

**Florida Department of Transportation
STATE ENVIRONMENTAL IMPACT REPORT**

1. GENERAL INFORMATION:

Project Name:	SR 52 Project Development and Environment (PD&E) Study
Project Limits:	From East of McKendree Road to East of US 301 Pasco County, Florida
WPI Segment Number:	435915-1
ETDM Number:	14184

2. PROJECT DESCRIPTION:

a. Existing:

Existing SR 52 is primarily a two-lane undivided rural roadway between its intersection with I-75 (SR 93) and US 301 in Dade City, Florida. Currently, there are limited bicycle and pedestrian facilities within the study area.

b. Proposed Improvements:

The proposed improvement includes the realignment and construction of SR 52 on a new route which will allow multiple lanes to be constructed without creating substantial impacts to the communities adjacent to the existing roadway. The proposed project begins on SR 52 at McKendree Road and it follows existing SR 52 for approximately 4,400 ft where it continues eastward on new alignment to CR 577 (Curley Road). At CR 577 (Curley Road), the project continues east along McCabe Road for approximately 1.25 miles (mi), then travels northeast avoiding Williams Cemetery before tying into the existing Clinton Avenue roadway. The project would follow existing Clinton Avenue from Prospect Road to US 301. The existing four-lane portion of Clinton Avenue between Fort King Road and US 301, recently constructed by Pasco County, will also be designated as SR 52, while the existing SR 52 from McKendree Road to US 301 will be transferred to Pasco County (**Figure 1**) for ownership and maintenance purposes. The total project length is approximately eight miles.

There are three proposed typical sections (**Figure 2**). The first, from McKendree Road to CR 577 (Curley Road), is a four-lane suburban typical section with a 44-ft depressed grass median expandable to an ultimate six-lane urban roadway with a 22-ft raised median. There is a 5-ft sidewalk on the south side and a 10-ft shared use path on the north side. The second typical section, from CR 577 (Curley Road) to CR 579 (Prospect Road) is the same as the first, except the sidewalks are 5-ft wide on both sides. The third proposed typical section, from CR 579

(Prospect Road) to Fort King Road, is a four-lane urban roadway with a 22-ft median and two 5-ft sidewalks. All three typical sections have 11-ft lanes, 7-ft buffered bike lanes, and a 45 – 55 mph design speed.

The proposed Access Classification is Access Class 3. The locations for signal and median access openings are shown in the concept plans in Appendix A of the *Engineering and Environmental Technical Compendium* (EETC). In addition, roundabouts will be evaluated during final design.

3. APPROVED FOR PUBLIC AVAILABILITY (BEFORE PUBLIC HEARING)


District Designee

5/8/15
Date

A Public Hearing was held on 6/2/15
Date

4. APPROVAL OF FINAL DOCUMENT (AFTER PUBLIC HEARING)


FDOT District Seven Secretary or Designee

8/28/15
Date

5. IMPACT EVALUATION

Topical Categories	S i g n	M i n	N o n	N o i n v	REMARKS
A. SOCIAL IMPACTS					
1. Land Use Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment A-1
2. Community Cohesion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Attachment A-2
3. Relocation Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment A-3
4. Community Services	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Attachment A-4
5. Title VI Considerations	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Attachment A-5
6. Controversy Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment A-6
7. Bicycles and Pedestrians	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Attachment A-7
8. Utilities and Railroads	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Attachment A-8
B. CULTURAL IMPACTS					
1. Historic Sites/Districts	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Attachment B-1
2. Archaeological Sites	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Attachment B-2
3. Recreation Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Attachment B-3
C. NATURAL ENVIRONMENT					
1. Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment C-1
2. Aquatic Preserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment C-3
4. Outstanding Fla. Waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment C-6
7. Coastal Barrier Islands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. Wildlife and Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment C-8
9. Farmlands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Essential Fish Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D. PHYSICAL IMPACTS					
1. Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment D-1
2. Air	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Attachment D-2
3. Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment D-3
4. Contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Attachment D-4
5. Navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

E. PERMITS REQUIRED

The US Army Corps of Engineers (USACE) and Southwest Florida Water Management District (SWFWMD) regulate wetlands and surface waters within the project area. Other agencies, including US Fish and Wildlife Service (USFWS), the US Environmental Protection Agency (EPA), and the Florida Fish and Wildlife Conservation Commission (FWC), review and comment on the wetland permit applications. In addition, the Florida Department of Environmental Protection (FDEP), through a delegation from the EPA, regulates stormwater discharges from the construction sites. It is currently anticipated that the following permits will be required for this project:

