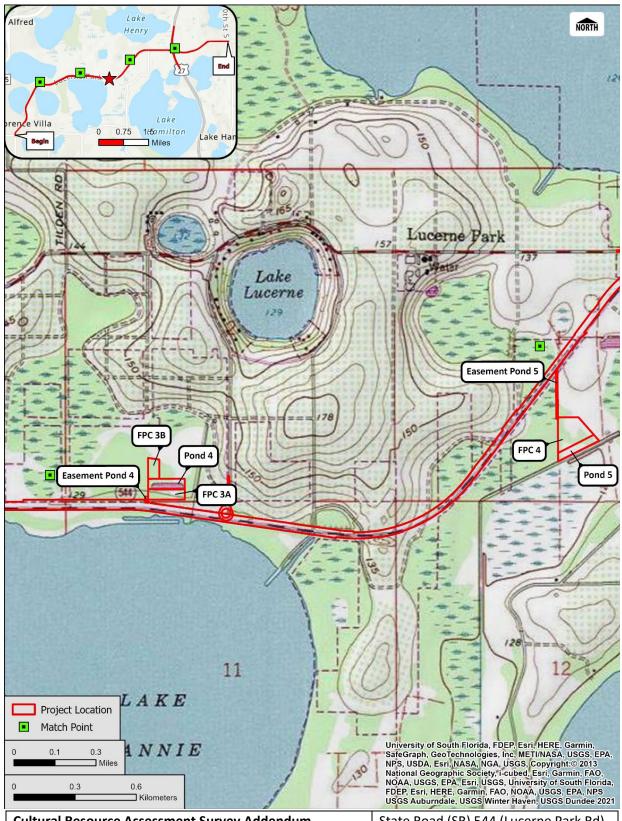
State Road (SR) 544 (Lucerne Park Rd) from Martin Luther King Blvd to SR 17 Polk County, Florida FPID No: 440273-1-22-01



Township 27 South, Range 27 East, Sections 32 and 33 Township 28 South, Range 26 East, Sections 1, 2, 3, 9-12, 16, and 17

Township 28 South, Range 27 East, Sections 4, 5, and 6 USGS Winter Haven 2021, USGS Dundee 2021 Polk County, Florida

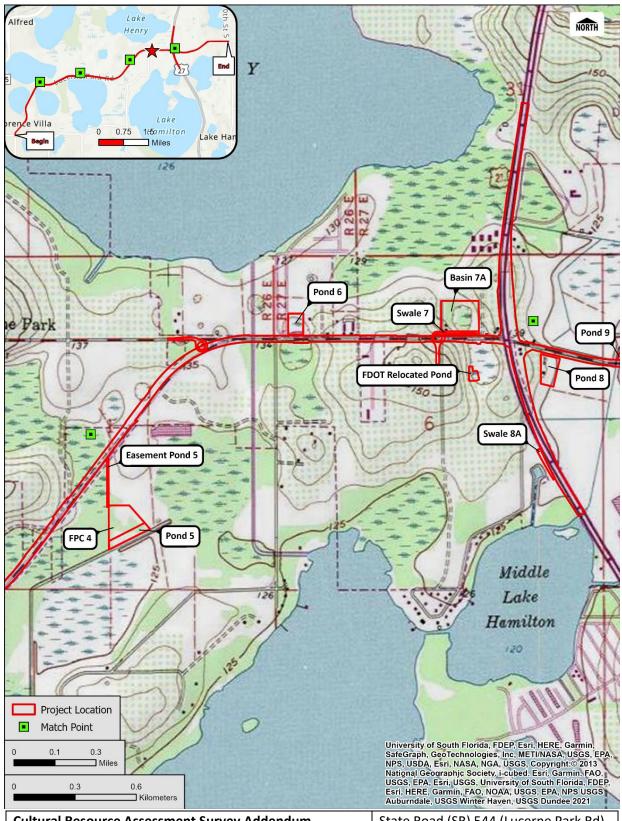
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