

RE-EVALUATION FORM

1. GENERAL PROJECT INFORMATION

A. Re-evaluation Type: Right of Way Phase, Design Change

B. Original approved Environmental Document:

Document Type: Type 2 CE

Date of Approval: 10/14/2019

Project Numbers:

5351

434965-1-21-01

D117-053-B

ETDM (if applicable)

Financial Management

Federal-Aid

Project Name: HARBORVIEW ROAD FROM MELBOURNE ST TO I-75

Project Location: FDOT District 1 (Charlotte County)

Project Limits: Harborview Road (CR 776) from Melbourne Street to I-75

C. Prior Re-evaluation(s):

There is no previous re-evaluation of this Environmental Document.

D. Project or project segment(s) being evaluated

FAP Number	FM Number	Project/ Segment Name	Project/ Segment Location	Type				Project/ Segment Letting Type	Funding
				PE	DC	ROW	CON		
D123-042-B	434965-5-48-01	HARBORVIEW ROAD FROM MELBOURNE ST TO I-75	District 1 - CHARLOTTE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design-Bid-Build	Federal
D123-042-B	434965-5-48-02	HARBORVIEW ROAD FROM MELBOURNE ST TO I-75	District 1 - CHARLOTTE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design-Bid-Build	Federal
D119-073-B	434965-2-32-01	HARBORVIEW ROAD FROM MELBOURNE RD TO I-75	District 1 - CHARLOTTE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design-Bid-Build	Federal

2. PROJECT DESCRIPTION

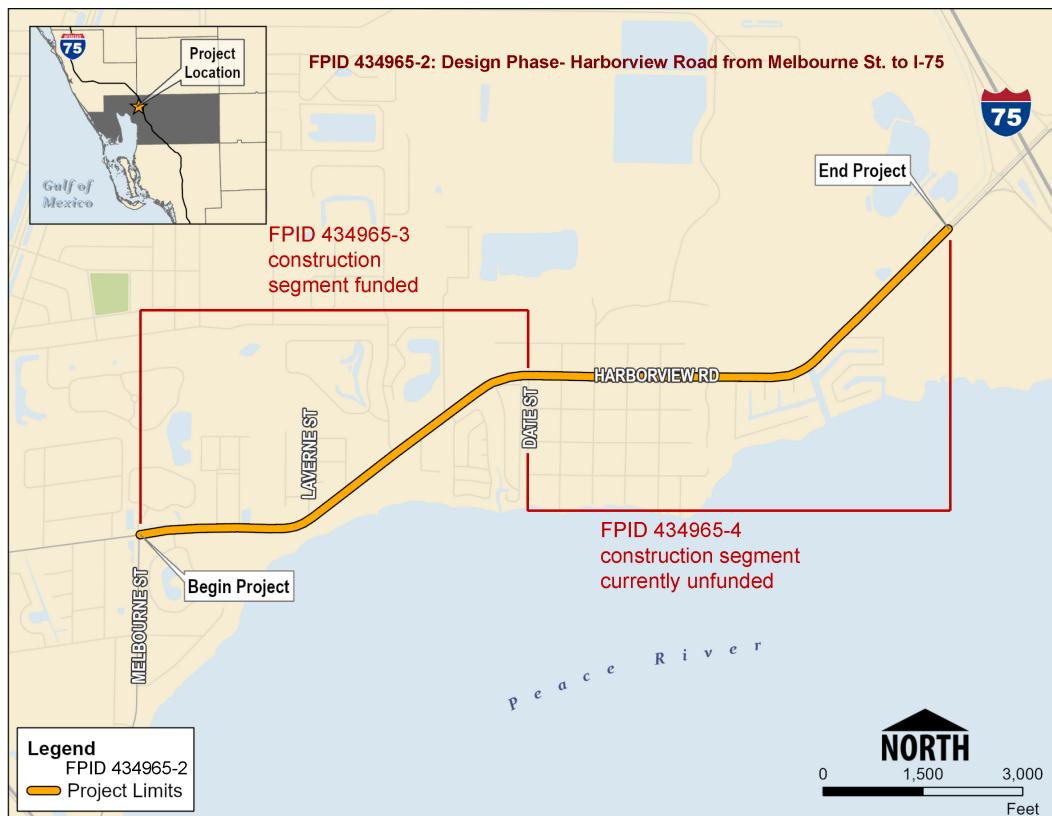
Harborview Road (County Road [CR] 776) is an east-west minor arterial roadway that connects US 41 to I-75. The project is located in the Port Charlotte area of unincorporated Charlotte County; the nearest city is Punta Gorda. Harborview Road is a two-lane undivided facility with 12-foot lanes (one in each direction) and no paved shoulders. Stormwater runoff is collected in roadside swales and directed to Charlotte Harbor; there is no existing stormwater management system that treats or attenuates roadway runoff. The posted speed limit within the project limits is primarily 45 mph, decreasing to 35 mph through three of the horizontal curves within the project limits. In general, existing right-of-way (ROW) along the project corridor is 80 feet. The project corridor lacks pedestrian, bicycle, and transit facilities with the exception of small sidewalk segments extending from Melbourne Street to just east of Roll's Landing Charlotte Harbor Condominium and

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**RE-EVALUATION
FORM**

four (4) school bus stops.

A Project Development and Environment (PD&E) Study was conducted to widen Harborview Road from the existing two-lane undivided roadway to a four-lane divided roadway from Melbourne Street to west of I-75, a distance of 2.3 miles. A project location map is shown in **Figure 1**. Construction is funded in Fiscal Year 2026 for the segment from Melbourne Street to Date Street (FPID 434965-3). The segment from Date Street to I-75 (FPID 434965-4) does not have construction funded at this time.

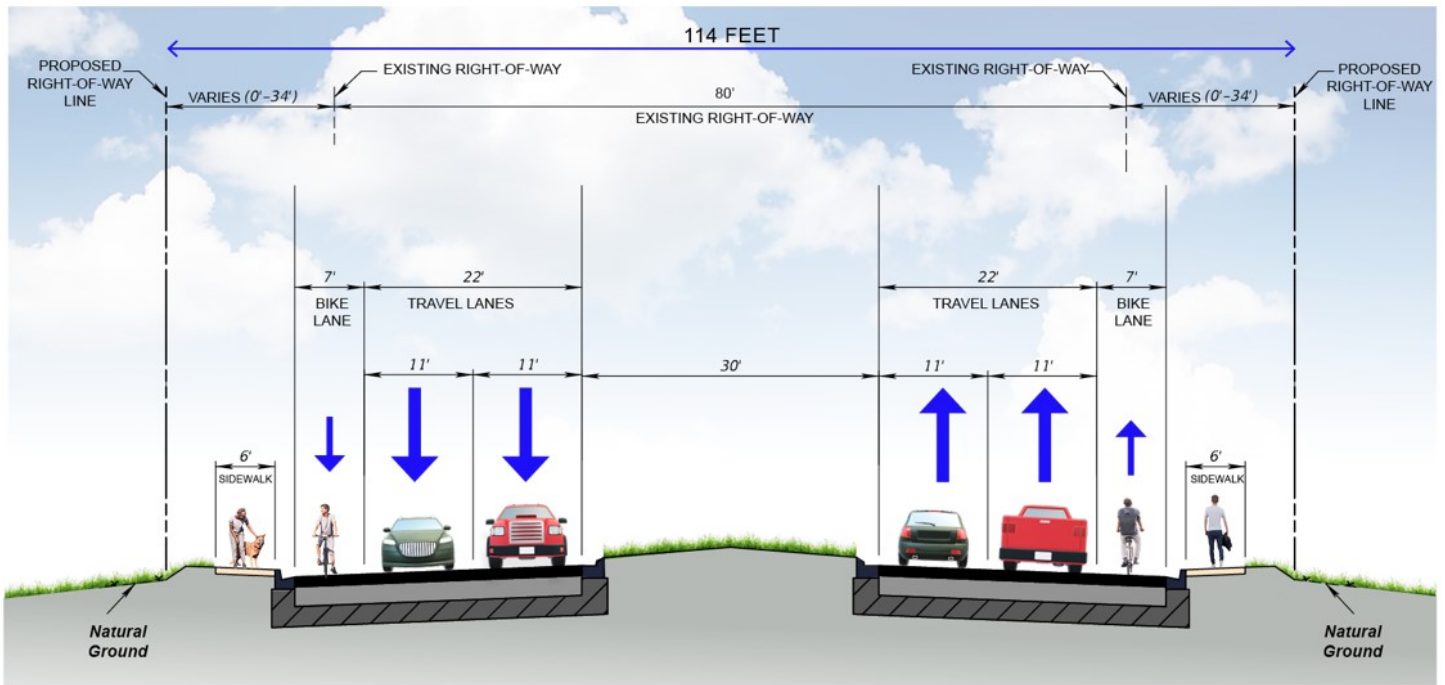
Figure 1: Project Location Map



The PD&E Preferred Alternative included an urban typical section of a four-lane divided roadway with 11-foot travel lanes, curb and gutter along the inside and outside edges of pavement, a 30-foot grassed median, six-foot sidewalks, seven-foot buffered bicycle lanes, and a posted speed limit of 45 mph. The PD&E Preferred Alternative typical section is shown in **Figure 2**. The Preferred Alternative recommended shifting to both the north and south of the existing roadway to minimize residential relocations. It required 114-feet of ROW, resulting in an expansion of approximately 34 feet, acquisition of 11.0 acres for roadway and 9.5 acres for stormwater management for a total of 20.5 acres, and relocation of three (3) residences.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**RE-EVALUATION
FORM**

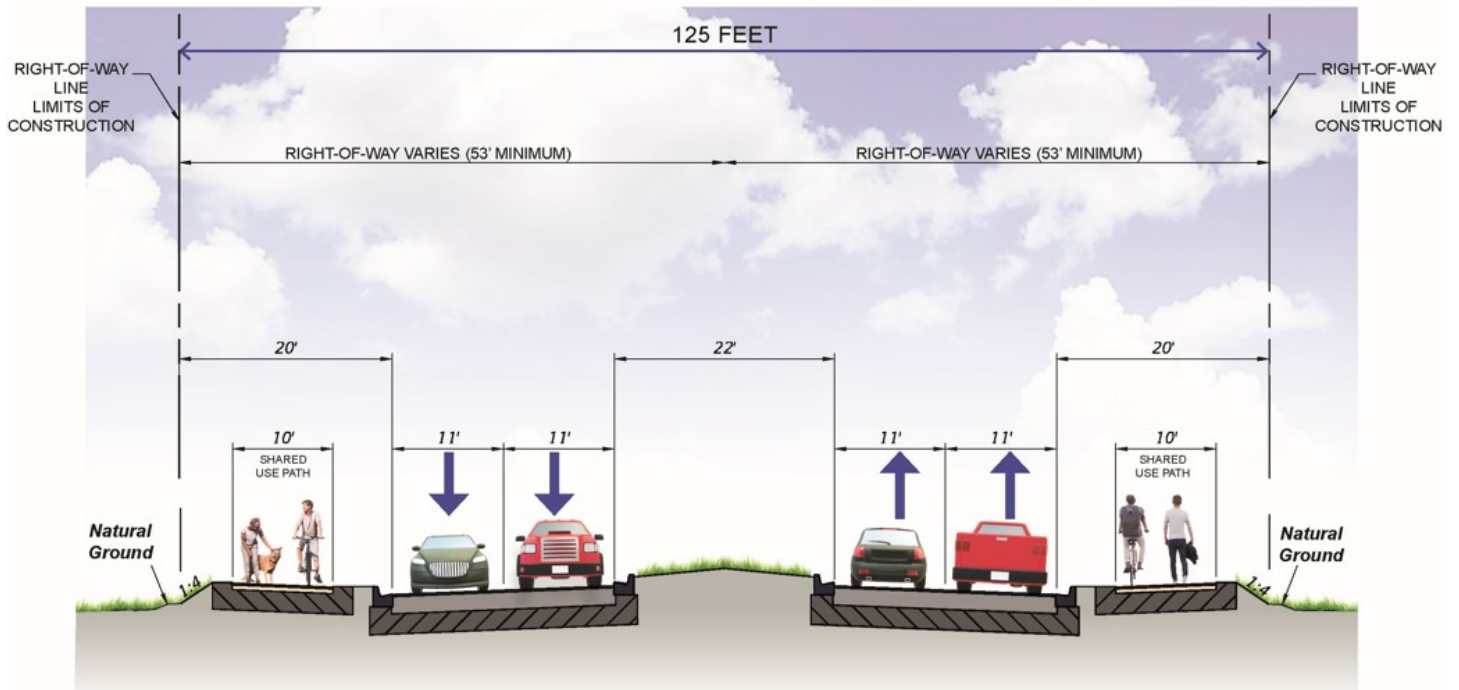
Figure 2: PD&E Preferred Alternative Typical Section



Since approval of the PD&E Study, the typical section was modified and now consists of a four-lane divided urban roadway with 11-foot travel lanes bordered by Type F curb and gutter, 10-foot shared use paths on both sides of the roadway, and a raised 22-foot median. The reduced median width did not affect the posted speed limit and did not require a design variation. The shared-use paths were agreed upon by Charlotte County and offers a safer travel environment for bicyclists. The Design Phase typical section is shown in **Figure 3**.

RE-EVALUATION FORM

Figure 3: Design Phase Typical Section



3. CHANGES IN APPLICABLE LAW OR REGULATION

Are there changes in federal or state laws, rules, regulations, or guidance that require consideration since the date of the original Environmental Document or subsequent Re-evaluation(s)? Yes

In October 2019, the US Fish and Wildlife Service (USFWS) expanded the Florida bonneted bat consultation area and established consultation key. The project occurs in Charlotte County and is therefore within the USFWS' consultation area for the species.

In November 2020, the USFWS listed the eastern black rail as a federally threatened species. There is no suitable habitat for this species in the project footprint; estuarine marsh habitat was only observed outside of the project footprint.

4. EVALUATION OF MAJOR DESIGN CHANGES AND REVISED DESIGN CRITERIA

Are there major design changes, including but not limited to changes in the alignment(s), typical section(s), drainage/stormwater requirements, design control and criteria, or temporary road or bridge? Yes

The primary design change in the horizontal alignment occurs at the first road curve to the west near Laverne Street. The curve is being flattened from the PD&E preferred alignment to enhance safety for motorists. It will also improve access to the parcels on the south side of the roadway. Additional ROW is required throughout the corridor due to raising the road profile to address the high-water table and account for sea-level rise in the design. The proposed stormwater management pond site locations also changed. The PD&E-identified pond locations, as well as additional pond locations within each basin, were further evaluated during the design phase. Design strategies included combining basins to reduce

**RE-EVALUATION
FORM**

the total number of ponds and using remnant parcels resulting from mainline widening impacts. Design change details are provided below.

The Design Phase II plans show several design changes to the roadway typical section from the PD&E Preferred Alternative, and these changes apply to the full project length. The changes for the roadway typical section are as follows and depicted in **Figures 2 and 3**, respectively:

- The seven (7)-foot wide buffered bicycle lanes and six (6)-foot wide sidewalks on both sides of the roadway were replaced with 10-foot wide shared use paths on both sides.
- The 30-foot wide median was replaced with a 22-foot wide median.
- The curb and gutter on both sides of the edge of pavement of the travel lanes was more defined to be Type F curb and gutter.

Additionally, the horizontal alignment has been flattened as compared to the PD&E preferred alignment. As a result, more ROW is needed for mainline improvements throughout the project limits.

- The roadway typical section will require approximately 53 feet of additional ROW (for a total ROW of approximately 133 feet) instead of the 34 feet identified in the PD&E Preferred Alternative (for a total ROW of approximately 114 feet);
- A total of 16.40 acres of mainline/roadway acquisition is needed instead of 11.0 acres.
- Separate from ROW to be acquired, there are several locations along the project where temporary construction easements (TCEs) will be required to connect the roadway improvements to adjacent driveways. These areas total 0.75 acres.

There were seven (7) preferred pond locations in the PD&E Study: one (1) pond site alternative for each of the six (6) drainage basins, as well as one (1) historic drainage basin pond. Following the pond siting analysis in the design-phase, a total of five (5) pond sites have been selected. Two (2) sites are the same as PD&E-identified ponds (Pond 5-6C; now simply named Pond 5-6) and Pond 1-2D, while the remaining three (3) sites are new locations identified during the design phase of the project. Of these sites, Pond 1-2B uses remainders of parcels proposed for impact by mainline widening.

- A total of 5.35 acres for stormwater management is needed instead of 9.5 acres identified in the PD&E Study.

Overall, 95 parcels will be impacted by the project as per the design concept, compared to 71 parcels as per the PD&E Study. **Attachment 1** provides an exhibit that depicts changes in ROW impacts.

[\[1 - ROW and relocation change exhibit\]](#)

5. PUBLIC INVOLVEMENT

Were there additional public involvement activities? Yes

FDOT held a hybrid public hearing to address the ROW and design changes on December 5, 2023 both virtually and at the Punta Gorda Isles Civic Association, 2001 Shreve Street, Punta Gorda, Florida, 33950, from 5 pm to 7 pm. A one-hour open house format was provided for the in-person event to allow attendees to view display boards with project information and ask questions to staff. The open house was followed by a formal presentation (project video) and public comment period. A total of 67 members of the public recorded their names on the sign-in sheet for the in-person event. An additional eleven (11) agency members attended in-person, consisting of members of Charlotte County (Public Works and other departments), Charlotte County-Punta Gorda MPO, and one member of the Charlotte County Board of County Commissioners (BOCC). Online registrants consisted of 26 members of the public and five (5) agency representatives, consisting of the same three (3) agencies listed above.

**RE-EVALUATION
FORM**

A total of 26 comments were received during the official public comment period, which was from December 5, 2023 through December 15, 2023. Of these 26 comments, four (4) were duplicate (four (4) citizens made two (2) comments in either the same or different methods (public testimony, email, etc.)). Therefore, a total of 22 comments by unique citizens were submitted. Of these 22 commenters, three (3) were employees of Charlotte County whose comments related to their aspects of their areas of expertise and not as private citizens. All comments were logged and considered by the project team, and all comments that contained questions were responded to by email from the FDOT Project Representative. The following summary lists comments as topics and since several citizens commented on multiple items, these numbers are not meant to total 22 unique comment submissions.

During the public testimony portion of the hearing, two (2) members of the public made statements. Both statements related to concerns for wildlife in the area, including the federally-listed Florida panther and state-listed gopher tortoise. One (1) of the speakers also referenced concerns related to traffic noise and the second speaker referenced concerns about water runoff from the roadway. Written comments regarding environmental topics included concerns for wildlife that would be affected by the project (3 additional commenters), concerns about raising the roadway and flooding of adjacent properties and pond sites (3 additional commenters), and concerns about noise, the date of the noise study, or noise walls being included (4 additional commenters).

Three (3) comments asked why the road alignment could not be shifted to the north to avoid residential impacts, particularly waterfront properties or parks (note: no parks occur along the corridor). One (1) comment expressed dissatisfaction with the proposed roundabouts. Safety was mentioned in two (2) comments, related to widening the road next to homes and a suggestion to extend the curves. Three (3) comments related to turn lanes lacking at the mobile home communities, Oakview Drive, or in general. One (1) comment related to disapproval of the taking of property for the project, one (1) comment was expressed concern about loss of property values, one (1) comment was made to notify the project team of a residential septic tank in the ROW take area, and two (2) comments asked about ROW impacts either specific to their property or the timeframe of property acquisition. One (1) comment expressed that in lieu of capacity improvements, a wider shoulder and golf cart lane is sufficient and a second comment indicated that if the road cannot be widened within existing right-of-way, it should remain as is. One (1) comment was received that stated the shared use path would not be adequate for both bicycles, electric bikes, and pedestrians.

Four (4) comments were submitted about utilities, one being a concern for relocating overhead powerlines, a second about whether the proposed corridor width will accommodate future utility installation, particularly at intersections, and remainder were questions about if the project would include public water and sewer and who would pay for it. Two (2) comments were made about maintaining school bus stops and a turn-around at Charleston Cay Apartments and a third comment was made about maintaining bus stops during construction. One (1) comment was made about a church parcel and how the project may affect future plans to access the property.

Remaining comments included: a question as to whether any elected officials or MPO members were in attendance (2); a suggestion to add a stop light at Oakview Drive (1), a suggestion to relocate Westchester Road closer to I-75 to address increasing traffic (1); a recommendation to widen Kings Highway (1); concerns about traffic to and from the Sunseekers Resort on Harborview Road (2); concerns about disruptions to the residences during construction (1); a question about the median width (1); and identification of salt water ponds south of the project area (1).

Two (2) letters were submitted to express support for the project, one of which was from the Charlotte County Chamber of Commerce.

RE-EVALUATION FORM

The public hearing transcript is provided in **Attachment 2**. Also, the submitted comments, responses, display boards, and hearing notifications are included in the project file.