PERMITS

Section 404 Dredge/Fill Permit
 Environmental Resource Permit (ERP)
 National Pollutant Discharge Elimination
 System (NPDES) Permit

ISSUING AGENCY

USACE
 SWFWMD (issued 5/18/2011)
 FDEP

6. COMMITMENTS AND RECOMMENDATIONS

Commitments

1. Further reviews will be completed during project design and prior to the construction phases to provide updated observations and verification of the potential for project involvement with listed/protected species and their habitat.
2. A land use review will be performed during the design phase of the project to ensure that all noise-sensitive land uses that have received a building permit prior to the project's Date of Public Knowledge are evaluated.
3. The original noise study and analysis shall be reviewed to confirm that the assumptions, project conditions and results are still valid. Computer modeling efforts will be conducted using the latest version of Traffic Noise Model (TNM), for any required subsequent noise reevaluation as a result of a major design change.

Recommendations

The Build Alternative has been selected as the Recommended Alternative. The three proposed typical sections are provided below in **Figure 2**. The first, from McKendree Road to CR 577 (Curley Road), is a four-lane suburban typical section with a 44-ft depressed grass median expandable to an ultimate six-lane urban roadway with a 22-ft raised median. There is a 5-ft sidewalk on the south side and a 10-ft shared use path on the north side. The second typical section, from CR 577 (Curley Road) to CR 579 (Prospect Road) is the same as the first, except the sidewalks are 5-ft wide on both sides. The third proposed typical section, from CR 579 (Prospect Road) to Fort King Road, is a four-lane urban roadway with a 22-ft median and two 5-ft sidewalks. All three typical sections have 11-ft lanes, 7-ft buffered bike lanes, and a 45 – 55 mph design speed.

FIGURE 1: PROJECT LOCATION MAP

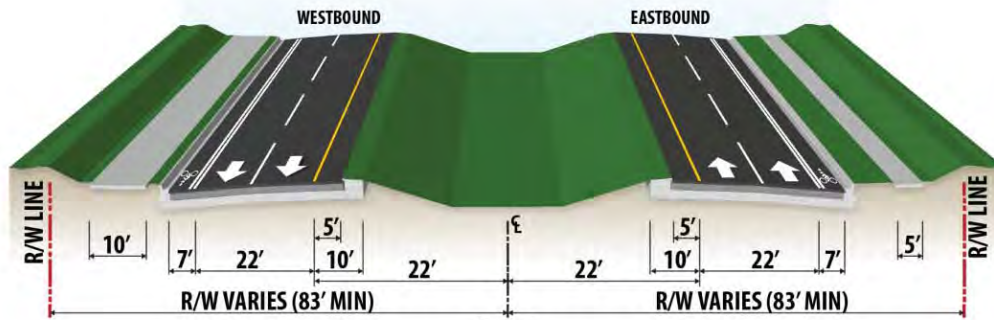


PROJECT LOCATION MAP

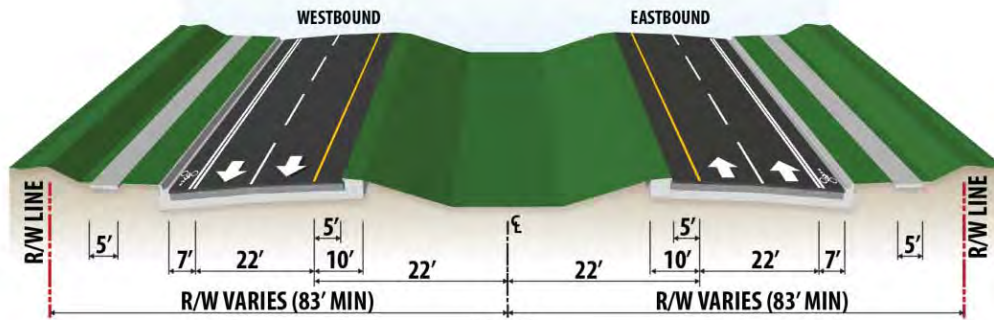
SR 52 PD&E Study
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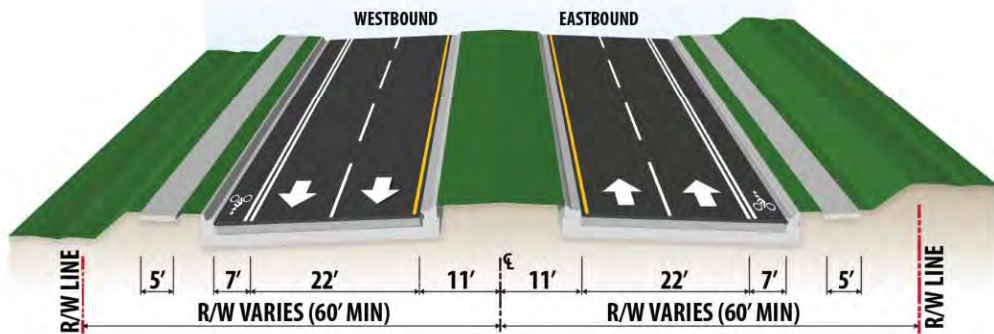
FIGURE 2: PROPOSED TYPICAL SECTIONS