[\[2 - Public Hearing Certification_signed with transcript\]](#)

6. PROJECT or SEGMENT(S) PLANNING CONSISTENCY

Segment FM Number: 434965-5-48-01

Currently Adopted CFP-LRTP	Comments				
Yes	<p>The Charlotte County Punta-Gorda Metropolitan Organization (MPO) 2045 Long Range Transportation Plan (LRTP) was adopted in October 2020.</p> <p>This project is included in their Cost Feasible Plan, Table 8.6 - Roadway Cost Feasible Projects List.</p> <p>The latest Charlotte County Punta-Gorda Metropolitan Organization (MPO) Transportation Improvement Program (TIP) for FY 2023/2024 - FY2026/2027 was adopted on May 16, 2023 and amended on March 21, 2024 to update this project.</p> <p>ROW is funded on 434965-5. One segment for construction is funded on 434965-3: Harborview Road from Melbourne St. to Date St.</p> <p>Attachment 3 provides planning consistency documentation.</p>				
Phase	TIP/STIP	Currently Approved	\$	FY	Comments
PE (Final Design)	TIP	Yes		<2021 All years	PE phase funded < FY23 (on 434965-2).
PE (Final Design)	STIP	Yes		<2021 All years	PE phase funded < FY23 (on 434965-2).
R/W	TIP	Yes	\$20,010,000 \$20,010,000	2024 All years	Cost estimates between the TIP and STIP are consistent. ROW is funded on the 434965-5 segment for entire project.
R/W	STIP	Yes	\$20,010,000 \$20,010,000	2024 All years	Cost estimates between the TIP and STIP are consistent. ROW is funded on the 434965-5 segment for entire project.
Construction	TIP	No			CST is funded for one segment (on 434965-3)
Construction	STIP	Yes	\$29,026,179	2026	CST is funded for one segment (on 434965-3)

RE-EVALUATION FORM

			\$29,026,179	All years	
--	--	--	--------------	-----------	--

Segment FM Number: 434965-5-48-02

Currently Adopted CFP-LRTP	Comments
Yes	<p>The Charlotte County Punta-Gorda Metropolitan Organization (MPO) 2045 Long Range Transportation Plan (LRTP) was adopted in October 2020.</p> <p>This project is included in their Cost Feasible Plan, Table 8.6 - Roadway Cost Feasible Projects List.</p> <p>The latest Charlotte County Punta-Gorda Metropolitan Organization (MPO) Transportation Improvement Program (TIP) for FY 2023/2024 - FY2026/2027 was adopted on May 16, 2023 and amended on March 21, 2024 to update this project.</p> <p>ROW is funded on 434965-5. One segment for construction is funded on 434965-3: Harborview Road from Melbourne St. to Date St.</p> <p>Attachment 3 provides planning consistency documentation.</p>

Phase	TIP/STIP	Currently Approved	\$	FY	Comments
PE (Final Design)	TIP	Yes		<2021 All years	PE phase funded < FY23 (on 434965-2).
PE (Final Design)	STIP	Yes		<2021 All years	PE phase funded < FY23 (on 434965-2).
R/W	TIP	Yes	\$20,010,000 \$20,010,000	2024 All years	Cost estimates between the TIP and STIP are consistent. ROW is funded on the 434965-5 segment for entire project.
R/W	STIP	Yes	\$20,010,000 \$20,010,000	2024 All years	Cost estimates between the TIP and STIP are consistent. ROW is funded on the 434965-5 segment for entire project.
Construction	TIP	No			CST is funded for one segment (on 434965-3)
Construction	STIP	Yes	\$29,026,179 \$29,026,179	2026 All years	CST is funded for one segment (on 434965-3)

Segment FM Number: 434965-2-32-01

Planning Consistency is not required for this project segment.

[\[3 - Planning Consistency Documentation\]](#)

**RE-EVALUATION
FORM****7. EVALUATION OF CHANGES IN IMPACTS****a. SOCIAL & ECONOMIC**

Are there changes in impacts to the social, economic, land use, mobility, and/or aesthetic effects? Yes

Overall, changes to the social, economic, land use, mobility, and aesthetic environments resulting from the design change are minimal. No new impacts to social services or resources in the area, land use, economic aspects, or aesthetic resources will occur. The anticipated residential relocations have increased and one new business relocation is anticipated. For mobility, shared-use paths, separated from the travel lanes, are now proposed.

Are there changes in right-of-way needs? Yes

Additional ROW width is needed for the roadway mainline which varies along the corridor but on average, is approximately 133 feet, which requires approximately 53 feet of additional ROW. This results in an acquisition need of 16.40 acres for roadway. Due to the refinement of stormwater pond needs and pond site locations, 5.35 acres is required for the stormwater management design. Overall, the design changes result in a combined ROW need of 21.75 acres. This is an increase from the PD&E-phase estimate of 1.25 acres. In addition, the PD&E Study identified the need for ROW take from 71 parcels, whereas the design concept impacts 95 parcels. While not considered ROW acquisition, there are also 0.75 acres of anticipated TCEs along the corridor. The additional ROW area and TCEs are depicted in **Attachment 1**, ROW and relocation change exhibit.

Is there a change in anticipated relocation(s)? Yes

The Preferred Alternative from the PD&E Study identified the need for three (3) residential relocations. These were unavoidable given the need to acquire additional ROW for the mainline widening. Two (2) of these residences are part of a duplex and the third location is a single-family residence. These residential relocations are no longer needed for the roadway improvements and will remain.

In total, there are seven (7) residential and one (1) business potential relocations associated with the design concept. Three (3) parcels, consisting of four (4) residential relocations, just west of Laverne Street, will require relocation. These properties will be impacted by mainline widening and use of remnant property for stormwater management (Pond 1-2B). There are three (3) additional relocations along the corridor due to the widened mainline, which are single-family residences. In addition, there is one (1) business relocation, which consists of the main office of the Harbor View on the Bay 55+ community. These relocations are detailed in the Conceptual Stage Relocation Plan (November 2023), included in the project file.

Are there changes in impacts to Prime or Unique Farmlands? Yes

During the PD&E Study, a Natural Resources Conservation Service (NRCS)-CPA-106 form was completed. The Preferred Alternative resulted in the conversion of 1.3 acres of designated prime and unique farmland. The total points calculated for the project was 67, which is well below the 160-point significance threshold. Form NRCS-CPA-106 was prepared again to address the design changes and additional ROW needed for the project. The current designated prime and unique farmland data layer was used. A total of 0.69 acres of direct conversion is proposed. Upon coordination with the NRCS, 49.1 points were calculated for the project, which remains below the significance threshold. The NRCS-CPA-106 form (October 2023) is included in **Attachment 4**.

b. CULTURAL

Are there changes in impacts to cultural resources pursuant to Section 106 of the National Historic Preservation Act (historic sites/districts and archaeological sites)? Yes

A CRAS Addendum was prepared in October 2022 to address four (4) stormwater pond locations and is included in the project file. The SHPO concurred with the findings on November 18, 2022 (SHPO File No. 2022-7311) and documentation

**RE-EVALUATION
FORM**

is included in **Attachment 5**. Archaeological background research and a review of the Florida Master Site File (FMSF) and the National Register of Historic Places (NRHP) indicated that no previously recorded historic or prehistoric archaeological sites were identified within any of the proposed pond sites. However, two previously recorded sites, 8CH00502 and 8CH00499, were recorded within one mile. Site 8CH00502 is a prehistoric midden located along the north shore of the Peace River about 1200 feet south of the project. Similarly, 8CH00499, the Northside Midden, is recorded about 800 feet south of the western terminus of the project. A review of relevant site locational information for environmentally similar areas within Charlotte County and the surrounding region indicated areas of moderate to low potential for the occurrence of prehistoric sites.

The historical/architectural background research indicated that no historic resources had been previously recorded within the proposed pond sites; however, four (4) previously recorded historic resources (8CH01338, 8CH02053, 8CH02741, and 8CH02742) are located adjacent to the four (4) proposed pond sites. This includes three buildings (8CH01338, 8CH02741, and 8CH02742) located adjacent to proposed Pond 1-2B (now designed as Pond 1-2D) and the historic linear resource, Harborview Road (8CH02053), located adjacent to all proposed pond sites. These resources were previously determined ineligible for listing in the NRHP in the 2018 CRAS and concurred with by the SHPO on December 19, 2018. No new historic resources 46 years of age or older (constructed in 1976 or earlier) were identified. This was confirmed during the field reconnaissance survey. The previously recorded historic resources were not updated since no significant changes were observed during the field survey.

A second CRAS Addendum (April 2023), included in the project file, was prepared that included field survey for the additional ROW needed for the mainline widening and the shift of one pond site, Pond 1-2B, to use remnant property from parcels proposed for impact by mainline widening. This second addendum also includes a historic resource update for the mainline corridor to identify, record and evaluate historic resources that were constructed between 1962 and 1976. These resources were not included in the previous 2018 PD&E Study CRAS since they were not yet 50 years old at the time or were identified within the new Area of Potential Effect (APE).

As a result of the archaeological background research, no previously recorded historic or pre-Contact period archaeological sites were identified that were not already previously identified. A review of relevant site locational information for environmentally similar areas within Charlotte County and the surrounding region indicated areas of moderate to low potential for the occurrence of pre-Contact period archaeological sites within the APE. The background research indicated that sites, if present, would most likely be small shell middens or artifact scatters. As a result of field surveys, including the excavation of 28 shovel tests, no archaeological sites were identified within the APE.

The historical/architectural background research, including a review of the FMSF database and the NRHP, indicated that 20 historic resources have been previously recorded within the APE (8CH01338, 8CH01444, 8CH01446, 8CH01451 - 8CH01456, 8CH01461, 8CH01462, 8CH02053, 8CH02722 - 8CH02727, 8CH02741, 8CH02742). All of the previously recorded historic resources within the APE have been determined ineligible for listing in the NRHP by the SHPO. The historic/architectural field survey resulted in the identification of 36 historic resources within the APE. Of these, 18 were newly identified, recorded, and evaluated (8CH02782 - 8CH02799) and the remaining 18 historic resources were previously recorded (8CH01338, 8CH01444, 8CH01446, 8CH01452, 8CH01454, 8CH01455, 8CH01456, 8CH01461, 8CH01462, 8CH02053, 8CH02722 - 8CH02727, 8CH02741, 8CH02742) within the APE. The previously recorded resources were not re-evaluated since the SHPO already determined they were ineligible for listing in the NRHP, and no significant changes were observed during the field survey. The newly identified resources include 16 buildings (8CH02783 and 8CH02798) that were constructed between circa (ca.) 1962 and ca. 1976 and two building complex resource groups (8CH02782 and 8CH02799). Overall, the buildings have been altered, lack sufficient architectural features, and are not

RE-EVALUATION FORM

significant embodiments of a type, period, or method of construction. The building complex resource groups are common mobile home parks found throughout Florida and are not significant embodiments of a type, period, or method of construction. In addition, background research did not reveal any historic associations with significant persons and/or events. Thus, the resources do not appear eligible for listing in the NRHP, either individually or as a part of a historic district. Furthermore, as a result of the field survey, two previously recorded historic resources (8CH01451 and 8CH01453) were found to be demolished. Of the 36 extant historic resources, three (8CH01338, 8CH01456, and 8CH02784) are located within the relocated Pond 1-2 and three (8CH01454, 8CH02741, and 8CH02742) are located immediately adjacent.

Based on the results of the background research and field investigations, no archaeological sites or historic resources that are listed, eligible, or that appear potentially eligible for listing in the NRHP are located within the APE. The FDOT notified the SHPO of the finding of "no historic properties affected" on April 6, 2023. The SHPO provided concurrence on April 26, 2023 and is included in **Attachment 6**.

Following the April 2023 SHPO coordination, additional mainline roadway design changes included the shift at the west end of the project to avoid a conservation easement at Roll's Landing, and the addition of a pond, referred to as pond 1-2D, which was previously evaluated as part of the September 2022 CRAS Addendum for proposed pond sites. No additional archaeological surveys were deemed necessary given all negative results for prior surveys. No additional historic resources were identified to be recorded or updated. This summary was provided in a memorandum dated October 2023 and is included in the project file.

[\[5 - CRAS Pond Addendum_Concurrence Letter_SHPO\]](#)[\[6 - Second Addendum_Concurrence letter_SHPO\]](#)

Are there changes in effects to Section 4(f) of the Department of Transportation Act protected resources or other protected public lands? N/A

Are there changes in impacts to lands purchased under Section 6(f) of the Land and Water Conservation Fund Act? N/A

Are there changes in impacts to recreational areas or protected lands? N/A

c. NATURAL

Are there changes in impacts to protected species and habitat, wetlands and other surface waters, and/or essential fish habitat? Yes

Design changes and updates relative to protected species and wetlands are found in the NRE Addendum (January 2024), included in the project file.

An acoustic survey for the Florida bonneted bat was conducted in April 2023 to assess the involvement of this species. Given the survey results and use of the finalized 2019 consultation key for the species, a determination of may affect, not likely to adversely affect-Programmatic (MANLAA-P) was made. This programmatic concurrence does not require further consultation with USFWS; however, FDOT will implement the following Best Management Practices (BMPs) into the proposed project:

**RE-EVALUATION
FORM****BMP 1**

If potential roost trees or structures need to be removed, check cavities within 30 days prior to remove of trees, snags or structures. When possible, remove structure outside of breeding season (e.g., January 1 - April 15). If evidence of use by any bat species is observed, discontinue removal efforts in that area and coordinate with the Service on how to proceed.

BMP 5

Conserve open freshwater and wetland habitats to promote foraging opportunities and avoid impacting water quality. Created/restored habitat should be designed to replace the function of native habitat.

BMP 7

Avoid or limit widespread application of insecticides (e.g., mosquito control, agricultural pest control) in areas where Florida bonneted bats are known or expected to forage or roost.

BMP 11

Avoid and minimize the use of artificial lighting, retain natural light conditions, and install wildlife friendly lighting (e.g., downward facing lighting and lowest lumens possible).

The species consultation key with step and BMP highlighting is attached as **Attachment 7**.

Proposed impacts to smalltooth sawfish Critical Habitat (CH) have changed from 0.38-acre as estimated during the PD&E Study to 0.03-acre as per the proposed design. There is also 0.13-acre of presumed accessible habitat proposed for impact. Other details of the proposed construction and project effects, including construction methods at the box culverts/cross-drains where in-water work will occur, are detailed in the NRE Addendum (January 2024). The effect determination for CH remains as no adverse modification or destruction of Critical Habitat. The *Protected Species Construction Conditions (NOAA Fisheries Southeast Regional Office)* has replaced the *NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions* and will be implemented during construction.

Proposed impacts to West Indian manatee CH have also been refined from the 0.14-acre PD&E estimate to 0.03-acre as per the proposed design. The PD&E phase commitment to implement construction precautions during in-water work will protect the species. There are no changes to the determination of effect of may affect, not likely to adversely affect. The effect determination for CH remains as no adverse modification or destruction of Critical Habitat.

The PD&E Study included an estimate of wood stork foraging biomass. However, based on the *South Florida Wood Stork Key*, a foraging analysis only needs to be conducted for projects impacting greater than five acres of wetlands. The design change is anticipated to impact 0.46 acres of wetlands and 1.99 acres of surface water which falls under the threshold needed for the wood stork foraging analysis. However, suitable foraging habitat impacts will be mitigated through credit purchase from federally-permitted wetland mitigation banks; therefore, the project determination of effect remains at may affect, but is not likely to adversely affect for this species.

While the PD&E-phase indicated a may affect, not likely to adversely affect determination for the snail kite, based on design-phase field reviews, there is no suitable habitat for this species. Based on this information, it has been determined that the project will have no effect on the snail kite.

**RE-EVALUATION
FORM**

The American alligator was listed as may affect, not likely to adversely affect determination in the January 2019 NRE. Since that time, the USFWS has indicated that they will not consult on this species given that it is listed only by similarity of appearance to the American crocodile. As a result, no further evaluation or agency coordination will occur for the alligator.

The 2019 NRE did not address the Florida panther since the project is located outside the consultation area for the species and there are no confirmed observations near the project. However, based on public comments received during the public hearing, the Florida panther was evaluated and included in the January 2024 NRE addendum. The proposed project will have no effect on the Florida panther.

Wetland and surface water jurisdictional boundaries were established during the design phase and the anticipated impacts to these resources have been updated in the January 2024 NRE Addendum. Direct impacts to jurisdictional wetlands and surface waters were quantified and evaluated for the design change. There are 0.46 acres of direct impacts proposed to jurisdictional wetlands and 1.99 acres of direct impacts proposed to surface waters for a total of 2.45 acres. In the January 2019 NRE, wetland and surface water impacts resulting from the preferred alternative totaled 3.50 acres which included 0.80 acres of wetlands and 2.70 acres of surface waters. This reduction in impacts is due to more refined wetland and surface water boundaries. Mitigation will be addressed pursuant to Chapter 373.4137, Florida Statutes (F.S.) in order to satisfy all mitigation requirements of Part IV, Chapter 373, F.S. and 33 U.S.C. 1344. Mitigation options for this project include credit purchase from Little Pine Island Mitigation Bank to offset estuarine wetland impacts and from Boran Ranch, Peace River, and/or Horse Creek Mitigation Banks to offset freshwater wetland impacts.

The project is within Essential Fish habitat (EFH) for 55 managed species and the coral complex listed by the Gulf of Mexico Fishery Management Council (GMFMC). During the PD&E Study and subsequent design-phase field surveys, no seagrass or shellfish habitat was identified within the project area. EFH in the project footprint was refined to include the vegetated wetlands (primarily mangrove) surrounding estuarine open water habitats. Total impacts to EFH habitat changed from 0.38-acre to 0.30-acre. Therefore, the effect determination for these impacts will remain minimal on EFH. Consultation with NMFS is currently ongoing. Impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 22 U.S.C. 1344. Specifically, credit purchase from Little Pine Island Mitigation Bank is a viable option as the bank offers estuarine wetland credits (including mangrove credits).

The January 2024 NRE Addendum was submitted to the agencies for review on January 29, 2024. The Florida Department of Agriculture and Consumer Services (FDACS) responded on January 30, 2024 that the agency concurred with the NRE Addendum updated determinations and commitments. The USFWS concurred with the species determinations of effect and the manatee CH determination on February 2, 2024 and provided a concurrence stamp. All agency concurrences are included in **Attachment 8**. The NMFS responded on February 5, 2024 that the agency was initiating formal consultation given the amount of mangrove impacts in relation to smalltooth sawfish habitat. On February 9, 2024, a coordination meeting was held between FDOT D1 and NMFS. It was discussed that the mangrove fringe along the culvert accessible to sawfish is sparse and also contains Brazilian pepper. It was agreed that another field review would be completed and mapping of specifically red mangrove would be provided to the NMFS. On February 22, 2024, OEM requested initiation of formal consultation with NMFS. This request included documentation of the red mangrove calculation of 62 linear feet within the smalltooth sawfish CH and 166 linear feet outside of CH. Documentation is included in the project file and the Biological Opinion prepared by NMFS which provides concurrence for the smalltooth sawfish and the species' CH was issued on March 29, 2024. This document is included in **Attachment 9**.

RE-EVALUATION FORM

In November 2020, the USFWS listed the eastern black rail as a federally threatened species. There is no suitable habitat for this species in the project footprint; estuarine marsh habitat was only observed outside of the project footprint.

[\[7 - Florida bonneted bat consultation key\]](#)[\[8 - agency concurrences\]](#)[\[9 - SERO-2024-00355 Biological Opinion_Signed Final\]](#)

Are there changes in impacts to designated Aquatic Preserves, Coastal Barrier resources, Wild and Scenic Rivers, Nationwide Rivers Inventory Rivers, and/or Outstanding Florida Waters? N/A

Are there changes in impacts to Floodplains or Water Resources? Yes

Changes in stormwater management pond sites have been described previously in Section 4. The total number of stormwater ponds have decreased from seven (7) to five (5). Two (2) of the PD&E-phase sites are proposed for use in the design concept, and three (3) are new sites evaluated as part of this re-evaluation. Overall, stormwater pond acreage was reduced from 9.5 acres to 5.35 acres.

d. PHYSICAL

Are there changes in Air Quality? No

What is the status of Highway Traffic Noise?

The Noise Study Report (NSR), completed as part of the PD&E Study, identified five (5) locations where barriers were potentially feasible and reasonable:

- Birchwood Condominiums north of Harborview Road between Coconut Street and Drance Street,
- Multi-family residences north of Harborview Road and east of Drance Street,
- Harbor View Mobile Home Park south of Harborview Road between Rowland Drive and Date Street,
- Multi-family residences south of Harborview Road between Date Street and Coconut Street, and
- Single-family homes south of Harborview Road between Coconut Street and Drance Street.

The feasible and reasonable barriers from the PD&E study remain feasible and reasonable with some minor changes. These locations meet the minimum criteria of two impacted receptors achieving a 5 dB(A) or greater reduction in order for a noise barrier to be considered feasible. The following locations describe the feasible and reasonable barriers that will meet the Noise Reduction Design Goal (NRDG) of achieving at least seven (7) dB(A) reduction at one (1) or more benefited receptors:

- Birchwood Condominium - One (1) barrier segment, 395 feet long and 16 feet tall
- Multi-family residences east of Drance Street- One (1) barrier segment, 175 feet long and eight (8) feet tall
- Harborview Mobile Home Park - One (1) barrier segment, 405 feet long and eight (8) feet tall located west of Harborview Mobile Home Park Road.
- Multi and single-family residences located south of Harborview Road between Date Street and Drance Street. This barrier system consists of four (4) barrier segments: 1) between Date Street and the first driveway - 90 feet long and eight (8) feet tall; 2) between the first driveway and Coconut Street - 185 feet long and eight (8) feet tall; 3) between Coconut Street and the second driveway - 150 feet long and eight (8) feet tall; and 4) between the second driveway and Drance Street - 215 feet long and eight (8) feet tall.

A Noise Report Addendum (November 2023) is provided in the project file.

RE-EVALUATION FORM

What is the status of Contamination?

A PD&E Reevaluation Contamination Technical Memorandum was prepared in November 2023 to document an updated review of the project corridor since completion of the original 2018 CSER, to incorporate mainline roadway design changes, and assign risk ratings to proposed stormwater management ponds. This document also summarizes findings of earlier design-phase reports completed for the pond siting evaluation (reports dated September 2021 and April 2023). The November 2023 update provides risk ratings assigned to the original five (5) sites from the 2018 CSER, five (5) additional sites, and five (5) stormwater ponds. Consideration for Level II testing is warranted for the contamination sites or stormwater management ponds that received a "Medium" risk rating, which include:

- Site 7- Former Groves- Medium
- Stormwater Management Facility 3- Medium

All CSER memoranda are included in the project file.

Are there changes in impacts to Utilities and Railroads? No

Are there changes in impacts to Navigation? N/A

8. COMMITMENT STATUS

Are there prior commitments from the Environmental Document or previously approved re-evaluation(s)? Yes

Are there new environmental commitments? Yes

New commitments include:

- In accordance with the Florida bonneted bat consultation key, FDOT will implement Best Management Practice #1: If potential roost trees or structures need to be removed, check cavities for bats within 30 days prior to removal of trees, snags, or structures. When possible, remove structure outside of breeding season (e.g., January 1 - April 15). If evidence of use by any bat species is observed, discontinue removal efforts in that area and coordinate with the Service on how to proceed.
- In accordance with the Florida bonneted bat consultation key, FDOT will implement Best Management Practice #5: Conserve open freshwater and wetland habitats to promote foraging opportunities and avoid impacting water quality. Created/restored habitat should be designed to replace the function of native habitat.
- In accordance with the Florida bonneted bat consultation key, FDOT will implement Best Management Practice #7: Avoid or limit widespread application of insecticides (e.g., mosquito control, agricultural pest control) in areas where Florida bonneted bats are known or expected to forage or roost.
- In accordance with the Florida bonneted bat consultation key, FDOT will implement Best Management Practice #11: Avoid and minimize the use of artificial lighting, retain natural light conditions, and install wildlife friendly lighting (*i.e.*, downward facing and lowest lumens possible avoid permanent night-time lighting to the greatest extent practicable.
- No blasting will occur during the construction of the proposed culverts.
- The FDOT will only conduct in-water work during daytime hours.
- The FDOT will require contractors to install sheet pile walls using vibratory hammers and not impact hammers.
- The FDOT will contact the FWC prior to the temporary culvert closure (CD-4) should the agency wish to sweep the creek upstream of the culvert with nets to capture sawfish prior to the temporary culvert closure. Culvert closure will avoid the smalltooth sawfish pupping season which is March 1 - July 31.
- Impacts to suitable foraging habitat for the federally-protected wood stork will be mitigated through the purchase of credits from a USFWS-approved mitigation bank pursuant to Section 373.4137, F.S. or as otherwise agreed to by the

RE-EVALUATION FORM

FDOT and the appropriate regulatory agencies.

- The most current version of the FWC Standard Manatee Conditions for In-Water Work will be implemented to ensure that manatees will not be adversely impacted by the project.
- The Protected Species Construction Conditions (NOAA Fisheries Southeast Regional Office) will be implemented to ensure that sea turtles and smalltooth sawfish will not be adversely impacted by the project.

The updated PCR is provided in **Attachment 10**.

[\[10 - 434965-2 Project Commitment Record\]](#)

9. STATUS OF PERMITS

Federal

Segment	Name	Descriptor	Status	Date
434965-5-48-01	USACE Section 10 or Section 404 Permit	USACE Section 404	Needed	
434965-5-48-02	USACE Section 10 or Section 404 Permit	USACE Section 404	Needed	

State

Segment	Name	Descriptor	Status	Date
434965-5-48-01	DEP or WMD Environmental Resource Permit (ERP)	SWFWMD ERP	Needed	
434965-5-48-01	FWC Gopher Tortoise Relocation Permit	FDEP Tortoise Relocation	Needed	
434965-5-48-02	DEP or WMD Environmental Resource Permit (ERP)	SWFWMD ERP	Needed	
434965-5-48-02	FWC Gopher Tortoise Relocation Permit	FDEP Tortoise Relocation	Needed	

Local

None anticipated.

Other

None anticipated.

10. CONCLUSION

- The project has been re-evaluated pursuant to 23 CFR § 771.129. The FDOT has determined that no changes to the project affect the original decision. Therefore, the Administrative Action remains valid and the project can advance.

11. DISTRICT REVIEW AND APPROVAL

Name and title of FDOT Preparer: Jeffrey James, Environmental Manager

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 the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding (MOU) dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

**RE-EVALUATION
FORM**

Jeffrey James

April 24, 2024

District approving authority or designee

Date

Electronically signed within SWEPT
on April 24, 2024 1:57:31 PM EDT
(electronic signature on file)**12. OEM CONCURRENCE**

Jennifer Marshall, P.E.

May 20, 2024

Print Name

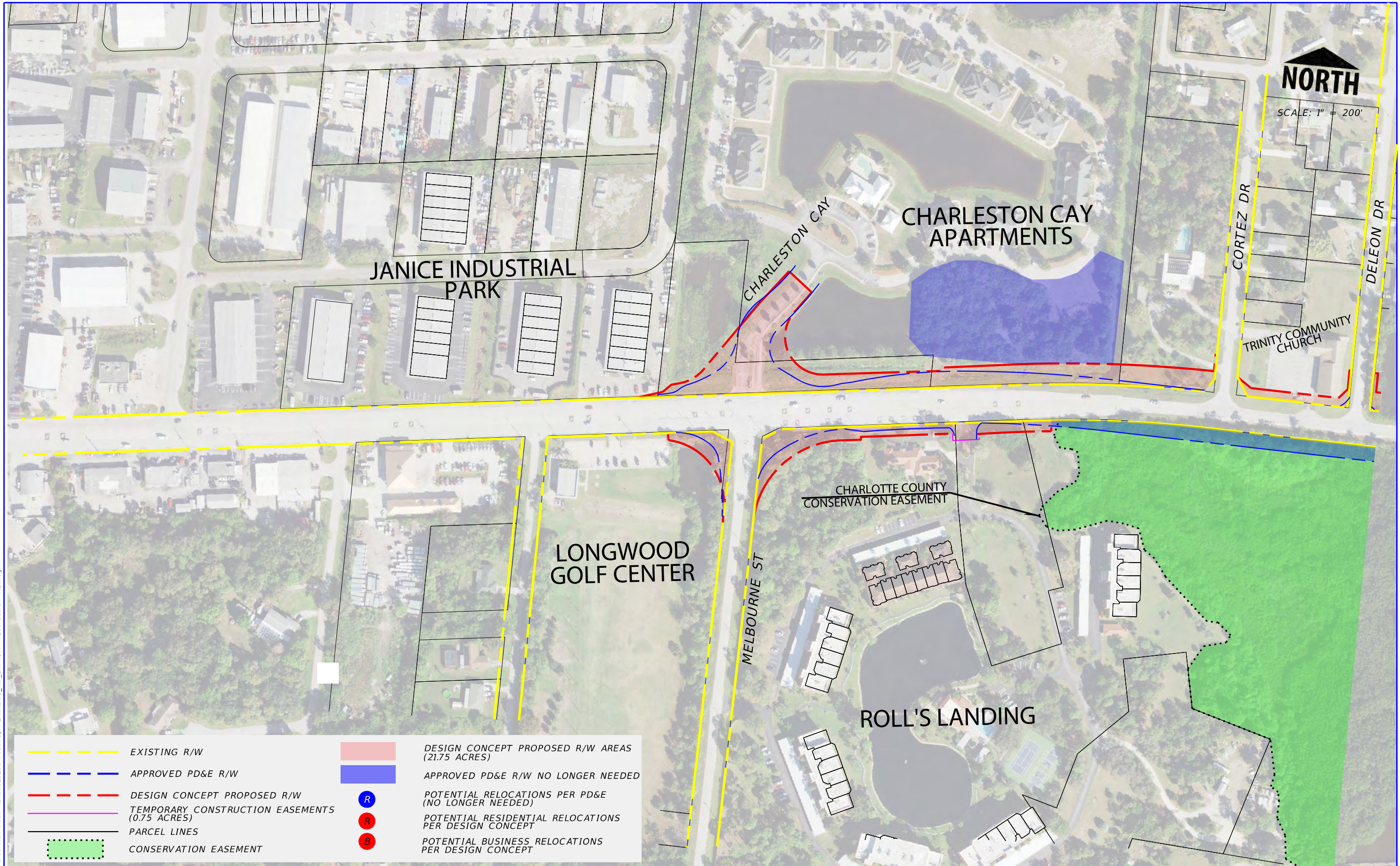
Date

Director of the Office of Environmental Management or Designee

Electronically signed within SWEPT
on May 20, 2024 7:49:54 AM EDT
(electronic signature on file)**13. Links to Supporting Documentation**

- 1 - [43496512101-CE2-D1-ROW_and_relocation_change_exhibit-2023-1121.pdf](#)
- 2 - [43496512101-CE2-D1-Public_Hearing_Certification_signed_with_transcript-2024-0108.pdf](#)
- 3 - [43496512101-CE2-D1-Planning_Consistency_Documentation-2024-0408.pdf](#)
- 4 - [43496512101-CE2-D1-NRCS-CPA-106_Form_Re-evaluation-2023-1011.pdf](#)
- 5 - [43496512101-CE2-D1-CRAS_Pond_Addendum_Concurrence_Letter_SHPO-2022-1118.pdf](#)
- 6 - [43496512101-CE2-D1-Second_Addendum_Concurrence_letter_SHPO-2023-0426.pdf](#)
- 7 - [43496512101-CE2-D1-Florida_bonneted_bat_consultation_key-2023-1219.pdf](#)
- 8 - [43496512101-CE2-D1-agency_concurrences-2024-0409.pdf](#)
- 9 - [43496512101-CE2-D1-SERO-2024-00355_Biological_Opinion_Signed_Final-2024-0329.pdf](#)
- 10 - [43496512101-CE2-D1-434965-2_Project_Commitment_Record-2024-0516.pdf](#)

11/21/2023 1:48:31 PM USER: asebold
 P:\2019\SP19D1000 Harborview Road\43496525201\roadway\PLAN\RD01_RW_EXHIBIT - 200 scale - NEW.dgn

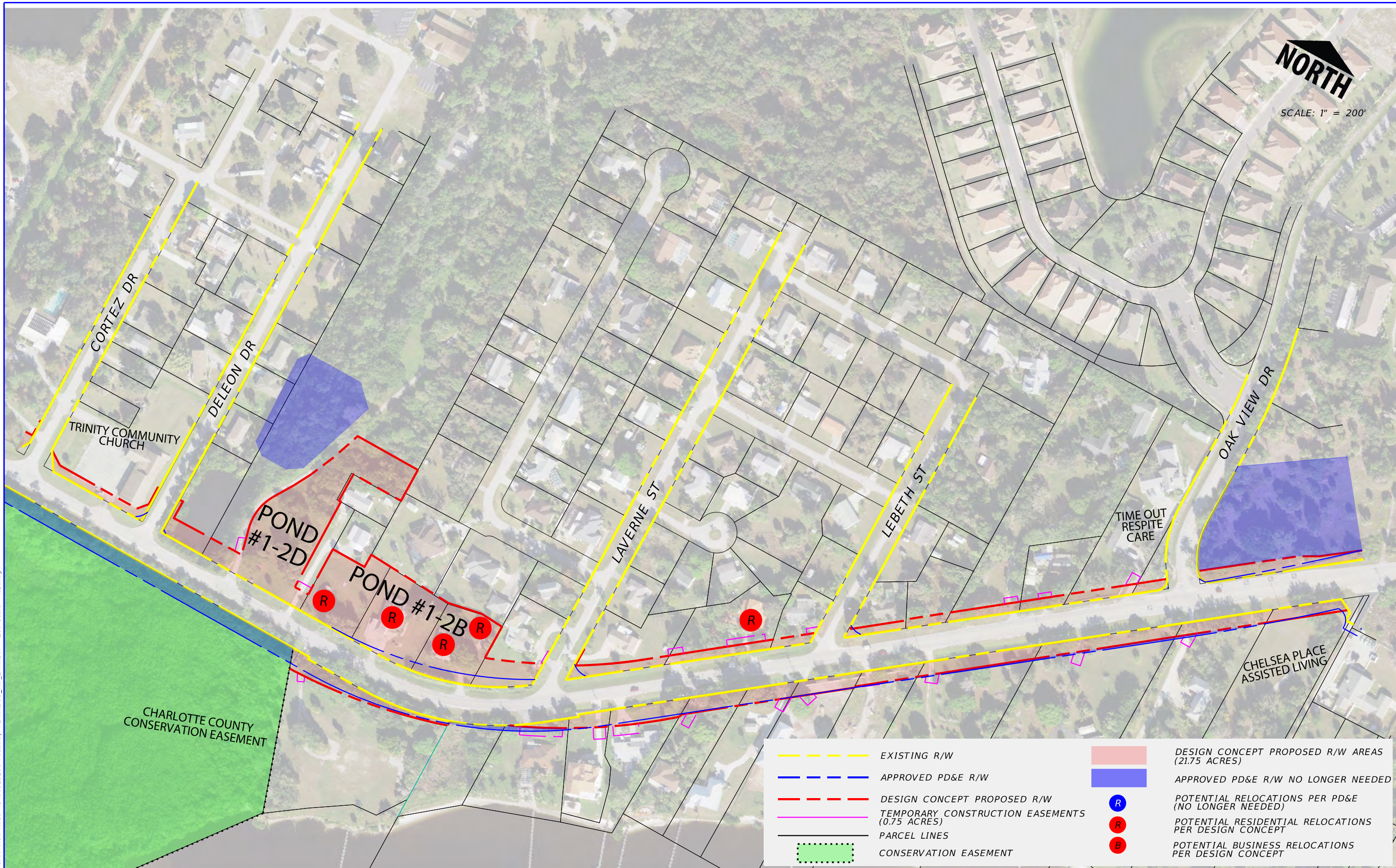


REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JAMES MICHAEL WINTER, JR., P.E. LICENSE NUMBER: 55514 SCALAR CONSULTING GROUP INC. 13337 NORTH 56TH STREET TAMPA, FL 33617		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
						55	CHARLOTTE	434965-2-52-01	1

R/W EXHIBIT



SCALE: 1" = 200'

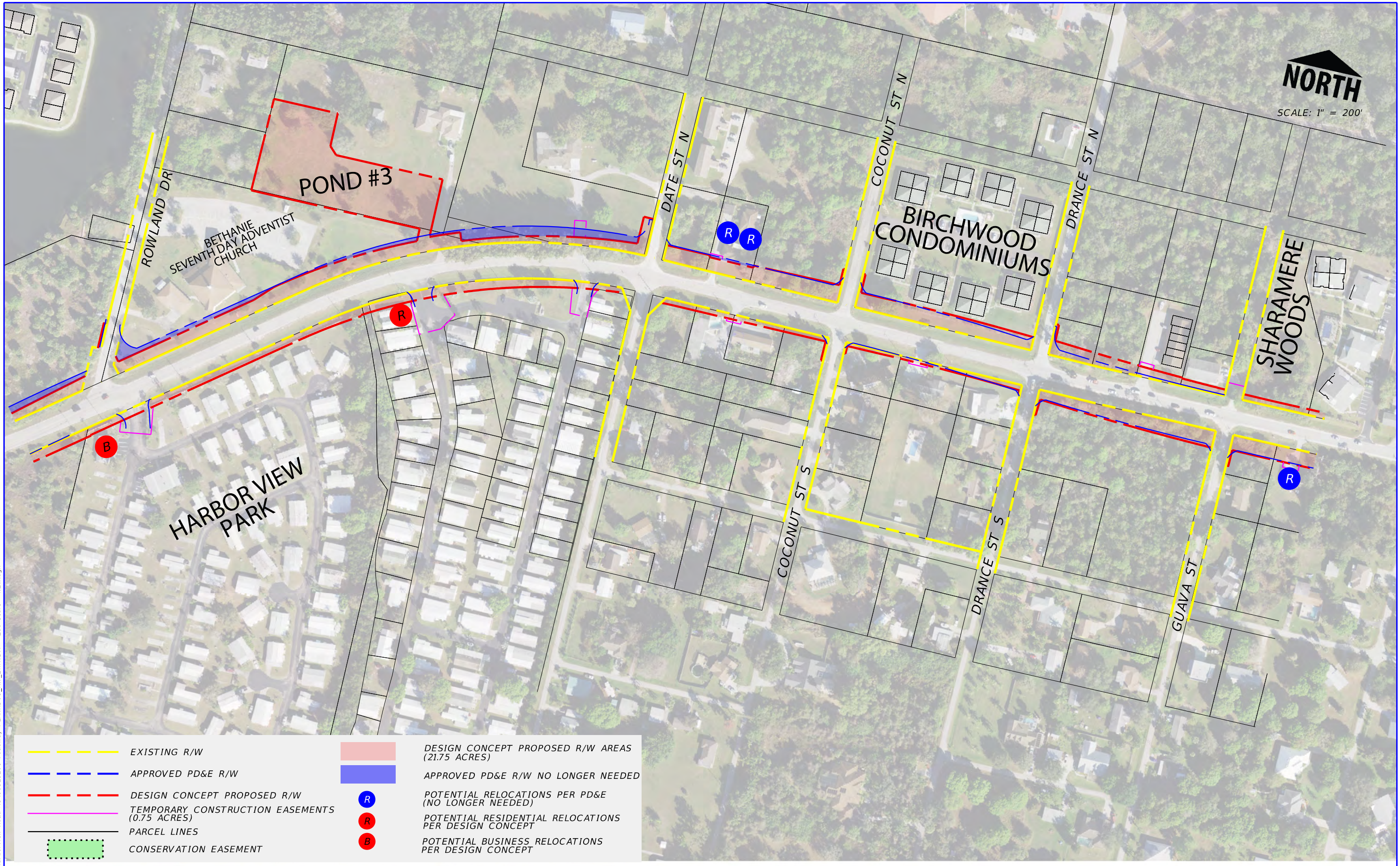


	EXISTING R/W		DESIGN CONCEPT PROPOSED R/W AREAS (21.75 ACRES)
	APPROVED PD&E R/W		APPROVED PD&E R/W NO LONGER NEEDED
	DESIGN CONCEPT PROPOSED R/W		POTENTIAL RESIDENTIAL RELOCATIONS PER DESIGN CONCEPT
	TEMPORARY CONSTRUCTION EASEMENTS (0.75 ACRES)		POTENTIAL BUSINESS RELOCATIONS PER DESIGN CONCEPT
	PARCEL LINES		
	CONSERVATION EASEMENT		

11/21/2023 1:48:38 PM USER: asebold P:\2019\SP19D1000 Harborview Road\43496525201\roadway\PLAN\RD01_RW_EXHIBIT - 200 scale - NEW.dgn

REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. 2
DATE	DESCRIPTION	DATE	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
				JAMES MICHAEL WINTER, JR., P.E. LICENSE NUMBER: 55514 SCALAR CONSULTING GROUP INC. 13337 NORTH 56TH STREET TAMPA, FL 33617		55	CHARLOTTE	434965-2-52-01	
R/W EXHIBIT									

NORTH
SCALE: 1" = 200'



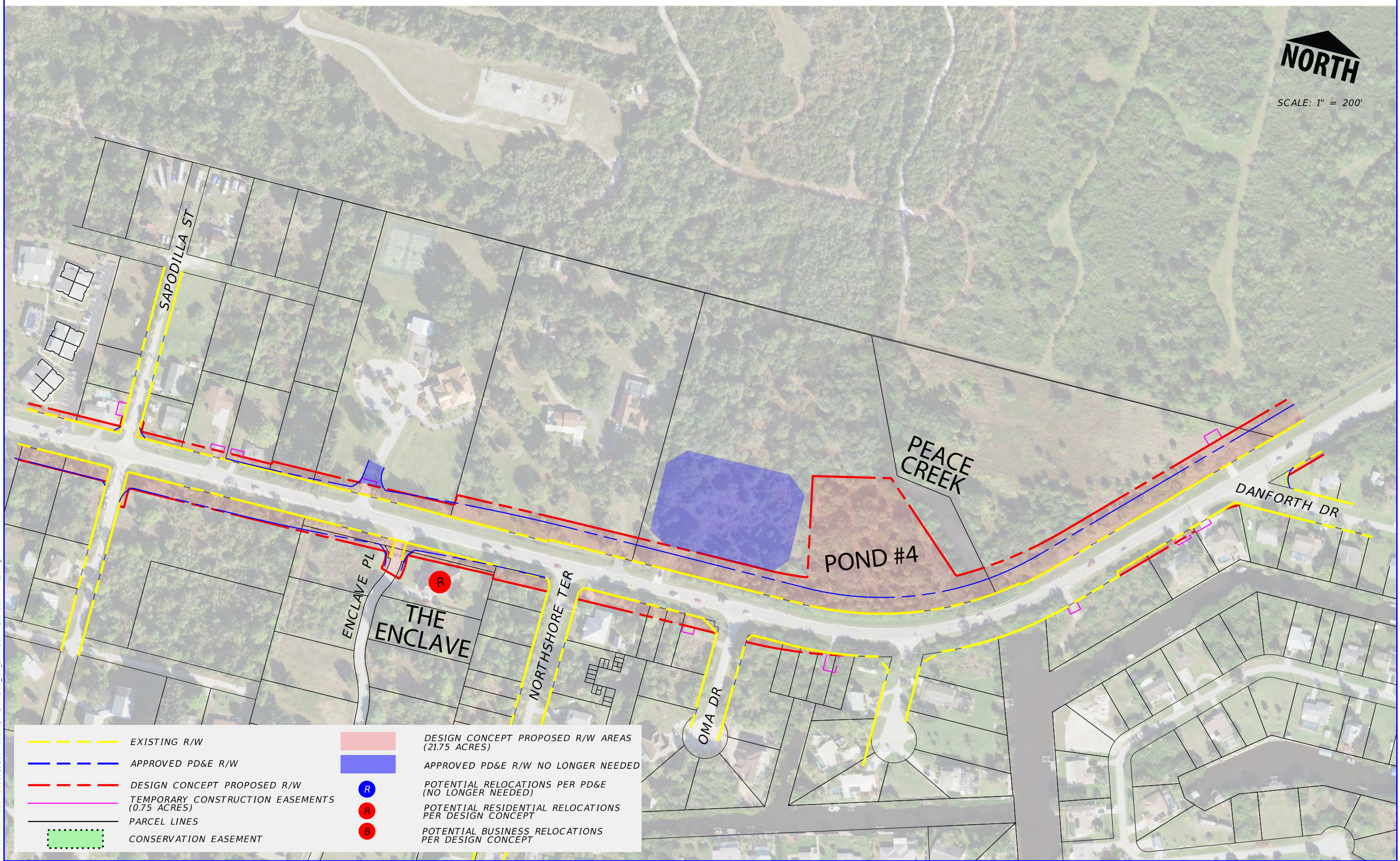
	EXISTING R/W		DESIGN CONCEPT PROPOSED R/W AREAS (21.75 ACRES)
	APPROVED PD&E R/W		APPROVED PD&E R/W NO LONGER NEEDED
	DESIGN CONCEPT PROPOSED R/W		POTENTIAL RELOCATIONS PER PD&E (NO LONGER NEEDED)
	TEMPORARY CONSTRUCTION EASEMENTS (0.75 ACRES)		POTENTIAL RESIDENTIAL RELOCATIONS PER DESIGN CONCEPT
	PARCEL LINES		POTENTIAL BUSINESS RELOCATIONS PER DESIGN CONCEPT
	CONSERVATION EASEMENT		