SR 52
From McKendree Road to CR 577 (Curley Road)



SR 52
From CR 577 (Curley Road) to CR 579 (Prospect Road)



SR 52
From CR 579 (Prospect Road) to Fort King Road



SR 52 PD&E Study

From East of McKendree Road to East of US 301
WPI Segment No: 435915-1

PROPOSED TYPICAL SECTIONS

ATTACHMENT A SOCIAL IMPACTS

A-1. Land Use Changes

The Build Alternative, being on mostly new alignment, could open up areas for development that previously were undeveloped or in agricultural use; however, this is consistent with Pasco County's Future Land Use designations which include New Town at the western end of the Build Alternative and residential throughout the remaining corridor. The New Town land use designation is within the Bella Verde DRI. The Bella Verde DRI, which encompasses 1,965 acres and proposes 4,373 dwelling units when built out, should accommodate the population needs of the planning period (until 2040). Therefore, the Build Alternative is not likely to induce development beyond that already approved and would, as a result, have minimal effect on land use changes. For more information, see the EETC.

A-2. Community Cohesion

The proposed project involves constructing a new roadway and widening an existing roadway through unincorporated Pasco County. The area of Pasco County along the proposed alignment includes isolated residences. There is one neighborhood adjacent to both sides of the existing two-lane portion of Clinton Avenue, just west of Pasadena Road where multiple residences are located. There are no other established communities or developments that will be bisected by the proposed project. The project is not anticipated to adversely impact elderly persons, handicapped individuals, non-drivers and transit-dependent individuals, or minorities. Therefore, this project is being developed without regard to race, color, national origin, age, sex, religion, disability or family status. It is anticipated that impacts to community cohesiveness resulting from the project improvements will be none.

A-3. Relocation Potential

The Build Alternative will require right-of-way (ROW) acquisition and will result in five residential relocations and no business relocations:

FDOT will carry out a ROW and Relocation Program in accordance with *Florida Statute (F.S.) 339.09* and the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970* (Public Law 91-646, as amended by Public Law 100-17) in order to minimize the unavoidable effects of ROW acquisition and displacement of people and businesses pursuant to *F.S. 339.09*. Relocation resources are available to all residential and business relocatees without discrimination. Therefore, the relocation impacts will be minimal.

A-4. Community Services

There are no cultural centers, parks, recreational facilities, fire stations, schools, or medical facilities in the vicinity of the Build Alternative between McKendree Road and Fort King Road. This analysis is documented in the EETC.

There are two mobile home parks, three churches, and one cemetery in the vicinity of the Build Alternative:

- Sunny Skies Mobile Home & RV Park, 32704 Cantwell Drive, San Antonio
- Lake Iola TP, 33009 McCabe Road, San Antonio
- Piney Grove Missionary Baptist Church, 31027 SR 52
- Pasadena Baptist Church, 35845 Clinton Avenue, Dade City
- Williams Cemetery, Williams Cemetery Road, San Antonio
- Faith Fellowship Church (former Pasadena Church)

Access to both mobile home parks will not be affected by this project. Access to Sunny Skies Mobile Home & RV Park will not be affected by this project since improvements along CR 577 (Curley Road) are not part of this project. The Lake Iola TP mobile home park is located along the south side of McCabe Road, where the proposed alignment is to the north. Therefore, there are no direct impacts. The Piney Grove Missionary Baptist Church is located along SR 52 northeast of where the project breaks away towards the east. Therefore, there are no direct impacts. The Pasadena Baptist Church is located along Clinton Avenue east of Pasadena Road. Direct impacts to the church will be avoided. The development of the Build Alternative took into consideration the location of Williams Cemetery and avoided the cemetery by staying to the northwest to align with Clinton Avenue. Therefore, the Build Alternative would have no impact on Williams Cemetery. Therefore, the community service impacts will be none.