11/21/2023 1:48:45 PM USER: asebold P:\2019\SP19D1000 Harborview Road\43496525201\roadway\PLAN\RD01_RW_EXHIBIT - 200 scale - NEW.dgn

REVISIONS				ENGINEER OF RECORD			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
				JAMES MICHAEL WINTER, JR., P.E. LICENSE NUMBER: 55514 SCALAR CONSULTING GROUP INC. 13337 NORTH 56TH STREET TAMPA, FL 33617			55	CHARLOTTE	434965-2-52-01	3
R/W EXHIBIT										



SCALE: 1" = 200'



	EXISTING R/W		DESIGN CONCEPT PROPOSED R/W AREAS (21.75 ACRES)
	APPROVED PD&E R/W		APPROVED PD&E R/W NO LONGER NEEDED
	DESIGN CONCEPT PROPOSED R/W		POTENTIAL RELOCATIONS PER PD&E (NO LONGER NEEDED)
	TEMPORARY CONSTRUCTION EASEMENTS (0.75 ACRES)		POTENTIAL RESIDENTIAL RELOCATIONS PER DESIGN CONCEPT
	PARCEL LINES		POTENTIAL BUSINESS RELOCATIONS PER DESIGN CONCEPT
	CONSERVATION EASEMENT		

11/21/2023 1:48:55 PM USER: asebold P:\2019\SP19D1000 Harborview Road\43496525201\roadway\PLAN\RD01_RW_EXHIBIT - 200 scale - NEW.dgn

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
				JAMES MICHAEL WINTER, JR., P.E. LICENSE NUMBER: 55514 SCALAR CONSULTING GROUP INC. 13337 NORTH 56TH STREET TAMPA, FL 33617	55	CHARLOTTE	434965-2-52-01	R/W EXHIBIT 4

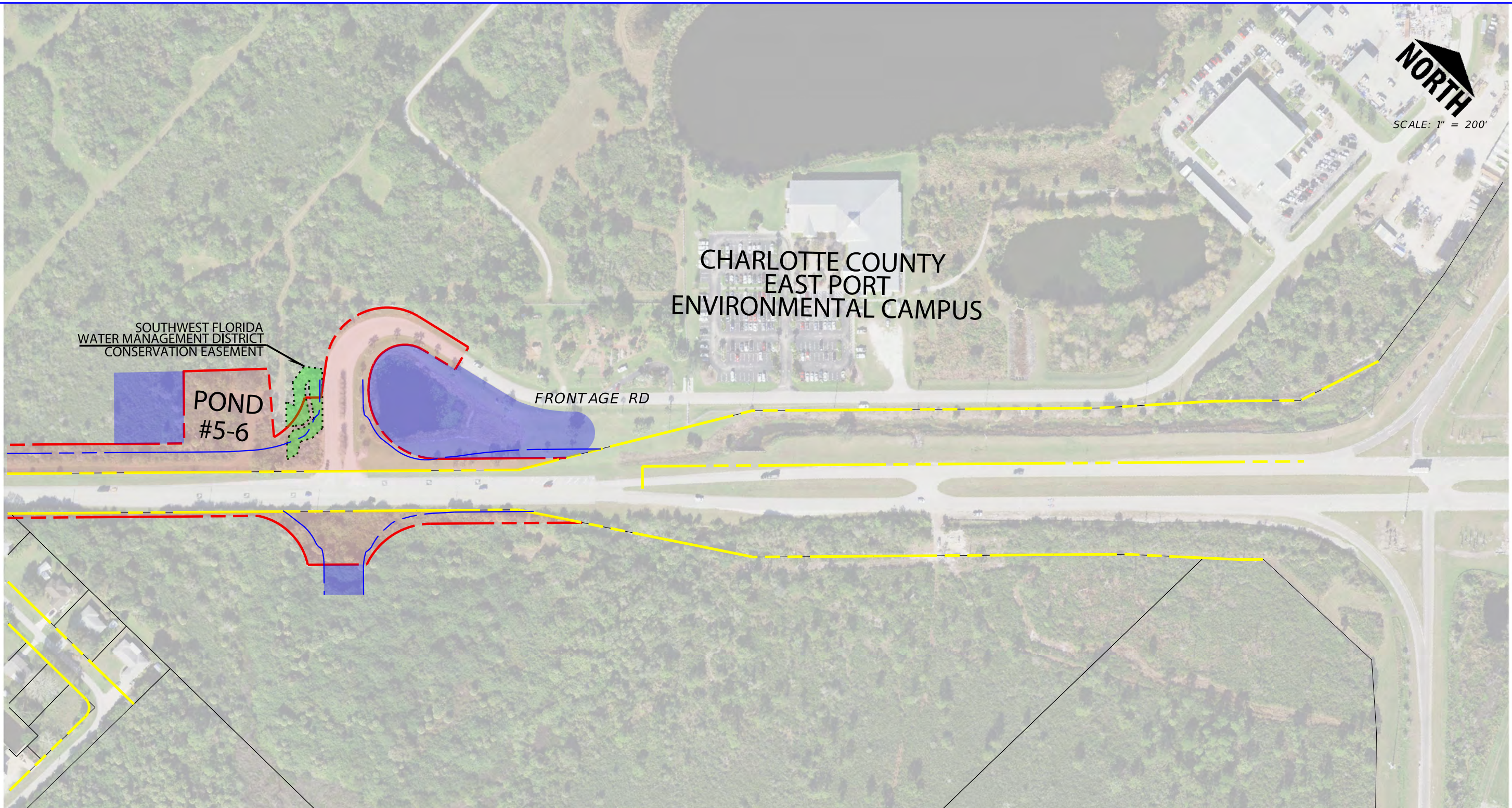
NORTH
SCALE: 1" = 200'

**CHARLOTTE COUNTY
EAST PORT
ENVIRONMENTAL CAMPUS**

SOUTHWEST FLORIDA
WATER MANAGEMENT DISTRICT
CONSERVATION EASEMENT

**POND
#5-6**

FRONTAGE RD



	EXISTING R/W		DESIGN CONCEPT PROPOSED R/W AREAS (21.75 ACRES)
	APPROVED PD&E R/W		APPROVED PD&E R/W NO LONGER NEEDED
	DESIGN CONCEPT PROPOSED R/W		POTENTIAL RELOCATIONS PER PD&E (NO LONGER NEEDED)
	TEMPORARY CONSTRUCTION EASEMENTS (0.75 ACRES)		POTENTIAL RESIDENTIAL RELOCATIONS PER DESIGN CONCEPT
	PARCEL LINES		POTENTIAL BUSINESS RELOCATIONS PER DESIGN CONCEPT
	CONSERVATION EASEMENT		

11/21/2023 1:49:03 PM USER: asebold P:\2019\SP19D1000 Harborview Road\43496525201\roadway\PLAN\RD01_RW_EXHIBIT - 200 scale - NEW.dgn

REVISIONS				ENGINEER OF RECORD			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
				JAMES MICHAEL WINTER, JR., P.E. LICENSE NUMBER: 55514 SCALAR CONSULTING GROUP INC. 13337 NORTH 56TH STREET TAMPA, FL 33617			55	CHARLOTTE	434965-2-52-01	5
R/W EXHIBIT										

FLORIDA DEPARTMENT OF TRANSPORTATION
PUBLIC HEARING CERTIFICATION

650-050-56
ENVIRONMENTAL MANAGEMENT
08/17

Harborview Road PD&E Re-evaluation
Project Development and Environment (PD&E) Study
from Melbourne Street to I-75
Charlotte County, Florida
Financial Management No.: 434965-2

I certify that a public hearing was conducted on December 5, 2023, beginning at 6:00 p.m. for the above project. A transcript was made and the document attached is a full, true, and complete transcript of what was said at the hearing.



Christopher Speese
(Name)

January 8, 2024
Date

Project Representative
(Title of FDOT Representative)

Florida Department of Transportation

Public Hearing

held on

December 5, 2023

6:06 p.m. to 6:52 p.m.

at

Punta Gorda Isles Civic Association
2001 Shreve Street
Punta Gorda, Florida 33950

RE: Harborview Road PD&E Re-evaluation

FPID NO. 434965-2-32-01

FORT MYERS COURT REPORTING, INC.
Barraco Building
2271 McGregor Boulevard, Suite 220
Fort Myers, Florida 33901
PHONE: (239) 334-1411 FAX: (239) 334-1476

Serving All of Southwest Florida

1 MR. SPEESE: Good evening, everybody. We're going
2 to get started here. Good evening. The Florida
3 Department of Transportation welcomes you to the public
4 hearing for the Project Development & Environment, or
5 PD&E, Reevaluation for Harborview Road in Charlotte
6 County. My name is Christopher Speese. I am the
7 project representative. Thank you for attending this
8 event in person or online. Here with me tonight are
9 FDOT representatives and Charlotte County who own and
10 maintain this roadway as well as members of the
11 consultant project team to answer your questions.

12 We would like to thank any elected officials for
13 your attendance and participation in this hearing. We
14 encourage you to sign in with your name and the office
15 you represent for the project record.

16 The purpose of tonight's hearing is to present the
17 proposed design changes and share the engineering and
18 environmental analysis conducted to date. The public
19 hearing also serves as an official forum providing an
20 opportunity for members of the public to express their
21 opinions regarding the design changes. We bring design
22 changes to a public hearing so we can hear your views
23 and comments. We want to hear from people with local
24 knowledge. It is important that you express your views
25 at this stage of the project when the flexibility still

1 exists to incorporate those views into the study
2 documents. Final decisions are made using these
3 documents. This public hearing is using both an
4 in-person and online format.

5 All hearing materials detailing and documenting
6 project analysis and recommendations such as the
7 project video, environmental and engineering documents,
8 and informational graphics have been available to the
9 public online since November 28th, 2023. These
10 materials are also available for viewing at the venue
11 here tonight. Additionally, project reevaluation
12 documents are available for review at the Port
13 Charlotte Public Library, 2280 Aaron Street, Port
14 Charlotte, Florida, 33952, and public -- and Punta
15 Gorda Charlotte Library, 401 Shreve Street, Punta
16 Gorda, Florida, 33950, as well as on the project web
17 page.

18 Tonight we will show a project video which will
19 explain the project in detail. Following the video
20 will be a ten-minute intermission. Finally we will
21 open the formal comment period where you will have the
22 opportunity to provide statements at the microphone or
23 you may provide your comments directly to the court
24 reporter or in writing.

25 Now I will read the following information for the

1 record. This is the public hearing for the Harborview
2 Road Design Project in Charlotte County, Florida,
3 financial project ID number 434965-2-32-01. This
4 public hearing is being conducted by the Florida
5 Department of Transportation with Tallahassee as the
6 approving authority. It is being held at the Punta
7 Gorda Isles Civic Association, 2001 Shreve Street,
8 Punta Gorda, Florida, 33950 on Tuesday, December 5th,
9 2023, at approximately 6:09 p.m.

10 This project is described as a PD&E reevaluation
11 to widen Harborview Road. The limits of the proposed
12 improvements are from Melbourne Street to I75 in
13 Charlotte County.

14 The hearing is being conducted in accordance with
15 all state and federal laws as well as with the
16 Americans with Disabilities Act of 1990 and Title VI of
17 the Civil Rights Act of 1964 and related statutes. It
18 is also being conducted to meet all applicable
19 executive orders. For a listing of these regulations
20 please see the hearing display boards here tonight or
21 on the project web page. If anyone here feels they
22 have been discriminated against, they may complete one
23 of the forms located at the sign-in table and mail the
24 completed form to the address listed on the display
25 board. This information is also available online.

1 At this time we will play the project video.

2 (The project video was started.)

3 MR. SPEAKER: Welcome to the Florida Department of
4 Transportation or FDOT public hearing for the
5 Harborview Road from Melbourne Street to I75 PD&E or
6 Project Development & Environmental Reevaluation in
7 Charlotte County. We appreciate your attendance and
8 participation. This public hearing is being conducted
9 to give the public the opportunity to review and
10 provide comments on the proposed design and associated
11 effects on the social, economic, cultural, natural, and
12 physical environment.

13 FDOT is preparing final design plans for
14 Harborview Road from Melbourne Street and extending 2.3
15 miles to I75 in Charlotte County. FDOT proposes to
16 widen Harborview Road from the existing two-lane
17 undivided roadway to a four-lane divided roadway with
18 the addition of roundabouts at Melbourne Street and
19 Frontage Road. Both Harborview Road and Melbourne
20 Street are under the jurisdiction of Charlotte County.

21 The project is needed to accommodate increased
22 traffic demand including truck traffic generated by
23 projected growth in Charlotte County. The project will
24 also improve safety along the corridor, enhance
25 emergency evacuation, and improve connectivity between

1 US 41 and I75. The project is part of the Charlotte
2 County/Punta Gorda Metropolitan Planning Organization's
3 Long-Range Transportation Plan and Transportation
4 Improvement Program, the Charlotte County Comprehensive
5 Plan, and the State Transportation Improvement Program.

6 FDOT completed the PD&E study for Harborview Road
7 from Melbourne Street to I75 in 2019 with a preferred
8 alternative of a four-lane divided roadway with 11-foot
9 travel lanes bordered by curb and gutter, a raised
10 30-foot grass median, and 7-foot buffered bicycle lanes
11 and 6-foot sidewalks on each side of the roadway. This
12 alternative was approved by the FDOT Office of
13 Environmental Management in October 2019. The design
14 phase for Harborview Road began in 2020 and is ongoing
15 with an anticipated completion date of late 2025.

16 FDOT is conducting a reevaluation of the PD&E
17 study due to changes in the approved concept. Since
18 the approval of the PD&E the typical section was
19 modified and approved with the reduced median width and
20 the addition of shared use paths on both sides of the
21 roadway in lieu of the PD&E approved sidewalk and
22 bicycle lanes on each side. Other design improvements
23 include the flattening of the first road curve near
24 Laverne Street. The roadway profile will also be
25 raised to account for sea level rise. The number and

1 location of stormwater ponds were also refined.

2 Currently Harborview Road is a two-lane undivided
3 facility with ten-and-a-half-foot lanes, one in each
4 direction, and no paved shoulders. The project
5 corridor lacks pedestrian, bicycle, and transit
6 facilities with the exception of small sidewalk
7 segments at the western project limit and at four
8 school bus stops. Stormwater runoff is collected in
9 roadside swales and directed to Charlotte Harbor.
10 There is no existing stormwater management system that
11 treats or attenuates roadway runoff. The posted speed
12 limit within the project limits is primarily 45 miles
13 per hour decreasing to 35 miles per hour through three
14 of the horizontal curves within the project limits. In
15 general existing right-of-way along the project
16 corridor is 80 feet.

17 Let's look at the proposed changes in more detail.
18 The PD&E preferred alternative included a four-lane
19 divided roadway with 11-foot travel lanes. The
20 modified design still includes a four-lane divided
21 highway with 11-foot travel lanes, but the median width
22 has been reduced from 30 feet to 22 feet. The reduced
23 median width will not affect the posted speed of 45
24 miles per hour. Ten-foot-wide shared use paths are
25 proposed on both sides of the roadway in place of the

1 6-foot sidewalks and 7-foot bicycle lanes on both sides
2 as proposed during the PD&E study. The shared use
3 paths were proposed by FDOT and agreed upon by
4 Charlotte County. Separated from the travel lanes the
5 shared use paths offer a safer travel environment for
6 bicyclists.

7 The primary design change in the roadway occurs at
8 the first road curve near Laverne Street. The curve is
9 being flattened from the PD&E recommendation to enhance
10 safety for motorists. The roadway is also being
11 widened to the north in this area to avoid a county
12 conservation easement located east of Rolls Landing.
13 This shift will also improve access to the properties
14 on the south side of the roadway.

15 Additional right-of-way is required throughout the
16 corridor to raise the road profile. This elevation
17 change is needed due to the high water table as well as
18 to account for sea level rise.

19 Some of the proposed stormwater management pond
20 site locations have also changed. The PD&E identified
21 seven pond locations, but only five will be needed.
22 The locations were selected based on combining drainage
23 basins and using remnant parcels resulting from
24 mainline widening impacts. Two sites are the same as
25 PD&E identified pond sites while the other three are

1 revised locations.

2 As a result of these design changes, additional
3 right-of-way width is needed for the roadway mainline.
4 Existing width varies along the corridor but is
5 approximately 80 feet on average. The proposed design
6 requires approximately 53 feet of additional
7 right-of-way resulting in the need for acquisition of
8 approximately 16.4 acres for roadway. Due to the
9 refinement of stormwater pond needs and pond site
10 locations, approximately 5.35 acres is required for the
11 stormwater management design. Overall the design
12 changes result in a combined right-of-way need of 21.75
13 acres. This is an increase from the PD&E phase
14 estimate by 1.25 acres.

15 One of the unavoidable consequences for a project
16 such as this is the necessary relocation of families or
17 businesses. On this project we anticipate the
18 relocation of up to seven residences and one business.
19 These potential relocations were not previously
20 identified during the PD&E study, and the three
21 potential residential relocations that were identified
22 in the PD&E study are no longer needed.

23 Shown here are areas of new right-of-way need.
24 All right-of-way acquisition will be conducted in
25 accordance with Florida Statute Section 339.09 and the

1 Uniform Relocation Assistance and Real Property
2 Acquisition Policies Act of 1970 commonly known as the
3 Uniform Act.

4 If you are required to make any type of move as a
5 result of a Department of Transportation project, you
6 can expect to be treated in a fair and helpful manner
7 and in compliance with the Uniform Relocation
8 Assistance Act. If a move is required, you will be
9 contacted by an appraiser who will inspect your
10 property. We encourage you to be present during the
11 inspection and provide information about the value of
12 your property. You may also be eligible for relocation
13 advisory services and payment benefits.

14 If you are being moved and you are unsatisfied
15 with the Department's determination of your eligibility
16 for payment or the amount of that payment, you may
17 appeal that determination. You will promptly be
18 furnished necessary forms and notified of the
19 procedures to be followed in making that appeal.

20 A special word of caution. If you move before you
21 receive notification of the relocation benefits that
22 you might be entitled to, your benefits may be
23 jeopardized.

24 The relocation specialists who are supervising
25 this program are here tonight. They will be happy to

1 answer your questions and will also furnish you with
2 copies of relocation assistance brochures.

3 The proposed design will not add substantial
4 changes to the social, economic, or environmental
5 impacts that would significantly affect the quality of
6 the human environment. Through the reevaluation the
7 environmental features including archeological and
8 historical resources, protected species and habitat,
9 wetlands and flood plains, stormwater management and
10 permitting, contamination, noise, farm land, and
11 right-of-way requirements and relocations have been
12 reviewed.

13 A cultural resource assessment survey was
14 completed in 2018, and it was concluded that there
15 would be no historic properties affected by the
16 proposed project. The state historic preservation
17 officer concurred with the findings on December 19th,
18 2018.

19 Following the reevaluation of archeological
20 features and historical resources 18 newly identified
21 historic resources were recorded and evaluated. These
22 resources were not found to be eligible for listing in
23 the National Register of Historic Places. As a result
24 a finding of no historic properties affected was made,
25 and the state historic preservation officer concurred

1 with this finding on April 26th, 2023.

2 A noise study report was completed in October
3 2018. Noise abatement measures were evaluated and five
4 locations were found where barriers are potentially
5 feasible and reasonable. The reevaluation found that
6 these locations remain potentially feasible and
7 reasonable with some minor changes. If you'd like more
8 information regarding traffic noise, please speak with
9 one of our noise specialists here tonight. Noise
10 barrier surveys will be sent to the benefited
11 residences to determine their support for or opposition
12 to construction of the barriers.

13 A contamination screening evaluation report was
14 completed in 2018 with identified five potential
15 contamination sites all with a risk rating of no risk
16 for contamination. Results from the design phase
17 contamination screenings identified five additional
18 contamination sites due to proximity of the revised
19 stormwater pond locations. All newly identified sites
20 are considered as no or low risk for potential
21 contamination with one exception. One contamination
22 site which was ranked as medium risk is recommended for
23 testing, and the FDOT project manager and the district
24 contamination impact coordinator will coordinate on
25 further actions that must be taken to address

1 contamination issues. Before construction specially
2 trained crews will address contamination in this area
3 as required.

4 A natural resources evaluation was completed in
5 2019 to assess potential impacts to federal and state
6 listed species. Consultation was initiated with the
7 Florida Fish and Wildlife Conservation Commission, the
8 US Fish and Wildlife Service, and the National Marine
9 Fishery Service. However, it was determined that
10 consultation would be deferred to the design phase
11 since detailed information was not yet available for
12 two federally listed species, specifically the Florida
13 bonneted bat and the smalltooth sawfish. This
14 information has since been obtained. Project effects
15 have been analyzed, and it has been determined that
16 there will be no adverse effects to any listed species.
17 Similarly project effects to critical habitat for the
18 smalltooth sawfish and the West Indian manatee were
19 evaluated, and it was determined that the project will
20 result in no adverse modification or destruction of
21 critical habitat.

22 The FDOT will re-initiate consultation with the
23 federal agencies and will continue to work closely with
24 environmental agencies to meet all environmental
25 permitting requirements. The proposed improvement may

1 directly impact approximately 0.5 acres of wetlands and
2 2 acres of surface water for a total of 2.5 acres of
3 impact. In addition the proposed improvement may
4 directly impact 0.3 acres of essential fish habitat.
5 These impacts are all reductions from the original PD&E
6 estimates. The Department will take all practical
7 measures to minimize harm to these areas and will
8 mitigate wetland impacts resulting from this project's
9 construction to meet requirements of Florida statutes
10 and the United States code.

11 An evaluation matrix showing a detailed comparison
12 of the new design changes and the approved PD&E concept
13 is provided in the project handout and is also on
14 display here this evening. The matrix shows the
15 changes and potential effects to the social, cultural,
16 natural, and physical environments and identifies
17 preliminary estimated costs.

18 At this time FDOT's adopted five-year work program
19 includes funding for the design phase in fiscal year
20 2020 and funding for the right-of-way phase in fiscal
21 year 2024. The construction phase for Harborview Road
22 from Melbourne Street to Date Street is funded in
23 fiscal year 2026. The segment from Date Street to I75
24 does not have construction funded at this time. The
25 Department anticipates completion of this reevaluation

1 by spring 2024.