A-5. Title VI Considerations

This project has been developed in accordance with Title VI of the Civil Rights Act of 1964, as amended by Title VIII of the Civil Rights Act of 1968, Executive Order 12898 (Environmental Justice) and in accordance with Executive Order 13166 (Improving Access to Service for Persons with Limited English Proficiency).

The Environmental Screening Tool (EST) Sociocultural Data Report (SDR) was used for demographic data for the area in the vicinity of and surrounding the Build Alternative. The SDR uses the Census 2012 American Community Survey (ACS) data and reflects the approximation of the population based on the blockgroups encompassing the Build Alternative and the study area in the vicinity of and surrounding the site. The SDR identified 83 households with a population of 312 people. The median family income is \$76,964, but there are several households that were below poverty level (7.23%) but none received public assistance income.

The median age is 38 with persons 65 and over comprising 14.74% of the population. The minority population makes up 9.29% of the total population comprised mainly of a Hispanic or Latino population with 48 people (15.387%) and a Black or African American population of 15 people (4.81%). There are 14 people (6.54%) between the ages of 16 and 64 that have a disability. There are 4 people (1.32%) that speak English “not at all” and 1 person (0.33%) that speaks English “not well”.

Written translation obligations under “safe harbor” are not expected for this project since the eligible Limited English Proficiency (LEP) language group does not meet the threshold (constitute 5% or 1,000 persons or more in a project area speak a language other than English per the FDOT PD&E Manual, Part 1, Chapter 11, Section 11.1.2.4). Refinement of the LEP population totals and requirements will be further evaluated in the design phase as part of public involvement efforts.

A proactive public involvement approach has been implemented for this project to ensure that opportunity is given to all residents and businesses along the corridor to provide input into this project.

Many aspects of this project will be enhancements to the standard of living and will improve mobility for all residents throughout the study area, minority or otherwise. Relocation resources are available to all residential and business relocatees without discrimination. Although there will be five relocations, there will be no isolation or splitting of neighborhoods as a result of the project. Therefore, FDOT does not anticipate that the proposed project will result in any disproportionate adverse impacts to any distinct minority, ethnic, elderly or handicapped groups, and/or low-income households. Title VI information was made available at the Public Hearing.

A-6. Controversy Potential

Much public comment was received at three public workshops held during the 2004 Route Study: September 10, 2003, January 14, 2004, and April 13, 2004. Many alignment alternatives were eliminated for varied reasons including the absence of gentle curves that would conform to the rural community it would serve. After the final public workshop, the current alignment (Alignment 1/4) was selected by Pasco County.

A comprehensive Public Involvement Program was conducted for this project’s PD&E study. The program is in compliance with the FDOT *Project Development and Environment Manual*, Section 339.155, F.S.; Executive Orders 11990 and 11988; Council on Environmental Quality Regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA); and 23 CFR 771.

Through the Advance Notification (AN) process the FDOT informed numerous federal, state, and local agencies of the project and its scope. The AN Package was transmitted to the Florida State Clearinghouse (FSC), Department of Environmental Protection/Office of Intergovernmental

Programs, on August 18, 2014. In addition, the FDOT distributed the AN package simultaneously to other local, state and federal agencies for review and comment.

There were no responses to the Advance Notification. Comments received from agency reviews of the project in the EST are summarized below:

Florida Department of Economic Opportunity indicated that discussions with local governments indicated that the SR 52 improvements should be directed to the Clinton Avenue alignment and not through St. Leo, San Antonio, or Dade City (Existing SR 52).

The Florida Department of State/State Historic Preservation Officer (SHPO) indicated that the Build Alternative would likely impose an adverse effect upon the Pasadena Church (PA02219) located at 36134 Clinton Avenue, a historic resource eligible for listing on the National Register of Historic Places. The historic church (PA02219), now known as Faith Fellowship, is located along Clinton Avenue east of Pasadena Road. Direct impacts to the church will be avoided.

FDOT held a public hearing on June 2, 2015, from 5:00 p.m. to 7:00 p.m. at the Knights of Columbus Hall, Council 1768, 11549 Curley Road, San Antonio, Florida. A total of 171 people registered as attending the hearing. Four people spoke for the record during the formal portion of the hearing. The Department received 12 completed comment forms at the hearing and 3 additional comment forms in the 10-day comment period following the hearing.

Oral and written comments were both in favor of and opposed to the new SR 52 alignment. People requested sidewalks, a trail connection and traffic signals in specific segments of the new alignment. As a result of the coordination with the public and agencies to date, there is expected to be a minimum amount of controversy associated with the proposed project.

A-7. Bicycles and Pedestrians

Constructing the project will result in enhanced accommodations for bicyclists and pedestrians, with the addition of 7-ft paved bike lanes for bicyclists, 5-ft sidewalks and a 10-ft shared use path for pedestrians. Therefore the level of impact will be none. This analysis is documented in the EETC.

A-8. Utilities and Railroads

There are utilities in the vicinity however they are not expected to be impacted and there is no involvement with railroads, therefore the level of impact will be none. This analysis is documented in the EETC.

ATTACHMENT B CULTURAL IMPACTS

B-1. Historic Sites / Districts

In accordance with Chapter 267 F.S. and FDOT procedures, the study team conducted two Cultural Resource Assessment Survey (CRAS) Updates to locate and identify any historic resources, including sites and/or districts, occurring within the project area of potential effect (APE) and to assess their significance in terms of their potential eligibility for listing in the *National Register of Historic Places* (NRHP). Work included background research and a historical/architectural field survey.

The project APE for the historical resources survey was defined as the project corridor and the pond sites previously identified by Pasco County. The APE included immediately adjacent properties to take into account potential indirect effects such as visual and access. As a result of the background research and field survey, seven previously recorded historic resources (8PA2217, 8PA2218, 8PA2783, and 8PA2785 through 8PA2788) were identified plus an additional five historic resources (8PA2897 and 8PA2899 through 8PA2902) constructed in 1965 or earlier were newly identified, recorded, and evaluated. These are typical buildings and do not appear to meet the criteria for listing in the NRHP due to their commonality of style and lack of significant historical associations.

The first *CRAS Update Technical Memorandum* (February 2015) was sent to the State Historic Preservation Officer (SHPO) for approval on February 20, 2015. SHPO concurrence with the finding that this project will have no effect on historic resources that are listed or potentially eligible for listing in the NRHP was received on March 16, 2015.

Subsequent to completion of the first *CRAS Update Technical Memorandum* (February 2015), the FDOT project limits were extended to US 301. The segment of Clinton Avenue between Fort King Road and US 301 has been constructed by Pasco County; therefore a second CRAS Update was prepared for the segment of SR 52 from Pasadena Road to Fort King Road. The project APE for the historical resources survey was defined as the project corridor and pond site K that was previously identified by Pasco County. The APE included immediately adjacent properties to take into account potential indirect effects such as visual and access. As a result of background research and field survey, nine extant previously recorded (8PA02219, 8PA02788, 8PA02789, 8PA02791, 8PA02792, 8PA02793, 8PA02795, 8PA02796, and 8PA02902) and two new historic resources (8PA02906 and 8PA02907) were identified; one historic resource (8PA02794) is no longer extant. The previously recorded resources include the NRHP-eligible Faith Fellowship Church (former Pasadena Church; 8PA02219), an 1887 Frame Vernacular style building located at 36134 Clinton Avenue. All the other historic resources were determined ineligible or are considered potentially ineligible for listing in the NRHP. Although the October 2010 Pasco County plans show proposed right-of-way (ROW) impacts to the Faith Fellowship parcel, the plans have been evaluated recently from a drainage perspective to reduce or remove

ROW impacts. With the drainage information available, it appears that the ROW impacts to this parcel can be completely avoided so that 8PA02219 will not be affected by this project. This will be reevaluated in the design phase.

The second *CRAS Update and Effects Determination Technical Memorandum* (May 2015) was sent to the State Historic Preservation Officer (SHPO) for approval. SHPO concurrence with the finding that this project will have no effect on historic resources that are listed or potentially eligible for listing in the NRHP was received on May 19, 2015.

B-2. Archaeological Sites

In accordance with Chapter 267 F.S. and FDOT procedures, the study team conducted two CRAS Updates to locate and identify any archaeological sites, occurring within the project APE and to assess their significance in terms of their potential eligibility for listing in the NRHP. Work included background research and archaeological field survey only in areas not previously surveyed during the 2010 Clinton Avenue Extension CRAS, which was performed by Pasco County.