2 Also on display are boards with roadway typical
3 sections, right-of-way impact exhibits, roadway design
4 exhibits, project location and flood plain maps and
5 information on the Title VI federal and state
6 requirements and how to submit project comments.

7 This public hearing is an opportunity for you to
8 ask questions and offer comments on the design changes
9 and reevaluation. Project representatives are
10 available to provide more detailed information and to
11 address your questions. We encourage you to review
12 project information tonight and provide us your
13 feedback. All comments should be submitted or
14 postmarked by Friday, December 15th, 2023, to become
15 part of the formal hearing record.

16 All hearing materials presented here tonight are
17 available to the public on the project web page and
18 will remain posted for your review. The technical
19 documents are also available for review until Friday,
20 December 15th, 2023, in person at the Port Charlotte
21 Public Library located at 2280 Aaron Street, Port
22 Charlotte, Florida, 33952, Monday, Tuesday, Friday, and
23 Saturday from 10:00 a.m. to 6:00 p.m. and Wednesday and
24 Thursday from 10:00 a.m. to 8:00 p.m. Phone number is
25 (941) 764-5562. And at the Punta Gorda Charlotte

1 Library located at 401 Shreve Street, Punta Gorda,
2 Florida, 33950, Monday and Tuesday from 10:00 a.m. to
3 8:00 p.m. and Wednesday through Saturday from 10:00
4 a.m. to 6:00 p.m. Phone number (941) 833-5460.

5 This project is being conducted and completed
6 according to the requirements of the National
7 Environmental Policy Act and other related federal and
8 state laws, rules, and regulations which will qualify
9 future phases of this project for federal funding. And
10 this hearing was advertised consistent with those
11 requirements. Please see the statute display board for
12 all other applicable requirements. This hearing is
13 also conducted in accordance with the Americans With
14 Disabilities Act of 1990 and with Title VI of the Civil
15 Rights Act of 1964 and related statutes. Anyone who
16 feels he or she has been discriminated against with
17 regard to race, color, national origin, age, sex,
18 religion, disability, or family status may complete one
19 of the forms located at the sign-in table and mail the
20 completed form to the address listed on the
21 posterboard.

22 And, finally, an FDOT safety moment. This is
23 Older Driver Safety Awareness Week connecting Florida's
24 aging road users with safe mobility for life, supports
25 safe driving skills, and helps them achieve mobility

1 independence so they can continue to get around their
2 communities whether they are driving or not. FDOT
3 thanks you for making safety a continued priority.

4 Thank you for your interest and participation in
5 the Harborview Road PD&E reevaluation public hearing
6 and for taking the time to join us this evening.

7 (The video concluded.)

8 MR. SPEESE: In a moment we will have a ten-minute
9 intermission so that you can review the displays, talk
10 with members of the project team, and ask any questions
11 that you may have before we begin the testimony portion
12 of the hearing. If you would like to make a verbal
13 comment here tonight, please fill out a speaker card
14 and give it to anyone with a name tag during the
15 intermission. If you do not wish to speak at the
16 microphone, you may provide your comments in writing or
17 directly to the court reporter to my right here at the
18 comment table. All comments are weighted equally. The
19 time is now 6:27. We will resume at 6:38. Thank
20 you.

21 (An intermission was had from 6:27 p.m. to
22 6:41 p.m.)

23 MR. SPEESE: Can I have your attention, everyone.
24 We're going to get ready for the public formal
25 testimony portion of the proceedings. If you have a

1 speaker card, could you please bring it up to me at
2 this time or I can come get it from you, either one's
3 easier.

4 Ladies and gentlemen, may I have your attention,
5 please. We're going to now begin the public testimony
6 portion of the hearing. We welcome your spoken or
7 written comments that will help us make this important
8 decision.

9 The comment period for this hearing will remain
10 open ten days after this hearing. Anyone wishing to
11 submit written statements or other exhibits in place of
12 or in addition to verbal statements may do so. You
13 have until December 15th, 2023, to postmark or submit
14 comments to become a part of the official hearing
15 transcript. Again, every comment carries equal weight.
16 Please see your handout, the display boards, or the
17 project website for contact and mailing information.

18 We will not be responding to questions or comments
19 at this time. Our focus tonight is recording your
20 verbal comments. However, we will post a summary of
21 the comments received on the project web page
22 approximately 30 days following the close of the
23 comment period. If you would like to have additional
24 discussion regarding the project, you may contact the
25 FDOT project representative, Christopher Speese, at the

1 information enlisted on your handout and on the web
2 page.

3 In-person speakers, please direct all comments
4 clearly into the microphone and toward the hearing
5 moderator at all times. This will ensure that your
6 comments are captured accurately for the project
7 record. Please limit your comment to three minutes. A
8 project staff member is operating a timer with
9 color-coded lights similar to a stoplight. We're going
10 to go with just a green for this time because we're
11 having difficulties with it, but we'll notify you when
12 the three minutes is up. Once again, we are not
13 responding to questions or comments during testimony.

14 We will now call on those who have registered to
15 speak in person. We will start with Laura Fine.

16 MS. FINE: Hi. I'm Laura Fine. I live at Rolls
17 Landing. And I just wanted to make it known that there
18 are several protected federally and state protected
19 species, I believe, that are residents along with the
20 human residents at Rolls Landing. And I want to see a
21 show of hands here for anybody else who sees panthers.
22 Panthers, Florida panthers are protected. Anybody else
23 who sees American bald eagles? American bald eagles
24 are protected. Anyone else see gopher tortoises?
25 Which are protected species.

1 So this tells me that perhaps the
2 environmentalists working with you and other
3 independent sources should look a little further into
4 our animal residents, our protected animal residents,
5 before any construction is even considered. Thank you
6 so much, everyone.

7 MR. SPEESE: Thank you for your comments.

8 MS. SPEAKER: Bobcats, bobcats, bobcats.

9 MS. FINE: We all need to document. We need to
10 write letters and document all of this so that they
11 have it in writing, okay? Very important.

12 MR. SPEESE: Thank you for your comment.

13 MR. SPEAKER: Great job.

14 MS. SPEAKER: Absolutely.

15 MR. SPEESE: Next person, Diana Drake. If you'd
16 please come forward, state your name and address and if
17 you represent an organization, municipality, or other
18 public body.

19 MS. DRAKE: Yes. My name is Diana Drake. And we
20 also have the bats because we have bats in that nest in
21 our tree off of Northshore and Harborview Road. So I
22 don't know if anyone's seen bats, but raise your hand
23 if you have. That's also protected. I don't know how
24 they missed that. Also the noise. They stated a noise
25 survey that was done was medium. Did you do that in

1 2019 or 2018? We're at two lanes now. Adding four
2 lanes, that would be more than a medium for noise
3 decibels. I think they said 62 decibels in 2019. So
4 we'd also like them to look at what we've pointed out
5 with the vacant land that could be taken instead of --
6 for consideration instead of all the homes that they're
7 disrupting. I notice also there are no elected
8 officials here. There were no elected officials in
9 2019, as well. And I encourage everyone to write
10 because this is going to disrupt your lives for years
11 and take your homes and make it unsafe to live off of
12 Harborview Road.

13 MS. FINE: A lower quality of life, as well.

14 MS. DRAKE: The lower quality of life, the
15 animals, the runoff, the rain. We've talked with the
16 studies about the water and the runoff where they have
17 it all situated, the ponds and the extra culverts.
18 Well, we've all experienced Ian with 11 hours of rain,
19 and that is considered an act of God which they can do
20 nothing about. So I encourage everyone to write in and
21 make their comments known to protect our quality of
22 life and our homes. Thank you.

23 MR. SPEESE: Thank you for your comment. Is there
24 anyone else attending in person who has not spoken who
25 would like to speak?

1 MS. FINE: I have a question. How do we know for
2 sure that this will all be entered into the record?

3 MS. DORNING: So we have a process here with FDOT
4 with the public hearing, and all this tonight is
5 actually being recorded with a court reporter. And so
6 all of your verbal comments as well as all of your
7 written comments, all the written comments become a
8 part of the project record, and any comments that you
9 email, they're all weighted equally. So it's very
10 important, like you said, to please make your comments
11 and to provide your input.

12 MS. FINE: And why is it that there are no elected
13 officials here at this meeting?

14 MR. SPEAKER: Because they're crooks.

15 MR. SPEESE: Is there anyone else that would like
16 to make a comment at this time? Okay. Seeing none.

17 MS. FINE: I have a question.

18 MR. ROSE: We usually hold for questions until
19 afterwards, ma'am.

20 MS. DORNING: If you have more questions, we can
21 take them after the formal testimony. There may be
22 people online who are waiting to do their verbal
23 testimony portion.

24 MR. SPEESE: So we will move to our speakers
25 joining us online. Is there anyone online that would

1 like to provide a comment at this time?

2 MS. JARVIS: Is there anyone online attending that
3 has not spoken but would like to speak? We currently
4 don't see anything.

5 Okay. We will now return to our in-person
6 moderator to close out the hearing. There were no more
7 -- there were no comments online.

8 MR. SPEESE: Thank you. Once again written
9 statements and exhibits in place of or in addition to
10 verbal statements will be accepted and recorded as part
11 of this hearing if postmarked or sent by ten days after
12 this hearing on December 15th, 2023.

13 After the comment period closes, the project team
14 will compile all comments and, together with the
15 engineering and environmental work that has been done,
16 make a final recommendation that will be submitted to
17 the FDOT Office of Environmental Management for
18 approval. We will publish the approval of the
19 preferred alternative in the Daily Sun and post the
20 approval on the project website.

21 The verbatim transcript of this hearing's
22 proceedings together with all the written statements or
23 exhibits received and all studies, displays, and
24 informational material presented with this hearing will
25 be made part of the project decision making process and

1 will be available for public review upon request at the
2 FDOT District 1 Southwest Area Office, 10041 Daniels
3 Parkway, Fort Myers, Florida, 33913.

4 Thank you for attending this public hearing and
5 for providing your input into this project. It is now
6 6:52. I hereby officially close the public hearing for
7 Harborview Road from Melbourne Street to I75 in
8 Charlotte County, Florida. Thank you again, and have a
9 good evening.

10 (Thereupon, the proceedings were concluded at 6:52
11 p.m.)

12 -----

13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATE OF REPORTER

STATE OF FLORIDA)

COUNTY OF CHARLOTTE)

I, Dawn M. Roush, Florida Professional Reporter, do hereby certify that I was authorized to and did report the foregoing proceedings, and that the transcript, pages 1 through 25 inclusive, is a true and correct record of my stenographic notes.

I further certify that I am not a relative, employee, attorney, or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in this action.

Dated this 14th day of December, 2023.



Dawn M. Roush
Dawn M. Roush, FPR

1	anyone's 20:22	D	24:9	I
1 24:2	approval 23:18,20	Daily 23:19	exhibits 23:9,23	I75 24:7
10041 24:2	Area 24:2	Daniels 24:2	experienced 21:18	lan 21:18
11 21:18	attending 21:24 23:2 24:4	days 23:11	extra 21:17	important 20:11 22:10
15th 23:12	B	December 23:12	F	in-person 23:5
2	bats 20:20,22	decibels 21:3	FDOT 22:3 23:17 24:2	independent 20:3
2018 21:1	bobcats 20:8	decision 23:25	final 23:16	informational 23:24
2019 21:1,3,9	body 20:18	Diana 20:15,19	FINE 20:9 21:13 22:1, 12,17	input 22:11 24:5
2023 23:12	C	displays 23:23	Florida 24:3,8	J
3	Charlotte 24:8	disrupt 21:10	formal 22:21	JARVIS 23:2
33913 24:3	close 23:6 24:6	disrupting 21:7	Fort 24:3	job 20:13
6	closes 23:13	District 24:2	forward 20:16	joining 22:25
62 21:3	comment 20:12 21:23 22:16 23:1,13	document 20:9,10	G	L
6:52 24:6,10	comments 20:7 21:21 22:6,7, 8,10 23:7,14	DORNING 22:3,20	God 21:19	land 21:5
A	compile 23:14	Drake 20:15,19 21:14	good 24:9	lanes 21:1,2
Absolutely 20:14	concluded 24:10	E	Great 20:13	letters 20:10
accepted 23:10	consideration 21:6	elected 21:7,8 22:12	H	life 21:13,14,22
act 21:19	considered 20:5 21:19	email 22:9	hand 20:22	live 21:11
Adding 21:1	construction 20:5	encourage 21:9,20	Harborview 20:21 21:12 24:7	lives 21:10
addition 23:9	County 24:8	engineering 23:15	hearing 22:4 23:6,11,12,24 24:4,6	lower 21:13,14
address 20:16	court 22:5	entered 22:2	hearing's 23:21	M
alternative 23:19	crooks 22:14	environmental 23:15,17	hold 22:18	made 23:25
animal 20:4	culverts 21:17	environmentalists 20:2	homes 21:6,11,22	make 21:11,21 22:10,16 23:16
animals 21:15		equally 22:9	hours 21:18	making 23:25
		evening		

Management 23:17	part 22:8 23:10,25	questions 22:18,20	20:7,12,15 21:23 22:15,24 23:8	verbal 22:6,22 23:10
material 23:24	people 22:22	<hr/> R <hr/>	spoken 21:24 23:3	verbatim 23:21
medium 20:25 21:2	period 23:13	rain 21:15,18	state 20:16	<hr/> W <hr/>
meeting 22:13	person 20:15 21:24	raise 20:22	stated 20:24	waiting 22:22
Melbourne 24:7	place 23:9	received 23:23	statements 23:9,10,22	water 21:16
missed 20:24	pointed 21:4	recommendation 23:16	Street 24:7	website 23:20
moderator 23:6	ponds 21:17	record 22:2,8	studies 21:16 23:23	weighted 22:9
move 22:24	portion 22:23	recorded 22:5 23:10	submitted 23:16	work 23:15
municipality 20:17	post 23:19	reporter 22:5	Sun 23:19	working 20:2
Myers 24:3	postmarked 23:11	represent 20:17	survey 20:25	write 20:10 21:9,20
<hr/> N <hr/>	preferred 23:19	request 24:1	<hr/> T <hr/>	writing 20:11
nest 20:20	presented 23:24	residents 20:4	talked 21:15	written 22:7 23:8,22
noise 20:24 21:2	proceedings 23:22 24:10	return 23:5	team 23:13	<hr/> Y <hr/>
Northshore 20:21	process 22:3 23:25	review 24:1	tells 20:1	years 21:10
notice 21:7	project 22:8 23:13,20,25 24:5	Road 20:21 21:12 24:7	ten 23:11	
<hr/> O <hr/>	protect 21:21	ROSE 22:18	testimony 22:21,23	
Office 23:17 24:2	protected 20:4,23	runoff 21:15,16	time 22:16 23:1	
officially 24:6	provide 22:11 23:1	<hr/> S <hr/>	tonight 22:4	
officials 21:8 22:13	providing 24:5	situated 21:17	transcript 23:21	
online 22:22,25 23:2,7	public 20:18 22:4 24:1,4, 6	sources 20:3	tree 20:21	
organization 20:17	publish 23:18	Southwest 24:2	<hr/> U <hr/>	
<hr/> P <hr/>	<hr/> Q <hr/>	speak 21:25 23:3	unsafe 21:11	
p.m. 24:11	quality 21:13,14,21	SPEAKER 20:8,13,14 22:14	<hr/> V <hr/>	
Parkway 24:3	question 22:1,17	speakers 22:24	vacant 21:5	
		SPEESE		



2045 Long Range Transportation Plan: The Route to 2045

Adopted October 5, 2020



Charlotte County-Punta Gorda
Metropolitan Planning Organization





Table 6-1: Summary of Traffic Crashes from 2014-2018	6-8
Table 6-2: Cost Feasible Congestion Management Projects	6-17
Table 7-1: Roadway Needs List (\$ Millions, 2019 Present Day Cost)	7-6
Table 7-2: Transit Needs Projects and Costs	7-13
Table 7-3: Bicycle Pedestrian Master Plan	7-16
Table 8-1: Cost Feasible Plan Summary (2021 – 2045)	8-1
Table 8-2: Prioritization Criteria and LRTP Goals	8-2
Table 8-3: Revenue Projection Summary – Year-of-Expenditure Revenues (\$ millions)	8-4
Table 8-4: Inflation Factors	8-5
Table 8-5: Roadway Cost Table	8-6
Table 8-6: Roadway Cost Feasible Projects List (\$ Millions Future Year of Expenditure)	8-8
Table 8-7: Cost Feasible Transit Projects (\$ Millions Future Year of Expenditure)	8-12
Table 8-8: Bicycle/Pedestrian Master Plan Projects	8-14
Table 9-1: Summary of Goal 1 Performance Measures	9-3
Table 9-2: Summary of Goal 2 Performance Measures	9-3
Table 9-3: Summary of Goal 3 Performance Measures	9-3
Table 9-4: Summary of Goal 4 Performance Measures	9-4
Table 9-5: Summary of Goal 5 Performance Measures	9-4

Supplemental Technical Reports

2045 LRTP Public Participation Plan

Technical Report 1: Goals and Objectives

Technical Report 2: Public Participation Summary

Technical Report 3: SE Data Review and 2045 Forecast

Technical Report 4: Financial Resources

Technical Report 5: Sociocultural and Environmental Justice

Technical Report 6: Needs and Cost Feasible Plan Development



Table 8-6: Roadway Cost Feasible Projects List (\$ Millions Future Year of Expenditure)

Map ID	Facility	From	To	Existing Lanes	Project Description	LRTP Funding Source	2021 – 2025 (YOE)			2026-2030 (YOE)			2031-2035 (YOE)			2036-2045 (YOE)		
							PD&E / PE	ROW	CST	PD&E / PE	ROW	CST	PD&E / PE	ROW	CST	PD&E / PE	ROW	CST
1	Airport Road	Taylor Rd	Piper Road	2	Widen 2 to 4 lanes	Local						\$5.80	\$7.43					
4	Burnt Store Rd	Zemel Rd	Scham Rd	2	Widen 2 to 4 lanes	TIP												
5	Burnt Store Rd	N Jones Loop	Taylor Rd	2	Widen 2 to 4 lanes	Local									\$2.75	\$2.45	\$21.30	
6	Burnt Store Rd Extension	Taylor Rd	Florida St @ US 17	0	New 4-lane	Local									\$12.53			
7	Edgewater Dr (Phase 3)	Midway Blvd	Collingswood Blvd	2	Widen 2 to 4 lanes	TRIP / Local				\$31.40								
8	Edgewater Dr (Phase 4)	Collingswood Blvd	Samantha Ave	0	Roadway realignment and new bridge	Local	\$2.10		\$23.00									
9	Edgewater Dr / Flamingo (Phase 5)	Collingswood Blvd	SR 776	2	Widen 2 to 4 lanes	Local	\$1.00			\$25.12								
10	Flamingo Blvd	SR 776	US 41	2	Widen 2 to 4 lanes	Local						\$3.21	\$5.33	\$17.92				
12	Hillsborough Blvd / Raintree Blvd	Veterans Blvd		0	New 2-lane	Local						\$0.45	\$1.40	\$2.53				
21	N Jones Loop	Burnt Store Rd	Piper Road	4	Widen 4 to 6 lanes	State	\$1.22					\$4.48				\$5.27		
23	Prineville Dr	Paulson Dr	Hillsborough Blvd	2	Widen 2 to 4 lanes	TRIP / Local									\$9.07	\$15.64	\$52.59	
30	SR 776	CR 775	Spinnaker Blvd	4	Widen 4 to 6 lanes	State	\$2.00			\$6.49	\$6.13			\$57.38				
31a	SR 776 Future Corridor Study	Pine Street / Placida Rd	US 41		Future Corridor Study	State				\$6.48	\$20.28		\$2.57			\$9.98	\$67.38	
(Funding for up to 8 intersection locations) Potential Candidate Intersections: Sunnybrook Blvd, Oceanspray Blvd, David Blvd, Coliseum Blvd, San Casa Dr, Winchester Blvd, Hollis Ave, Biscayne Dr.)																		
34	SR 31	Lee County Line Cypress Parkway	Cypress Parkway Lake Babcock Dr.	2	Widen 2 to 6 lanes	Developer				\$2.56	\$7.18	\$28.99						
36	Taylor Rd	US 41	Jones Loop Rd	2	Widen 2 to 4 lanes	Local						\$5.37	\$8.90	\$29.93				
37	Taylor Rd	N Jones Loop Rd	Airport Rd	2	Widen 2 to 4 lanes	Local									\$7.42	\$12.80	\$43.03	
38	Taylor Rd	Airport Rd	US 41	2	Complete Streets	Local									\$3.22	\$4.23	\$18.66	
39a	Toledo Blade Blvd (CR 39)	SR 776	Whitney Avenue	2	Widen 2 to 4 lanes	Developer				\$7.62								
43	US 17	Copley Ave	CR 74	4	Widen 4 to 6 lanes	SIS						\$1.05		\$2.00				
51	Harbor View Road	Melbourne St	I-75	2	Widen 2 to 4 lanes	Federal / Local	\$4.02	\$9.79		\$31.60								
54 / 55	Marion Avenue / Olympia Avenue	US 41	Marlympia Way	3	Lane Repurposing - resurface and striping	State	\$0.29			\$1.42	\$9.32							
59	US 41 Corridor Vision Plan			4/6	Corridor & Safety Improvements	State				\$5.95	\$6.28						\$18.55	
60	SR 31	@ CR 74		2	Roundabout	State		\$0.64			\$0.89							
61	SR 776	@ Flamingo Blvd		4	Intersection - turn lanes	TIP			\$1.46									
62	US 41	@ Easy Street		4	Intersection - turn lanes	State									\$1.09		\$8.44	
63	US 41	@ Forrest Nelson		4	Intersection - turn lanes	State									\$1.09		\$8.44	
64	SR 776	@ Jacobs St		4	Intersection - turn lanes	State									\$1.09		\$8.44	

CHARLOTTE COUNTY-PUNTA GORDA METROPOLITAN PLANNING ORGANIZATION

TRANSPORTATION IMPROVEMENT PROGRAM FISCAL YEARS 2022/2023 - 2026/2027



ADOPTION MAY 16, 2022

The preparation of this document has been financed in part through a grant from The U.S. Department of Transportation (Federal Highway Administration)

In cooperation with

The Florida Department of Transportation,

The City of Punta Gorda Public Works Department; and Charlotte County Public Works Division
The Charlotte County Budget Office, Community Development Department, Transit Department and the
Charlotte County Airport Authority



Charlotte County - Punta Gorda MPO FY 2023/24 - FY 2027/28 Transportation Improvement Program (TIP) AMENDMENTS

436928-3

Burnt Store From Lee/Charlotte County Line to Wallaby Lane

Project Description:

Burnt Store From Lee/Charlotte County Line to Wallaby Lane

Prior Years Cost: N/A

Future Years Cost: N/A

Total Project Cost: N/A

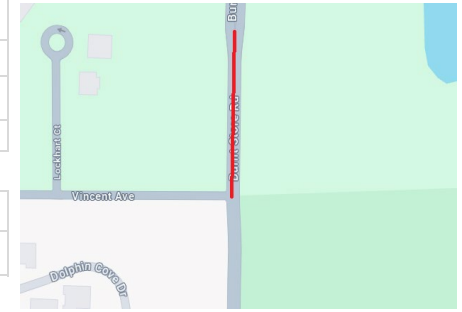
Work Summary: Adding new Segment

Lead Agency: FDOT

Length: 0.189

2045 LRTP 2045 CFP Page 8-9

Phase	Fund	< 2024	2024	2025	2026	2027	>2028	All Years
PD&E	SA - STP		\$150,000.00		\$0.00	\$0.00	\$0.00	\$150,000.00
Total			\$150,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$150,000.00



Adopted 05/16/2023
Amendment #1- March 21, 2024

434965-5

Harborview Rd from Melbourne St to I-75

Project Description:

Harborview Rd from Melbourne St to I-75

Prior Years Cost: N/A

Future Years Cost: N/A

Total Project Cost: N/A

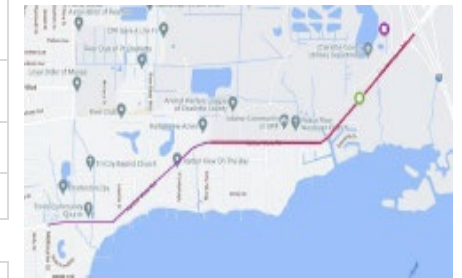
Work Summary: Add lanes and reconstruct

Lead Agency: Charlotte County

Length: 3.26

2045 LRTP 2045 CFP Page 8-9

Phase	Fund	< 2024	2024	2025	2026	2027	>2028	All Years
ROW	ACCM		\$1,985,585.00		\$0.00	\$0.00	\$0.00	\$1,985,585.00
	CM		\$362,056.00					\$362,056.00
	LF		\$11,326,000.00					\$11,326,000.00
	SA-STP		\$6,336,359.00					\$6,336,359.00
Total			\$20,010,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,010,000.00



Adopted 05/16/2023
Amendment #1- March 21, 2024

The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code.