The first CRAS Update was for the segment of SR 52 from East of McKendree Road to Pasadena Road. The project APE for the archaeological survey was defined as the project corridor and pond sites, including easements that were previously identified by Pasco County. The first *CRAS Update Technical Memorandum* (February 2015) resulted in the identification of one new archaeological site (8PA2903), a small lithic scatter, within SMF 1. No evidence of previously recorded site 8PA206 was found. One new archaeological occurrence (AO) (AO #4) was discovered within the proposed new alignment west of Prospect Road. The previous 2010 CRAS field survey resulted in no archaeological sites and three AOs (AO #1, #2, and #3) within SMF C, SMF E and within the project corridor just north of SMF E. During the current field survey and the 2010 field survey, no evidence was found for three additional previously recorded archaeological sites (8PA207, 8PA208 and 8PA167), as located within the project APE. The newly identified archaeological site (8PA2903) is a common site type and is not considered potentially eligible for listing in the NRHP.

The first *CRAS Update Technical Memorandum* (February 2015) was sent to the SHPO for approval on February 20, 2015. SHPO concurrence with the finding that this project will have no effect on archaeological sites that are listed or potentially eligible for listing in the NRHP was received on March 16, 2015.

Subsequent to completion of the first *CRAS Update Technical Memorandum* (February 2015), the FDOT project limits were extended to US 301. The segment of Clinton Avenue between Fort King Road and US 301 has been constructed by Pasco County; therefore a second CRAS Update was prepared for the segment of SR 52 from Pasadena Road to Fort King Road. The project APE for the archaeological sites survey was defined as the footprint for pond site K that

was previously identified by Pasco County. As a result of the CRAS Update field survey, no archaeological sites were identified within Pond K.

The second *CRAS Update and Effects Determination Technical Memorandum* (May 2015) was sent to the State Historic Preservation Officer (SHPO) for approval. SHPO concurrence with the finding that this project will have no effect on archaeological sites that are listed or potentially eligible for listing in the NRHP was received on May 19, 2015.

B-3. Recreation Areas

The Environmental Screening Tool (EST) Geographic Information Systems (GIS) analysis identified the SR 52 Trail Corridor (planned trail) from the Office of Greenways and Trails Multi-Use Trail Opportunities database.

Although the SR 52 Trail Corridor is only a planned trail, the Build Alternative will have bicycle and pedestrian facilities which could be utilized as part of the SR 52 Trail. Therefore, the proposed project would have an enhanced effect on this planned trail by providing potential access and connectivity.

There are no actual parks within the recommended Build Alternative's footprint.

Therefore, the recreation impacts will be none.

ATTACHMENT C NATURAL ENVIRONMENT

C-1. Wetlands

Pursuant to Presidential Executive Order 11990 entitled “Protection of Wetlands,” the United States DOT has developed a policy, (DOT Order 5660.1A), Preservation of the Nation’s Wetlands, dated August 24, 1978, which requires all federally funded highway projects to protect wetlands to the fullest extent possible. In accordance with this policy, as well as Part 2, Chapter 18 Wetlands of the FDOT PD&E Manual, the study area between McKendree Road and Fort King Road was evaluated for any wetlands that have potential involvement with the proposed improvements. Future assessments during the project’s design phase will document potential impacts of implementing the proposed SR 52 project and efforts to avoid, minimize, or mitigate those impacts to the greatest extent practicable. This analysis is documented in the EETC.

Preliminary surface water habitat types and estimated acreages are provided in **Table C-1** below.

TABLE C-1: WETLAND AND SURFACE WATER COMMUNITIES IN THE STUDY AREA

Wetland ID ¹	FLUCFCS ²	Cowardin Classification	Acres Within ROW	UMAM Functional Value ³
PC-4, PC-5	6150	PFO	4.00	2.00
NN	6300	PFO	0.37	0.20
NN, BB	6410	PEM	0.90	0.42
BV-2, BV-38, BV-40, BV-42, PC-1, PC-2, PC-3, PC-6	6430	PEM	4.08	1.98

¹ PC=Wetland label in ERP permit 29996.01 issued to Pasco County; BV=Wetland label in ERP permit 28080.025 for Bella Verde Ranch; BB=Bayou Branch; NN=Not named in permits

² FLUCFCS data from SWFWMD GIS (may be different than field-based data in permits)

³ UMAM Functional Value is estimated from ERP permits

Mitigation

The existing SWFWMD permits issued to Pasco County and the Bella Verde Ranch DRI for various portions of the project include mitigation at several enhanced or restored wetland areas within the County’s or the DRI property. However, these mitigation areas have not been completed and the project will require a permit modification issued to the Department. Therefore, the mitigation for this project will consist of the purchase of mitigation bank credits and/or through the FDOT Mitigation Program in accordance with Chapter 373.4137 F.S. The impacts and mitigation requirements will likely be less than estimated in Table C-1, due to design modifications.