The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

Transportation Improvement Program Amendment

FY2023/24 - 2027 /28

** This STIP is in an MPO Area **

STIP Amendment Number:

TIP Page Number: Attached

On **Thursday, March 21, 2024**, the **Charlotte Co Punta Gorda MPO** Metropolitan Planning Organization amended the Transportation Improvement Program that was developed and adopted in compliance with Title 23 and Title 49 in a continuing, cooperative and comprehensive transportation planning process as a condition to the receipt of federal assistance. By signature below, the MPO representative certifies that the TIP amendment was adopted by the MPO Board as documented in the supporting attachments. **This amendment will be subsequently incorporated into the MPOs TIP for public disclosure.**

The amendment does not adversely impact the air quality conformity or financial constraints of the STIP.

The STIP Amendment is consistent with the Adopted Long Range Transportation Plan. (Page Number:2-10)

This document was electronically signed
4/3/2024
D'Juan Harris
Charlotte Co Punta Gorda MPO

Metropolitan Planning Organization Chairman or Designee
[Charlotte Co Punta Gorda MPO](#)

This document was electronically signed
4/3/2024
Pamela Barr
FI DOT

FDOT District Representative or Designee District 01

This document has not been approved

Federal Aid Management Manager or Designee

This document has not been approved

Federal Authorization

STIP amendment criteria:

F - The change results in a cost increase that is greater than 20% AND greater than \$2 million.

An air conformity determination must be made by the MPO on amended projects within the non-attainment or maintenance areas

E - The MPO is not in an air quality non-attainment or maintenance area.

This project is not subject to the requirements of 23 CFR 667, where repair and reconstruction was required from two or more permanent emergency events at this location.

Project Name 434965-5 HARBORVIEW ROAD FROM MELBOURNE ST TO I-75

Status	ITEM	Ver	Description	< FY 2024	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	> FY 2028	All Years
Original STIP	434965 5	AD	HARBORVIEW ROAD FROM MELBOURNE ST TO I-75 MANAGED BY CHARLOTTE COUNTY BOCC								
	ACSA	ROW		0	333,733	0	0	0	0	0	333,733
	CM	ROW		0	1,661,904	0	0	0	0	0	1,661,904
	LF	ROW		0	3,750,000	0	0	0	0	0	3,750,000
	SA	ROW		0	5,688,363	0	0	0	0	0	5,688,363
	SM	ROW		0	1,544,000	0	0	0	0	0	1,544,000
Proposed Project	434965 5	G1	HARBORVIEW ROAD FROM MELBOURNE ST TO I-75 MANAGED BY CHARLOTTE COUNTY BOCC								
	ACCM	ROW		0	1,985,585	0	0	0	0	0	1,985,585
	CM	ROW		0	362,056	0	0	0	0	0	362,056
	LF	ROW		0	11,326,000	0	0	0	0	0	11,326,000
	SA	ROW		0	6,336,359	0	0	0	0	0	6,336,359
Funding Source After Change	443390 1	AD	DISTRICTWIDE CONSTRUCTION CONTINGENCY MANAGED BY FDOT								
	ACSA	CST		0	1,785,017	0	0	0	0	0	1,785,017
	CM	CST		0	0	0	742,486	0	2,199,801	0	2,942,287
	LFB	CST		0	38,815,952	3,035,485	0	0	0	0	41,851,437
	SA	CST		0	19,065	586,337	0	0	0	0	605,402

Funding Source Balance Before Change		47,652,034	3,621,822	742,486		2,199,801		54,216,143
Funding Source Balance After Change		40,620,034	3,621,822	742,486		2,199,801		47,184,143
Net Change to Funding Source		-7,032,000						-7,032,000
Proposed Project Before Change		12,978,000						12,978,000
Proposed Project After Change		20,010,000						20,010,000
Net Change to Project		7,032,000						7,032,000
Net Change to Funding Source		-7,032,000						-7,032,000
Net Change to Proposed Project		7,032,000						7,032,000
Net Change to STIP								






Notes:

STIP Added on: **2/19/2024**; By: **Pamela Barr**; Of: **FI DOT**

STIP Updated on: **3/28/2024**; By: **Dasha Kosheleva**; Of: **FI DOT**

STIP set to Ready to Process: **3/28/2024**; By: **Dasha Kosheleva**; Of: **FI DOT**

NOTE: ** 5 Attached documents found **

-  [434965-5_LRTP.pdf](#) (Size: 197 Kbytes) |
  [434965-5_AGN.pdf](#) (Size: 499 Kbytes) |
  [434965-5_STIP_ORG.pdf](#) (Size: 56 Kbytes) |
  [434965-5_TIP_AMD.pdf](#) (Size: 90 Kbytes)
-  [434965-5_TIP_ORG.pdf](#) (Size: 240 Kbytes) |



Florida Department of

TRANSPORTATION

[E-Updates](#) | [FL511](#) | [Site Map](#) | [Translate](#)



- [Home](#)
- [About FDOT](#)
- [Contact Us](#)
- [Maps & Data](#)
- [Offices](#)
- [Performance](#)
- [Projects](#)

Web Application

Federal Aid Management David Williams - Manager

STIP Project Detail and Summaries Online Report

**** Repayment Phases are not included in the Totals ****

Selection Criteria	
Current STIP Financial Project: 434965 As Of: 4/5/2024	Detail Related Items Shown

HIGHWAYS							
Item Number: 434965 1		Project Description: HARBORVIEW ROAD FROM MELBOURNE ST TO I-75					
District: 01	County: CHARLOTTE	Type of Work: PD&E/EMO STUDY			Project Length: 0.135MI		
		Fiscal Year					
Phase / Responsible Agency	<2024	2024	2025	2026	2027	>2027	All Years
P D & E / MANAGED BY FDOT							
Fund Code: ACCM-ADVANCE CONSTRUCTION (CM)		3,672					3,672
CM-CONGESTION MITIGATION - AQ	812,732	730					813,462
Phase: P D & E Totals	812,732	4,402					817,134
Item: 434965 1 Totals	812,732	4,402					817,134
Item Number: 434965 2		Project Description: HARBORVIEW ROAD FROM MELBOURNE ST TO I-75					
District: 01	County: CHARLOTTE	Type of Work: ADD LANES & RECONSTRUCT			Project Length: 2.445MI		
		Fiscal Year					
Phase / Responsible Agency	<2024	2024	2025	2026	2027	>2027	All Years
PRELIMINARY ENGINEERING / MANAGED BY FDOT							
Fund Code: CM-CONGESTION MITIGATION - AQ	73,036						73,036

	GFSL-GF STPBG <200K<5K (SMALL URB)	2,385,986						2,385,986
	LF-LOCAL FUNDS	617,713						617,713
	SA-STP, ANY AREA	86,246						86,246
	SL-STP, AREAS <= 200K	2,083,089	775,222					2,858,311
	Phase: PRELIMINARY ENGINEERING Totals	5,246,070	775,222					6,021,292
ENVIRONMENTAL / MANAGED BY FDOT								
Fund Code:	TALT-TRANSPORTATION							
	ALTS- ANY AREA		10,000					10,000
	Item: 434965 2 Totals	5,246,070	785,222					6,031,292
Item Number: 434965 3 Project Description: HARBORVIEW ROAD FROM MELBOURNE ST TO DATE ST								
District: 01 County: CHARLOTTE Type of Work: ADD LANES & RECONSTRUCT Project Length: 1.091MI								
Fiscal Year								
Phase / Responsible Agency		<2024	2024	2025	2026	2027	>2027	All Years
RAILROAD & UTILITIES / MANAGED BY FDOT								
Fund Code:	LF-LOCAL FUNDS				10,800,000			10,800,000
CONSTRUCTION / MANAGED BY FDOT								
Fund Code:	CM-CONGESTION MITIGATION - AQ				128,979			128,979
	LF-LOCAL FUNDS				9,685,807			9,685,807
	SA-STP, ANY AREA				11,520,647			11,520,647
	SL-STP, AREAS <= 200K				5,061,916			5,061,916
	SM-STBG AREA POP. W/ 5K TO 49,999				2,628,830			2,628,830
	Phase: CONSTRUCTION Totals				29,026,179			29,026,179
	Item: 434965 3 Totals				39,826,179			39,826,179
Item Number: 434965 5 Project Description: HARBORVIEW ROAD FROM MELBOURNE ST TO I-75								
District: 01 County: CHARLOTTE Type of Work: ADD LANES & RECONSTRUCT Project Length: 3.246MI								
Fiscal Year								
Phase / Responsible Agency		<2024	2024	2025	2026	2027	>2027	All Years
RIGHT OF WAY / MANAGED BY CHARLOTTE COUNTY BOCC								
Fund Code:	ACCM-ADVANCE CONSTRUCTION (CM)		1,985,585					1,985,585
	CM-CONGESTION MITIGATION - AQ		362,056					362,056
	LF-LOCAL FUNDS		11,326,000					11,326,000
	SA-STP, ANY AREA		6,336,359					6,336,359
	Phase: RIGHT OF WAY Totals		20,010,000					20,010,000
	Item: 434965 5 Totals		20,010,000					20,010,000
	Project Totals	6,058,802	20,799,624		39,826,179			66,684,605
	Grand Total	6,058,802	20,799,624		39,826,179			66,684,605

This site is maintained by the Office of Work Program and Budget, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 32399.

For additional information please e-mail questions or comments to:
Federal Aid Management

David Williams: David.Williams@dot.state.fl.us Or call 850-414-4449

Or

Denise Strickland: Denise.Strickland@dot.state.fl.us Or call 850-414-4491

[Reload STIP Selection Page](#)

Office Home: [Office of Work Program](#)

-
-
-
-
-
-

[Contact Us](#)
[Employment](#)
[MyFlorida.com](#)
[Performance](#)
[Statement of Agency](#)
[Web Policies & Notices](#)



© 1996-2019 Florida Department of Transportation

Florida Department of Transportation

Consistent, Predictable, Repeatable

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

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 10/9/23	4. Sheet 1 of 3
1. Name of Project Harborview Rd from Melbourne St. to I-75		5. Federal Agency Involved FDOT District One	
2. Type of Project Design (with prior PD&E) FPID 434965-2-32-01		6. County and State Charlotte County, Florida	
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 10/11/23	2. Person Completing Form Isabelle Giuliani
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated 13,716	Average Farm Size 765
5. Major Crop(s) citrus	6. Farmable Land in Government Jurisdiction Acres: 32,163 % 7.25	7. Amount of Farmland As Defined in FPPA Acres: 25,706 % 0.05	
8. Name Of Land Evaluation System Used none	9. Name of Local Site Assessment System soil potential rating	10. Date Land Evaluation Returned by NRCS 10/11/23	

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment _____			
	Design Alt			
A. Total Acres To Be Converted Directly	0.69			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0			
C. Total Acres In Corridor	51.62			

PART IV (To be completed by NRCS) Land Evaluation Information	
A. Total Acres Prime And Unique Farmland	0.7
B. Total Acres Statewide And Local Important Farmland	0
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.00218
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	21.4

PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)	41.1
--	-------------

PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))	Maximum Points			
1. Area in Nonurban Use	15	1		
2. Perimeter in Nonurban Use	10	4		
3. Percent Of Corridor Being Farmed	20	0		
4. Protection Provided By State And Local Government	20	0		
5. Size of Present Farm Unit Compared To Average	10	0		
6. Creation Of Nonfarmable Farmland	25	0		
7. Availability Of Farm Support Services	5	3		
8. On-Farm Investments	20	0		
9. Effects Of Conversion On Farm Support Services	25	0		
10. Compatibility With Existing Agricultural Use	10	0		
TOTAL CORRIDOR ASSESSMENT POINTS	160	8	0	0

PART VII (To be completed by Federal Agency)				
Relative Value Of Farmland (From Part V)	100	41.1	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	8	0	0
TOTAL POINTS (Total of above 2 lines)	260	49.1	0	0

1. Corridor Selected: Design Alt	2. Total Acres of Farmlands to be Converted by Project: 0.69	3. Date Of Selection: 12/30/22	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
--	--	--	---

5. Reason For Selection:
A PD&E Study (FPID 434965-1-22-01) was previously completed and a Preferred Alternative was selected. NRCS coordination occurred at that time. Since then, there have been design changes to the typical section and the tie-down slopes, resulting in a change in the project footprint.

Signature of Person Completing this Part: Dara Jarvis DATE **10/11/23**

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

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

- More than 90 percent - 15 points
- 90 to 20 percent - 14 to 1 point(s)
- Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

- More than 90 percent - 10 points
- 90 to 20 percent - 9 to 1 point(s)
- Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

- More than 90 percent - 20 points
- 90 to 20 percent - 19 to 1 point(s)
- Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

- Site is protected - 20 points
- Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)

- As large or larger - 10 points
- Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

- Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
- Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
- Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

- All required services are available - 5 points
- Some required services are available - 4 to 1 point(s)
- No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

- High amount of on-farm investment - 20 points
- Moderate amount of on-farm investment - 19 to 1 point(s)
- No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

- Substantial reduction in demand for support services if the site is converted - 25 points
- Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
- No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

- Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
 - Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
 - Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points
-



Farmland Impacts Map

FPID No. 434965-2-32-01
 Harborview Road from Melbourne Street to I-75
 Charlotte County

Image Source: ESRI
 Image Date: 2020





Florida Department of Transportation

RON DESANTIS
GOVERNOR

801 North Broadway Avenue
Bartow, FL 33830

JARED W. PERDUE, P.E.
SECRETARY

October 27, 2022

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: Transportation Compliance Review Program

**RE: Cultural Resource Assessment Survey Addendum
Proposed Pond Sites
Harborview Road (CR 776) PD&E Study
From Melbourne Street to I-75
Charlotte County, Florida
FPID No.: 434965-2-52-01**

Dear Ms. Lotane:

The Florida Department of Transportation (FDOT), District One, is conducting a Project Development and Environment (PD&E) Study to evaluate the proposed widening, from two-lanes to four-lanes of Harborview Road (CR 776) from Melbourne Street to I-75 in Charlotte County (**Figure 1**). In 2018, ACI submitted a Cultural Resource Assessment Survey (CRAS) of Harborview Road and a Technical Memorandum for proposed pond sites, between Melbourne Street between I-75 (Survey Nos. 25342, 25344). The State Historic Preservation Officer (SHPO) concurred with the survey findings that resulted in no historic properties affected (SHPO File No. 2017-2462). The focus of this study was four proposed pond sites that will be part of the proposed road widening. The study was conducted to meet the requirements of the National Environmental Policy Act (NEPA) and other related federal and state laws, rules, and regulations and is part of on-going improvements to the Burnt Store Road PD&E study.

The archaeological APE is defined as the area contained within the footprint of each proposed pond site, and the historical/architectural APE includes the archaeological APE and a 100-foot buffer.

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 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 and a review of the Florida Master Site File (FMSF) and the NRHP indicated that no previously recorded historic or prehistoric archaeological sites were identified within any of the proposed pond sites. However, two previously recorded sites, 8CH00502 and 8CH00499, were recorded within a mile of the APE. 8CH00502 is a prehistoric midden located along the north shore of the Peace River about 1200 feet (ft) south of the APE. Similarly, 8CH00499, the Northside Midden, is recorded about 800 ft south of the western terminus of the project APE. A review of relevant site locational information for environmentally similar areas within Charlotte County and the surrounding region indicated areas of moderate to low potential for the occurrence of prehistoric sites within the APE. As a result of the field survey, no archaeological sites were identified within the APE.

The historical/architectural background research included a review of the previous Harborview Road CRAS and pond memo, the Florida Master Site File (FMSF), and the NRHP. The research indicated that no historic resources had been previously recorded within the proposed pond sites; however, four previously recorded historic resources (8CH01338, 8CH02053, 8CH02741, and 8CH02742) had been previously recorded adjacent to the four proposed pond sites within the APE. This includes three buildings (8CH01338, 8CH02741, and 8CH02742) located adjacent to proposed Pond 1-2B and the historic linear resource, Harborview Road (8CH02053), located adjacent to proposed pond sites 1-2B, 3C, 4B, and 5C. These four resources were determined ineligible for listing in the NRHP in 2018 during the CRAS of Harborview Road and a survey for proposed pond sites between Melbourne Street between I-75 (Survey Nos. 25342, 25344). A review of relevant historic United States Geological Survey (USGS) quadrangle maps, historic aerial photographs, and the Charlotte County property appraiser's website data revealed the potential for no new historic resources 46 years of age or older (constructed in 1976 or earlier) within the APE (Polk 2022). This was confirmed during the field reconnaissance survey. The four previously recorded historic resources were not updated since no significant changes were observed during the field survey.

The CRAS Addendum is provided for your review and comment. If you have any questions, please do not hesitate to call me at (863) 519-2515 or email me at lauren.peters@dot.state.fl.us.

DocuSigned by:

50252A479EEF47F...

Lauren Peters
Environmental Project Manager
Florida Department of Transportation, District One

Enclosures: One original copy of the CRAS Report (October 2022), One Completed Survey Log

CC: Jay Winter, Scaler, Inc.
Maranda Kles, ACI

The Florida State Historic Preservation Officer (SHPO) finds the attached Cultural Resources Assessment Survey Report complete and sufficient and concurs/ does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 202207311. Or the SHPO finds the attached document contains insufficient information.

SHPO Comments:

Kelly L.
Chase

Digitally signed by Kelly L. Chase
DN: cn=Kelly L. Chase, o=DHR,
ou=DSHPO,
email=kelly.chase@dos.myflorida.
com, c=US
Date: 2022.11.18 15:53:08 -0500

Ms. Alissa S. Lotane, Director
State Historic Preservation Officer
Florida Division of Historical Resources

11/18/2022

Date



Florida Department of Transportation

RON DESANTIS
GOVERNOR

801 North Broadway Avenue
Bartow, FL 33830

JARED W. PERDUE, P.E.
SECRETARY

April 6, 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: Transportation Compliance Review Program

**RE: Cultural Resource Assessment Survey Addendum
Harborview Road (CR 776) PD&E Study
From Melbourne Street to I-75
Charlotte County, Florida
FPID No.: 434965-2-52-01**

Dear Ms. Lotane:

The Florida Department of Transportation (FDOT), District One, is conducting a Project Development and Environment (PD&E) Study to evaluate the proposed widening, from two-lanes to four-lanes of Harborview Road (CR 776) from Melbourne Street to I-75 in Charlotte County. In 2018, ACI submitted a Cultural Resource Assessment Survey (CRAS) of Harborview Road and a Technical Memorandum for proposed pond sites, between Melbourne Street between I-75 (Survey Nos. 25342, 25344). The State Historic Preservation Officer (SHPO) concurred with the survey findings that resulted in no historic properties affected (SHPO File No. 2017-2462). In 2022, ACI submitted a CRAS addendum of four proposed pond sites that were selected following the pond siting analysis. The addendum resulted in the discovery of no pre-Contact or historic archaeological sites. No historic resources were identified within any of the proposed pond sites; however, four historic resources (8CH01338, 8CH02053, 8CH02741, and 8CH02742) had been previously recorded adjacent to the four proposed pond sites and had been determined ineligible for listing in the NRHP by the SHPO in 2018. The SHPO concurred with the survey findings that resulted in no historic properties affected (SHPO File No. 2022-7311).

This current CRAS Addendum is being prepared to update the previous PD&E Study CRAS that was prepared in 2018 as well as the 2022 Pond addendum. This Addendum includes field survey for the additional ROW needed for the roadway mainline and one pond site, Pond 1-2B, that will utilize remainders of parcels proposed for impact by mainline widening. This Addendum also includes a historic resource update for the mainline corridor to identify, record and evaluate historic resources that were constructed between 1962 and 1976 that were not included in the previous 2018 PD&E Study CRAS since they were not yet 50 years old at the time or were identified within the new area of potential effects (APE) to account for the additional ROW.

The archaeological APE is defined as the area contained within the footprint of proposed improvements. The historical/architectural APE includes the archaeological APE and immediately adjacent parcels. This APE remains in-keeping with the 2018 CRAS (ACI 2018a; Survey No. 25342).

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 Chapters 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 2020). 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.

As a result of the archaeological background research, no previously recorded historic or pre-Contact period archaeological sites were identified within the APE. However, two previously recorded sites, 8CH00502 and 8CH00499, were recorded within a mile of the APE. 8CH00502 is a prehistoric midden (FMSF) located along the north shore of the Peace River about 1200 ft south of the APE. Similarly, 8CH00499, the Northside Midden, is recorded about 800 ft south of the western terminus of the project APE. A review of relevant site locational information for environmentally similar areas within Charlotte County and the surrounding region indicated areas of moderate to low potential for the occurrence of pre-Contact period archaeological sites within the APE. The background research indicated that sites, if present, would most likely be small shell middens or artifact scatters. As a result of field survey, including the current excavation of 28 shovel tests, no archaeological sites were identified within the APE.

The historical/architectural background research, including a review of the FMSF database and the NRHP, indicated that 20 historic resources have been previously recorded within the APE (8CH01338, 8CH01444, 8CH01446, 8CH01451 – 8CH01456, 8CH01461, 8CH01462, 8CH02053, 8CH02722 - 8CH02727, 8CH02741, 8CH02742). All of the previously recorded historic resources within the APE have been determined ineligible for listing in the NRHP by the SHPO. The historic/architectural field survey resulted in the identification of 36 historic resources within the APE. Of these, 18 were newly identified, recorded, and evaluated (8CH02782 – 8CH02799) and the remaining 18 historic resources were previously recorded (8CH01338, 8CH01444, 8CH01446, 8CH01452, 8CH01454, 8CH01455, 8CH01456, 8CH01461, 8CH01462, 8CH02053, 8CH02722 - 8CH02727, 8CH02741, 8CH02742) within the APE. The previously recorded resources were not re-evaluated since the SHPO already determined they were ineligible for listing in the NRHP, and no significant changes were observed during the field survey. The newly identified resources include 16 buildings (8CH02783 and 8CH02798) that were constructed between circa (ca.) 1962 and ca. 1976 and two building complex resource groups (8CH02782 and 8CH02799). Overall, the buildings have been altered, lack sufficient architectural features, and are not significant embodiments of a type, period, or method of construction. The building complex resource groups are common mobile home parks found throughout Florida and are not significant embodiments of a type, period, or method of construction. In addition, background research did not reveal any historic associations with significant persons and/or events. Thus, the resources do not appear eligible for listing in the NRHP, either individually or as a part of a historic district. Furthermore, as a result of the field survey, two previously recorded historic resources (8CH01451 and 8CH01453) were found to be demolished. Of the 36 extant historic resources, three (8CH01338, 8CH01456, and 8CH02784) are located within the relocated pond site 1-2B and three (8CH01454, 8CH02741, and 8CH02742) are located immediately adjacent.

Ms. Alissa Lotane, Director
Harborview CRAS Addendum, Charlotte County
FPID No.: 434965-2-52-01
April 6, 2023
Page 3 of 3

Based on the results of the background research and field investigations, no archaeological sites or historic resources that are listed, eligible, or that appear potentially eligible for listing in the NRHP are located within the APE. Therefore, it is the professional opinion of ACI that the proposed undertaking will result in no historic properties affected.

The CRAS Addendum is provided for your review and comment. If you have any questions, please do not hesitate to call me at (863) 519-2515 or email at lauren.peters@dot.state.fl.us.

DocuSigned by:

50252A479EEF47F...

Lauren Peters
Environmental Project Manager
Florida Department of Transportation, District One

Enclosures: One original copy of the CRAS Addendum (April 2023), 18 FMSF forms, One Completed Survey Log

CC: Kristin A. Caruso, Scalar, Inc.
Maranda Kles, ACI

The Florida State Historic Preservation Officer (SHPO) finds the attached Cultural Resource Assessment Survey Addendum complete and sufficient and concurs/ does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 202207311. Or the SHPO finds the attached document contains insufficient information.

SHPO Comments:



Ms. Alissa S. Lotane, Director
State Historic Preservation Officer
Florida Division of Historical Resources

4.26.2023
Date



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960
October 22, 2019

Shawn Zinszer
U.S. Army Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32232-0019

Subject: Consultation Key for the Florida bonneted bat; 04EF2000-2014-I-0320-R001

Dear Mr. Zinszer:

This letter replaces the December 2013, Florida bonneted bat guidelines provided to the U.S. Army Corps of Engineers (Corps) to assist your agency with effect determinations within the range of the Florida bonneted bat (*Eumops floridanus*). This October 2019 revision supersedes all prior versions. The enclosed *Florida Bonneted Bat Consultation Guidelines* and incorporated *Florida Bonneted Bat Consultation Key* (Key) are provided pursuant to the U.S. Fish and Wildlife Service's (Service) authorities under the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C.1531 *et seq.*). This letter, guidelines, and Key have been assigned Service Consultation Code: 41420- 04EF2000-2014-I-0320-R001.

The purpose of the guidelines and Key is to aid the Corps (or other Federal action agency) in making appropriate effect determinations for the Florida bonneted bat under section 7 of the Act, and streamline informal consultation with the Service for the Florida bonneted bat when the proposed action is consistent with the Key. There is no requirement to use the Key. There will be cases when the use of the Key is not appropriate. These include, but are not limited to: where project specific information is outside of the scope of the Key, applicants do not wish to implement the identified survey or best management practices, or if there is new biological information about the species. In these cases, we recommend the Corps (or other Federal action agency) initiate traditional consultation pursuant to section 7 of the Act, and identify that consultation is being requested outside of the Key.

This Key uses type of habitat (*i.e.*, roosting or foraging), survey results, and project size as the basis for making determinations of "may affect, but is not likely to adversely affect" (MANLAA) and "may affect, and is likely to adversely affect" (LAA). The Key is structured to focus on the type(s) of habitat that will be affected by a project. When proposed project areas provide features that could support roosting of Florida bonneted bats, it is considered roosting habitat. If evaluation of roosting habitat determines that roosting is not likely, then the area is subsequently evaluated for its value to the species as foraging habitat.

Roosting habitat

The guidelines describe the features of roosting habitat. When a project is proposed in roosting habitat, the likelihood that roosting is occurring is evaluated through surveys (*i.e.*, full acoustic or limited roost). When a roost is expected and the proposed activity will affect that roost, formal consultation is required. This is because the proposed activity is expected to take individuals through the destruction of the roost and the appropriate determination is that the project may affect, and is likely to adversely affect (LAA) the species. When roosting is expected, but all impacts to the roost can be avoided, and only foraging habitat (without roost structure) will be affected, the Service finds that it is reasonable to conclude that the proposed action is not likely to impair feeding, breeding, or sheltering. Thus, the proposed project may affect, but is not likely to affect the Florida bonneted bat (MANLAA).

The exception to this logic path is if the proposed action will affect more than 50 acres of foraging habitat in proximity to the roost. Under this scenario, we anticipate that the loss of the larger amount of foraging habitat near the roost could significantly impair feeding of young and overall breeding (*i.e.*, LAA). Consequently, these projects would require formal consultation to analyze the effect of the incidental take.

If the roost surveys demonstrate that roosting is not likely, the project is then evaluated for its effects to foraging habitat. Our evaluation of these actions is described below. The exception is for projects less than or equal to 5 acres if a limited roost survey is conducted. Limited roost surveys rely on peeping and visual surveys to determine whether roosting is likely. On these small projects, this survey strategy is believed to be more economical and is considered a reasonable effort to evaluate the potential for roosting. The Service acknowledges that this approach is less reliable in evaluating the likelihood of roosting when it is not combined with acoustic surveys. Therefore, when limited roost surveys are conducted for projects that are less than or equal to 5 acres in size and the determination is that roosting is not likely, we conclude that the proposed project may affect, but is not likely to adversely affect the species (MANLAA).

Foraging habitat

The guidelines describe the features of foraging habitat. Data informing the home range size of the Florida bonneted bats is limited. Global Positioning System (GPS) and radio-telemetry data for Florida bonneted bats documents that they move large distances and likely have large home ranges. Data from recovered GPS satellite tags on Florida bonneted bats tagged at Babcock-Webb Wildlife Management Area (BWWMA) found the maximum distance detected from a capture site was 24.2 mi (38.9 km); the greatest path length travelled in a single night was 56.3 mi (90.6 km) (Ober 2016; Webb 2018a-b). At BWWMA, researchers found that most individual locations were within one mile of the roost (point of capture) (Ober 2015). Additional data collected during the month of December documented the mean maximum distance Florida bonneted bats (n=8) with tags traveled from the roost was 9.5 mi (Webb 2018b).

The Service recognizes that the movement information comes from only one site (BWWMA and vicinity), and data are from small numbers (n=20) of tagged individuals for only short periods of time (Webb 2018a-b). We expect that across the Florida bonneted bat's range differences in

habitat quality, prey availability, and other factors will result in variable habitat use and home range sizes between locations. Foraging distances and home range sizes in high quality habitats are expected to be smaller while foraging distances and home range sizes in low quality habitat would be expected to be larger. Regardless, we use these studies as our best available information to evaluate when changes to foraging habitat may have an effect on the species ability to feed, breed, and shelter and subsequently result in incidental take. When considering where most of the nightly activity was observed, we calculate a foraging area centered on a roost with a 1 mile radius would include approximately 2,000 acres, and a foraging area centered on a 9.5 mile radius would encompass approximately 181,000 acres, on any given night.

Given the Service's limited understanding of how the Florida bonneted bat moves throughout its home range and selects foraging areas, we choose to use 50 acres of habitat as a conservative estimate to when loss of foraging habitat may affect the fitness of an individual to the extent that it would impair feeding and breeding. Projects that would remove, destroy or convert less than 50 acres of Florida bonneted bat foraging habitat are expected to result in a loss of foraging opportunities; however, this decrease is not expected to significantly impair the ability of the individual to feed and breed. Consequently, projects impacting less than 50 acres of foraging habitat that implement the identified best management practices in the Key would be expected to avoid take, and the appropriate determination is that the project may affect, but is not likely to adversely affect the species (MANLAA).

Next, the Service incorporated the level of bat activity into our Key to evaluate when a foraging area may have greater value to the species. When surveys document high bat activity, we deduce that this area has increased value and importance to the species. Thus, when high bat activity is detected in parcels with greater than 50 acres of foraging habitat, we anticipate that the loss, destruction, or conversion of this habitat could significantly impair the ability of an individual to feed and breed (*i.e.*, LAA); thus formal consultation is warranted.

If surveys do not indicate high bat activity, we anticipate that loss of this additional foraging habitat may affect, but is not likely to adversely affect the species (MANLAA). This is because although the acreage is large, the area does not appear to be important at the landscape scale of nightly foraging. Therefore, its loss is not anticipated to significantly impair the ability of an individual to feed or breed.

The exception to this approach is for projects greater than 50 acres when they occur in potential roosting habitat that is not found to support roosting or high bat activity. Under this scenario, the Service concludes that the loss of the large acreage of suitable roosting habitat has the potential to significantly impair the ability of an individual to breed or shelter (*i.e.*, LAA) because the species is cavities for roosting are expected to be limited range wide and the project will impair these limited opportunities for roosting.

Determinations

The Corps (or other Federal action agency) may reach one of several determinations when using this Key. Regardless of the determination, when acoustic bat surveys have been conducted, the Service requests that these survey results are provided to our office to increase our knowledge of

the species and improve our consultation process. Survey results and reports should be transmitted to the Service at FBBsurveyreport@fws.gov or mail electronic file to U.S. Fish and Wildlife Service, Attention Florida bonneted bat surveys, 1339 20th Street, Vero Beach, Florida 32960. When formal consultation is requested, survey results and reports should be submitted with the consultation request to verobeach@fws.gov.

No effect: If the use of the Key results in a determination of “no effect,” no further consultation is necessary with the Service. The Service recommends that the Corps (or other Federal action agency) documents the pathway used to reach the determination in the project record and proceeds with other species analyses as warranted.

May Affect, Not Likely to Adversely Affect (MANLAA): In this Key we have identified two ways that consultation can conclude informally, MANLAA-P and MANLAA-C.

MANLAA-P: If the use of the Key results in a determination of “MANLAA- P,” the Service concurs with this determination based on the rationale provide above, and no further consultation is necessary for the effects of the proposed action on the Florida bonneted bat. The Service recommends that the Corps (or other Federal action agency) documents the pathway used to reach the determination in the project record and proceeds with other species analyses as warranted.

MANLAA-C: If the use of the Key results in a determination of MANLAA-C, further consultation with the Service is required to confirm that the Key has been used properly, and the Service concurs with the evaluation of the survey results. Survey results should be submitted with the consultation request.

May Affect, Likely to Adversely Affect (LAA) - When the determination in the Key is “LAA” technical assistance with the Service and modifications to the proposed action may enable the project to be reevaluated and conclude with a MANLAA-C determination. Under other circumstance, “LAA” determinations will require formal consultation.

Working with the Fish and Wildlife Foundation of Florida, the Service has established a fund to support conservation and recovery for the Florida bonneted bat. Any project that has the potential to affect the Florida bonneted bat and/or its habitat is encouraged to make a voluntary contribution to this fund. If you would like additional information about how to make a contribution and how these monies are used to support Florida bonneted bat recovery please contact Ashleigh Blackford, Connie Cassler, or José Rivera at 772-562-3909.

This revised Key is effective immediately upon receipt by the Corps. Should circumstances change or new information become available regarding the Florida bonneted bat and/or implementation of the Key, the determinations herein may be reconsidered and this Key further revised or amended. We have established an email address to collect comments on the Key and the survey protocols at: FBBguidelines@fws.gov.

Thank you for your continued cooperation in the effort to conserve fish and wildlife resources. If you have any questions regarding this Key, please contact the South Florida Ecological Services Office at 772-562-3909.

Sincerely,



Roxanna Hinzman
Field Supervisor
South Florida Ecological Services

Enclosure

Cc: electronic only

Corps, Jacksonville, Florida (Dale Beter, Muriel Blaisdell, Ingrid Gilbert, Alisa Zarbo, Melinda Charles-Hogan, Susan Kaynor, Krista Sabin, John Fellows)

LITERATURE CITED

Ober, H. 2015. Annual report to USFWS for calendar year 2015. Permit number TE23583B-1. University of Florida, Department of Wildlife Ecology and Conservation, North Florida Research and Education Center. Quincy, Florida.

Ober, H. 2016. Annual report to USFWS for calendar year 2016. Permit number TE23583B-1. University of Florida, Department of Wildlife Ecology and Conservation, North Florida Research and Education Center. Quincy, Florida.

Webb, E.N. 2018a. Email to Paula Halupa *et al.* University of Florida, Department of Wildlife Ecology and Conservation. Gainesville, Florida. April 1, 2018.

Webb, E.N. 2018b. Presentation given at Florida bonneted bat working group meeting at The Conservancy of Southwest Florida. University of Florida, Department of Wildlife Ecology and Conservation. Gainesville, Florida. May 24, 2016.

**U.S. Fish and Wildlife Service
South Florida Ecological Services Office**

FLORIDA BONNETED BAT CONSULTATION GUIDELINES

October - 2019

The U.S. Fish and Wildlife Service’s South Florida Ecological Services Field Office (Service) developed the Florida Bonneted Bat Consultation Guidelines (Guidelines) to assist in avoiding and minimizing potential negative effects to roosting and foraging habitat, and assessing effects to the Florida bonneted bat (*Eumops floridanus*) from proposed projects. The Consultation Key within the Guidelines assists applicants in evaluating their proposed projects and identifying the appropriate consultation paths under sections 7 and 10 of the Endangered Species Act of 1973 (Act), as amended (87 Stat. 884; 16 U.S.C. 1531 *et seq.*). These Guidelines are primarily for use in evaluating regulatory projects where development and land conversions are anticipated. These Guidelines focus on conserving roosting structures in natural and semi-natural environments. The following Consultation Area map (Figure 1 and Figure 2, Appendix A), Consultation Flowchart (Figure 3), Consultation Key, Survey Framework (Appendices B-C), and **Best Management Practices (BMPs)** (Appendix D) are based upon the best available scientific information. As more information is obtained, these Guidelines will be revised as appropriate. If you have comments, or suggestions on these Guidelines or the Survey Protocols (Appendix B and C), please email your comments to FBBguidelines@fws.gov. These comments will be reviewed and incorporated in an annual review.

Terms in bold are further defined in the Glossary.

Wherever possible, proposed development projects within the Consultation Area should be designed to avoid and minimize take of Florida bonneted bats and to retain their habitat. Applicants are encouraged to enter into early technical assistance/consultation with the Service so we may provide recommendations for avoiding and minimizing adverse effects. Although these Guidelines focus on the effects of a proposed action (*e.g.*, development) on natural habitat, (*i.e.*, non-urban), Appendix E also provides Best Management Practices for Land Management Projects.

If you are renovating an existing artificial structure (*e.g.*, building) within the urban environment with or without additional ground disturbing activities, these Guidelines do not apply. The Service is developing separate guidelines for consultation in these situations. Until the urban guidelines are complete, please contact the Service for additional guidance.

The final listing rule for the Florida bonneted bat (Service 2013) describes threats identified for the species. Habitat loss and degradation, as well as habitat modification, have historically affected the species. Florida bonneted bats are different from most other Florida bat species because they are reproductively active through most of the year, and their large size makes them capable of foraging long distances from their roost (Ober *et al.* 2016). Consequently, this species is vulnerable to disturbances around the roost during a greater portion of the year and considerations about foraging habitat extend further than the localized roost.

Use of Consultation Area, Flowchart, and Key

Figure 1 shows the Consultation Area for the Florida bonneted bat where this consultation guidance applies. For information on how the Consultation Area was delineated see Appendix A. The Consultation Flowchart (Figure 3) and Consultation Key direct project proponents through a series of couplets that will provide a conclusion or determination for potential effects to the Florida bonneted bat. *Please Note: If additional listed species, or candidate or proposed species, or designated or proposed critical habitat may be affected, a separate evaluation will be needed for these species/critical habitats.*

Currently, the Consultation Flowchart (Figure 3) and Consultation Key cannot be used for actions proposed within the urban development boundary in Miami-Dade and Broward County. The urban development boundary is part of the Consultation Area, but it is excluded from these Guidelines because Florida bonneted bats use this area differently (roosting largely in artificial structures), and small natural foraging areas are expected to be important. Applicants with projects in this area should contact the Service for further guidance and individual consultation.

Determinations may be either “no effect,” “may affect, but is not likely to adversely affect” (**MANLAA**), or “may affect, and is likely to adversely affect” (**LAA**). An applicant’s willingness and ability to alter project designs could sufficiently minimize effects to Florida bonneted bats and allow for a **MANLAA** determination for this species (informal consultation). The Service is available for early technical assistance/consultation to offer recommendations to assist in project design that will minimize effects. When take cannot be avoided, applicants and action agencies are encouraged to incorporate compensation to offset adverse effects. The Service can assist with identifying compensation options (*e.g.*, conservation on site, conservation off-site, contributions to the Service’s Florida bonneted bat conservation fund, *etc.*).

Using the Key and Consultation Flowchart

- “No effect” determinations do not need Service concurrence.
- “May affect, but is not likely to adversely affect” **MANLAA**. Applicants will be expected to incorporate the appropriate BMPs to reach a **MANLAA** determination.
 - **MANLAA-P** (in blue in Consultation Flowchart) have programmatic concurrence through the transmittal letter of these Guidelines, and therefore no further consultation with the Service is necessary unless assistance is needed in interpreting survey results.
 - **MANLAA-C** (in black in Consultation Flowchart) determinations require further consultation with the Service.
- “May affect, and is likely to adversely affect” (**LAA**) determinations require consultation with the Service. Project modifications could change the **LAA** determinations in numbers 5, 8, 9, 11, 12, and 17 to **MANLAA**. When take cannot be avoided, **LAA** determinations will require a biological opinion.
- The Service requests copies of surveys used to support all determinations. If a survey is required by the Consultation Key and the final determination is “no effect” or “MANLAA-P”, send the survey to FBBsurveyreport@fws.gov, or mail electronic file to U.S. Fish and Wildlife Service, Attention Florida bonneted bat surveys, 1339 20th Street, Vero Beach, Florida 32960. If a survey is required by the Consultation Key and the determination is “MANLAA-C” or “LAA”, submit the survey in the consultation request.

For the purpose of making a decision at Couplet 2: If any potential roosting structure is present, then the habitat is classified as **potential roosting habitat**, and the left half of the flowchart should be followed (see Figure 3). We recognize that roosting habitat may also be used by Florida bonneted bats for foraging. If the project site only consists of **foraging habitat** (*i.e.*, no suitable roosting structures), then the right side of the flowchart should be followed beginning at step 13.

For couplets 11 and 12: **Potential roosting habitat** is considered **Florida bonneted bat foraging habitat** when a determination is made that roosting is not likely.