Therefore, effects to wetlands are expected to be minimal.

C-3. Water Quality

A Water Quality Impact Evaluation (WQIE) has been prepared for this study (Appendix D of the EETC). Effects to water quality are expected to be minimal.

C-6. Floodplains

Evaluation of the Federal Emergency Management Agency 1996 Flood Insurance Rate Maps (FIRM) for Pasco County revealed that the majority of the project between McKendree Road and Fort King Road (671.8 acres, or 94.46 percent) is within Zone X, areas outside of the 500-year floodplain. Of the remaining 5.54 percent of the project area, 31 acres (4.36 percent) is within Flood Zone A and 8.4 acres (1.18 percent) of the project is within an area that is not mapped on any published FIRM. This analysis is documented in the EETC.

Based on the information collected during this study, the proposed improvement can be categorized as a modification of CATEGORY 6: PROJECTS ON NEW AND EXISTING ALIGNMENT INVOLVING REPLACEMENT OF EXISTING DRAINAGE STRUCTURES WITH NO RECORD OF DRAINAGE PROBLEMS, as defined in Part 2, Chapter 24 (01-07-08) of the FDOT PD&E Manual.

“It has been determined, through consultation with local, state, and federal water resources and floodplain management agencies that there is no regulatory floodway involvement on the proposed project and that the project will not support base floodplain development that is incompatible with existing floodplain management programs.”

“The proposed structures will perform hydraulically in a manner equal to or greater than the existing structures, and backwater surface elevations are not expected to increase. Proposed structures will discharge in a similar condition as much as feasible and changes will be reviewed by the appropriate regulatory authorities who will concur that the determination that there will be no significant impacts. As a result, there will be no significant adverse impacts on natural and beneficial floodplain values, there will be no significant change in flood risk, and there will be no significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.” Effects to floodplains are expected to be minimal.

C-8. Wildlife and Habitat

This project between McKendree Road and Fort King Road was evaluated for potential impacts to wildlife and habitat resources, including protected species in accordance with Title 50 Code of Federal Regulations (CFR) Part 402 of the Endangered Species Act of 1973, as amended; 50 CFR 17 (federal animal list); 379.2291 F.S., Endangered and Threatened Species Act; Chapter 68A-27.003 F.A.C. (Endangered and threatened species list); 68A-27.005 F.A.C. (Species of Special Concern list), and Chapter 27 of the FDOT PD&E Manual, Wildlife and Habitat Impacts. This analysis is documented in the EETC.

Agency and GIS database searches, informal field reviews and a preliminary review of aerial photography were conducted to identify known and potential occurrences of state and federally protected wildlife species, suitable habitat and designated critical habitat occurring or potentially

occurring within the study area. There is no designated critical habitat for any species within or adjacent to the project.

The FDOT will be submitting a letter presenting the FDOT's effects determinations for federally-listed and state listed species involvement with the project to the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish and Wildlife Conservation Commission (FWC) during the project's permitting phase. In this letter, the FDOT will propose a "*may affect, but is not likely to adversely affect*" determination for the federally listed wood stork, eastern indigo snake, and bald eagle and for the state listed gopher tortoise, Florida mouse, gopher frog, Florida sandhill crane, Sherman's fox squirrel Florida burrowing owl, short-tailed snake, Florida pine snake, Southeastern American kestrel, and five state listed wading birds a "*may affect, but is not unlikely to adversely affect*" determination. All other state and federally-listed species occurring or potentially occurring within study area, with a "*no effect*" determination. The FDOT will coordinate with the USFWS and FWC as appropriate during the permitting phase of the project.

Further reviews will be completed during project design and prior to the construction phases to provide updated observations and verification of the potential for project involvement with listed/protected species and their habitat. Therefore, impacts to wildlife and habitat are expected to be minimal.

ATTACHMENT D PHYSICAL ENVIRONMENT

D-1. Noise

A *Noise Study Report* was prepared to evaluate traffic noise for noise sensitive sites along the Recommended Alternative between McKendree Road and Fort King Road. The traffic noise study was completed in accordance with Title 23, Code of Federal Regulations, Part 772 (23 CFR 772), *Procedures for Abatement of Highway Traffic Noise and Construction Noise* following methodology and policy established by FDOT in the *Project Development and Environment Manual*, Part 2, Chapter 17. The purpose of the noise study is to identify noise sensitive sites that would be affected by the proposed project and evaluate abatement measures at affected noise sensitive sites. Detailed information on the noise analysis performed is documented in the (July 2015) *Noise Study Report*.

For the Recommended Alternative, 189 receptor points were established representing 175 residences, five residences identified as relocations, Piney Grove Missionary Baptist Church, Childcare Center with an associated playground, Knights of Columbus lodge, Pasadena Baptist Church with an associated playground, Faith Fellowship Church and Clinton Academy Day Care with an associated playground. Exterior noise levels are predicted to approach or exceed the NAC for 2025 build conditions at 12 residences. Compared to existing conditions, traffic noise levels for 2025 build conditions are predicted to substantially increase as a direct result of the transportation improvement project at two residences, one at which the NAC is also exceeded.

For the Recommended Alternative, abatement has been evaluated for all 13 noise sensitive sites predicted to approach/exceed the NAC or predicted to experience a substantial increase in noise attributable to the project. Traffic management and alignment modifications are determined to not be viable abatement measures. Consideration of buffer zones during planning of future development is identified as a viable abatement measure that can be implemented by local officials responsible for land use planning. Noise barriers are evaluated for the amount of noise reduction that could potentially be provided and cost reasonableness where minimum noise reduction requirements could be achieved.

Noise barriers are not feasible at the 13 impacted residences primarily because the residence is an isolated impact or gaps in a noise barrier would be needed to accommodate driveways/roads which limit the amount of noise reduction to less than 5 dB(A).

Most properties adjacent to the project corridor are undeveloped. A land use review will be performed during the design phase of the project to ensure that all noise-sensitive land uses that have received a building permit prior to the project's Date of Public Knowledge are evaluated. Notably, there was no ongoing construction observed during the field review (January 7, 2015) which was performed to establish existing land use data.

Therefore, project effects to noise are expected to be minimal.

D-2. Air

The United States Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six pollutants: ozone, nitrogen dioxide, particulate matter, sulfur dioxide, carbon monoxide and lead. The Transportation Conformity Rule (Code of Federal Regulations, Title 40, Part 93, Subpart A) may apply to projects in areas designated as nonattainment for ozone, nitrogen dioxide or particulate matter. The project is located in an area that is designated by the EPA as in attainment of all of the NAAQS under the criteria provided in the Clean Air Act. Therefore, the Transportation Conformity Rule does not apply to this project, and the project effects to air quality are none.

D-3. Construction

Construction activities for this proposed project will have minimal, temporary, yet unavoidable, air, noise, water quality, traffic flow, and visual impacts for those residents and travelers within the immediate vicinity of the project.

For the residents living in the project area, some of the materials stored for the project may be displeasing visually; however, this will be a temporary condition and should pose no substantial, long term problem. Therefore, construction impacts are expected to be minimal.

More information is provided in the EETC.

D-4. Contamination

A contamination screening was performed using the ETDM screening tool in accordance with the FDOT *Project Development and Environment Manual*, Part 2, Chapter 22 to determine potential contamination concerns from properties or operations located within the vicinity of the Build Alternative. This analysis is documented in the EETC and the project file.

A total of nine potential contamination sites were identified along the project corridor between McKendree Road and Fort King Road, with a risk evaluation of seven sites as “Low” and two sites as “Medium” ratings. A total of 13 pond sites were also evaluated for their contamination risk potential. The risk ratings for the pond sites were 10 sites with “No”, one site with “Low” and two sites with “Medium” ratings.

Appendix A of the EETC provides the concept plans for the project that illustrate the locations of the potential contamination sites and pond sites.

If construction activities are to occur in an area with contamination concerns, then a site assessment would be performed to the degree necessary during final design to determine levels

of contamination and evaluate clean-up options and associated costs. Excavation and/or dewatering for installation of underground structures or utilities in the vicinity of the contaminated sites could potentially encounter or exacerbate contamination. Investigations would not be limited to the areas of roadway expansion but would also include the drainage areas located adjacent to the roadway.

The status of these sites, as well as any new sites/discharge events will be reviewed during the project's design phase. The Department will oversee contamination remediation as applicable during the project's design, right-of-way acquisition and/or construction phases.

Procedures specifying the contractor's responsibilities in regards to encountering petroleum-contaminated soil and/or groundwater are set forth in *FDOT's Standard Specifications for Road and Bridge Construction*. Special provisions to the aforementioned standard specifications may be necessary if the presence of contamination is confirmed, which could impact construction.

Therefore, the project effect on contamination will be minimal.