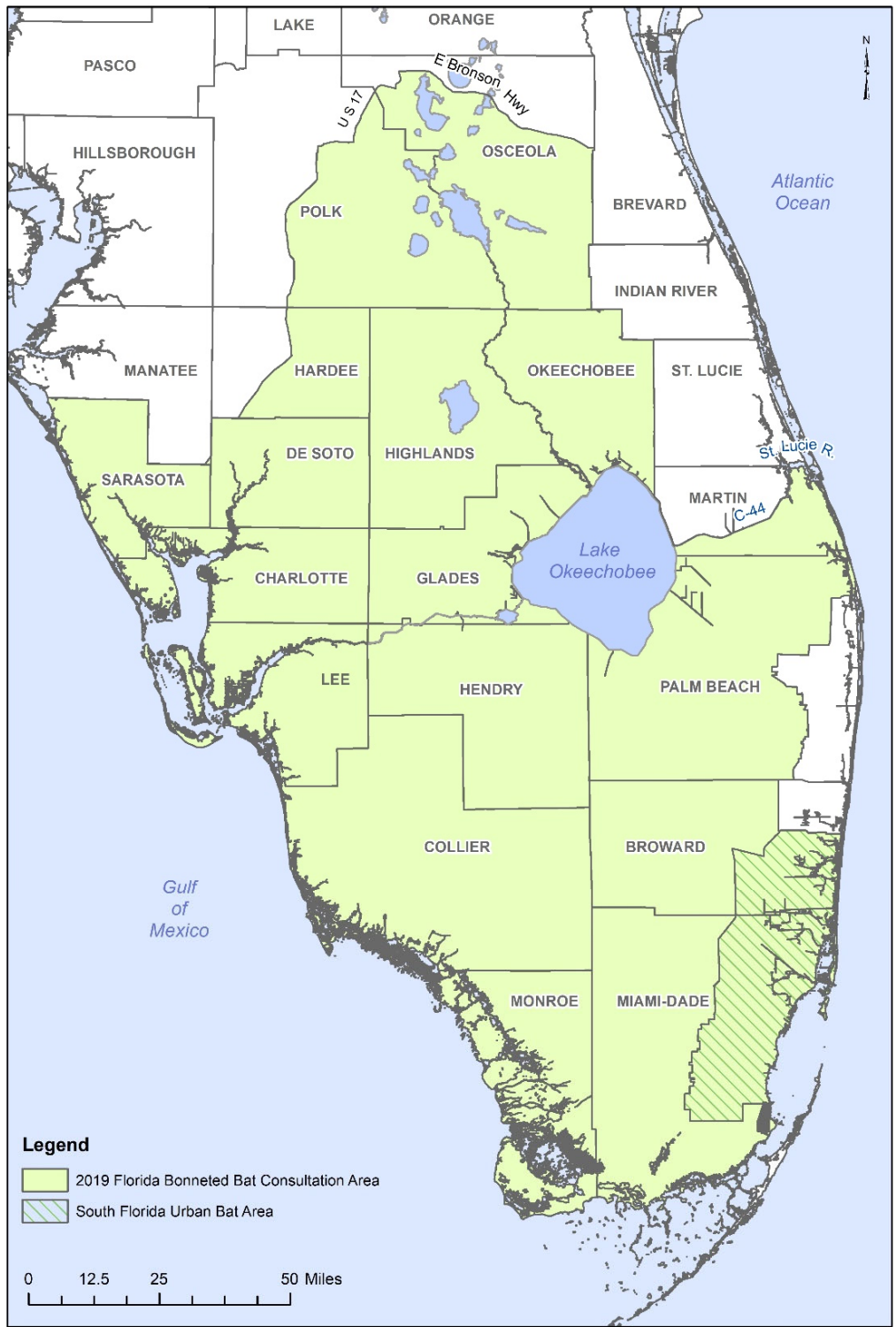


Figure 1. Florida Bonneted Bat Consultation Area. Hatched area (Figure 2) identifies the urban development boundary in Miami-Dade and Broward County. Applicants with projects in this area should contact the Service for specific guidance addressing this area and individual consultation. The Consultation Key should not be used for projects in this area.

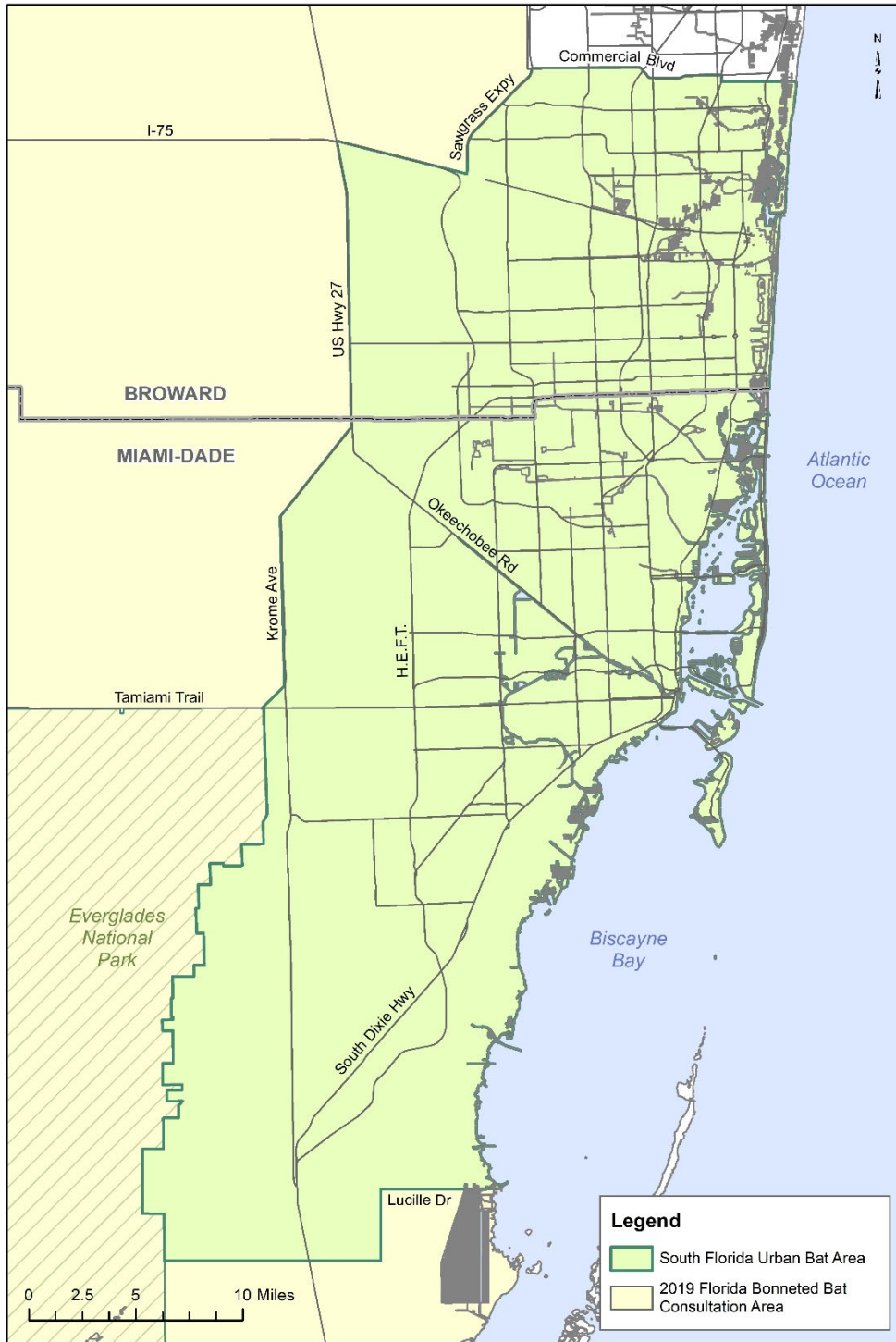


Figure 2. Urban development boundary in Miami-Dade and Broward County. The Consultation Key should not be used for projects in this area. Applicants with projects in this South Florida Urban Bat Area should contact the Service for specific guidance addressing this area and individual consultation.

Florida Bonneted Bat Consultation Key[#]

Use the following key to evaluate potential effects to the Florida bonneted bat (FBB) from the proposed project. Refer to the Glossary as needed.

- 1a. Proposed project or land use change is partially or wholly within the Consultation Area (Figure 1).....**Go to 2**
- 1b. Proposed project or land use change is wholly outside of the Consultation Area (Figure 1).....**No Effect**
- 2a. Potential FBB roosting habitat exists within the project area.....**Go to 3**
- 2b. No potential FBB roosting habitat exists within the project area.....**Go to 13**
- 3a. Project size/footprint* \leq 5 acres (2 hectares)..... **Conduct Limited Roost Survey (Appendix C) then Go to 4**
- 3b. Project size/footprint* $>$ 5 acres (2 hectares).....**Conduct Full Acoustic/Roost Surveys (Appendix B) then Go to 6**
- 4a. Results show FBB roosting is likely**Go to 5**
- 4b. Results do not show FBB roosting is likely.....**MANLAA-P if BMPs (Appendix D) used and survey reports are submitted. Programmatic concurrence.**
- 5a. Project will affect roosting habitat.....**LAA⁺ Further consultation with the Service required.**
- 5b. Project will not affect roosting habitat..... **MANLAA-C with required BMPs (Appendix D). Further consultation with the Service required.**
- 6a. Results show some FBB activity.....**Go to 7**
- 6b. Results show no FBB activity.....**No Effect**
- 7a. Results show FBB roosting is likely.....**Go to 8**
- 7b. Results do not show FBB roosting is likely.....**Go to 10**
- 8a. Project will not affect roosting habitat.....**Go to 9**
- 8b. Project will affect roosting habitat.....**LAA⁺ Further consultation with the Service required.**
- 9a. Project will affect* $>$ 50 acres (20 hectares) (wetlands and uplands) of foraging habitat.....**LAA⁺ Further consultation with the Service required.**
- 9b. Project will affect* \leq 50 acres (20 hectares) (wetlands and uplands) of foraging habitat..... **MANLAA-C with required BMPs (Appendix D). Further consultation with the Service required.**
- 10a. Results show high FBB activity/use.....**Go to 11**
- 10b. Results do not show high FBB activity/use.....**Go to 12**
- 11a. Project will affect* $>$ 50 acres (20 hectares) (wetlands and uplands) of FBB habitat (roosting and/or foraging)..... **LAA⁺ Further consultation with the Service required.**
- 11b. Project will affect* \leq 50 acres (20 hectares) (wetlands and uplands) of FBB habitat (roosting and/or foraging)..... **MANLAA-C with required BMPs (Appendix D). Further consultation with the Service required.**
- 12a. Project will affect* $>$ 50 acres (20 hectares) (wetlands and uplands) of FBB habitat..... **LAA⁺ Further consultation with the Service required.**
- 12b. Project will affect* \leq 50 acres (20 hectares) (wetlands and uplands) of FBB habitat..... **MANLAA-P if BMPs (Appendix D) used and survey reports are submitted. Programmatic concurrence.**

- 13a. FBB foraging habitat exists within the project area and foraging habitat will be affected.....**Go to 14**
- 13b. FBB foraging habitat exists within the project area and foraging habitat will not be affected **OR** no FBB foraging habitat exists within the project area.....**No Effect**
- 14a. Project size* > 50 acres (20 hectares) (wetlands and uplands)**Go to 15**
- 14b. Project size* ≤ 50 acres (20 hectares) (wetlands and uplands) **MANLAA-P if BMPs (Appendix D) used. Programmatic concurrence.**
- 15a. Project is within 8 miles (12.9 kilometers) of high quality potential roosting areas^.....**Conduct Full Acoustic Survey (Appendix B) and Go to 16**
- 15b. Project is not within 8 miles (12.9 kilometers) of high quality potential roosting area^.....**MANLAA-P if BMPs (Appendix D) used. Programmatic concurrence.**
- 16a. Results show some FBB activity.....**Go to 17**
- 16b. Results show no FBB activity.....**No Effect**
- 17a. Results show high FBB activity/use.....**LAA+ Further consultation with the Service required.**
- 17b. Results do not show high FBB activity/use..... **MANLAA-P if BMPs (Appendix D) used and survey reports submitted. Programmatic concurrence.**

If you are within the urban environment and you are renovating an existing artificial structure (with or without additional ground disturbing activities), these Guidelines do not apply. The Service is developing separate guidelines for consultation in these situations. Until the urban guidelines are complete, please contact the Service for additional guidance

*Includes wetlands and uplands that are going to be altered along with a 250- foot (76.2- meter) buffer around these areas if the parcel is larger than the altered area.

+Project modifications could change the LAA determinations in numbers 5, 8, 9, 11, 12, and 17 to MANLAA determinations.

^Determining if **high quality potential roosting areas** are within 8 mi (12.9 km) of a project is intended to be a desk-top exercise looking at most recent aerial imagery, not a field exercise.

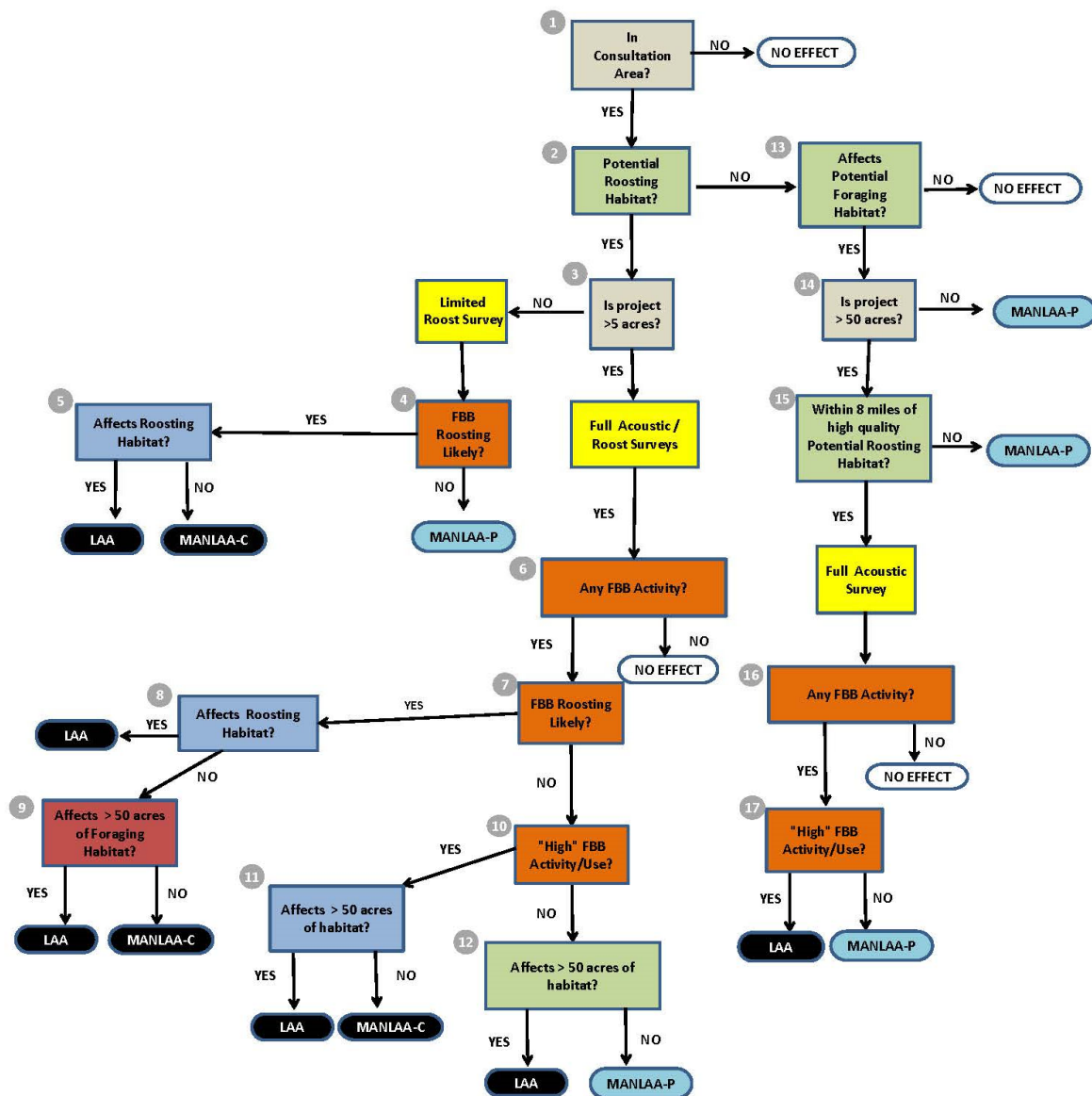


Figure 3. Florida bonneted bat Consultation Flowchart. “No effect” determinations do not need Service concurrence. “May affect, but not likely to adversely affect”, **MANLAA-P**, in blue have programmatic concurrence through the transmittal letter of these Guidelines, and therefore no further consultation with the Service is necessary unless assistance is needed in interpreting survey results. **MANLAA-C** determinations in black require further consultation with the Service. Applicants are expected to incorporate the appropriate **BMPs** to reach a **MANLAA** determination. “May affect, and is likely to adversely affect”, **LAA**, (also in black) determinations require consultation with the Service. Further consultation with the Service may identify project modifications that could change the **LAA** determinations in numbers 5, 8, 9, 11, 12, and 17 to **MANLAA** determinations. The Service requests Florida bonneted bat survey reports for all determinations.

GLOSSARY

BMPs – Best Management Practices. Recommendations for actions to conserve roosting and foraging habitat to be implemented before, during, and after proposed development, land use changes, and land management activities.

FBB Activity – Florida bonneted bat (FBB) activity is when any Florida bonneted bat calls are recorded during an acoustic survey or human observers see or hear Florida bonneted bats on a site.

FORAGING HABITAT - Comprised of relatively open (*i.e.*, uncluttered or reduced numbers of obstacles, such as fewer tree branches and leaves, in the flight environment) areas to find and catch prey, and sources of drinking water. In order to find and catch prey, Florida bonneted bats forage in areas with a reduced number of obstacles. This includes: open fresh water, permanent or seasonal freshwater wetlands, within and above wetland and upland forests, wetland and upland shrub, and agricultural lands (Bailey *et al.* 2017). In urban and residential areas drinking water, prey base, and suitable foraging can be found at golf courses, parking lots, and parks in addition to relatively small patches of natural habitat.

FULL ACOUSTIC/ROOST SURVEY - This is a comprehensive survey that will involve systematic acoustic surveys (*i.e.*, surveys conducted 30 minutes prior to sunset to 30 minutes after sunrise, over multiple consecutive nights). Depending upon acoustic results and habitat type, targeted roost searches through thorough visual inspection using a tree-top camera system or observations at emergence (*e.g.*, looking and listening for bats to come out of tree cavities around sunset) or more acoustic surveys may be necessary. See Appendix B for a full description.

HIGH FBB ACTIVITY/USE - High Florida bonneted bat (FBB) activity/use or importance of an area can be defined using several parameters (*e.g.*, types of calls, numbers of calls). An area will be considered to have high FBB activity/use if **ANY** of the following are found: (a) multiple FBB feeding buzzes are detected; (b) FBB social calls are recorded; (c) large numbers of Florida bonneted bat calls (9 or more) are recorded throughout one night. Each of these parameters is considered to indicate that an area is actively used and important to FBBs, however, the Service will further evaluate the activity/use of the area within the context of the site (*i.e.*, spatial distribution of calls, site acreage, habitat on site, as well as adjacent habitat) and provide additional guidance.

HIGH QUALITY POTENTIAL ROOSTING AREAS - Sizable areas (>50 acres) [20 hectares] that contain large amounts of high-quality, natural roosting structure – (*e.g.*, predominantly native, mature trees; especially pine flatwoods or other areas with a large number of cavity trees, tree hollows, or high woodpecker activity).

LAA - May Affect, and is Likely to Adversely Affect. The appropriate conclusion if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or

beneficial [see definition of “may affect, but is not likely to adversely affect” (**MANLAA**)]. In the event the overall effect of the proposed action is beneficial to the listed species, but also is likely to cause some adverse effects, then the proposed action is “likely to adversely affect” the listed species. If incidental take is anticipated to occur as a result of the proposed action, an “is likely to adversely affect” (**LAA**) determination should be made. An “is likely to adversely affect” determination requires the initiation of formal section 7 consultation.

LIMITED ROOST SURVEY - This is a reduced survey that may include the following methods: acoustics, observations at emergence (*e.g.*, looking and listening for bats to come out of tree cavities around sunset), and visual inspection of trees with cavities or loose bark using tree-top cameras (or combination of these methods). Methods are fairly flexible and dependent upon composition and configuration of project site and willingness and ability of applicant and partners to conserve roosting structures on site. See also Appendix C for a full description.

MANLAA - May Affect, but is Not Likely to Adversely Affect. The appropriate conclusion when effects on listed species are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. To use these Guidelines and Consultation Key applicants must incorporate the appropriate **BMPs** (Appendix D) to reach a **MANLAA** determination.

In this Consultation Key we have identified two ways that consultation can conclude informally, **MANLAA-P** and **MANLAA-C**:

MANLAA-P: programmatic concurrence is provided through the transmittal letter of these Guidelines, no additional consultation is required with the Service for Florida bonneted bats. All survey results must be submitted to Service.

MANLAA-C: further consultation with the Service is required to confirm that the Consultation Key has been used properly, and the Service concurs with the evaluation of the survey results. Request for consultation must include survey results.

NO EFFECT - The appropriate conclusion when the action agency determines its proposed action will not affect listed species or designated critical habitat.

POTENTIAL ROOSTING HABITAT - Includes forest and other areas with tall, mature trees or other areas with suitable roost structures (*e.g.*, utility poles, artificial structures). Forest is defined as all types including: pine flatwoods, scrubby flatwoods, pine rocklands, royal palm hammocks, mixed or hardwood hammocks, cypress, sand pine scrub, or other forest types. (Forrest types currently include exotic forests such as melaleuca, please contact the Service for additional guidance as needed). More specifically, this includes habitat in which suitable structural features for breeding and sheltering are present. In general, roosting habitat contains one or more of the following structures: tree snags, and trees with cavities, hollows, deformities, decay, crevices, or loose bark. Structural characteristics are of primary importance.

Florida bonneted bats have been found roosting in habitat with the following structural features, but may also occur outside of these parameters:

- trees greater than 33 feet (10 meters) in height, greater than 8 inches (20 centimeters) in diameter at breast height (DBH), with cavity elevations higher than 16 feet (5 meters) above ground level (Braun de Torrez 2019);
- areas with a high incidence of large or mature live trees with various deformities (*e.g.*, large cavities, hollows, broken tops, loose bark, and other evidence of decay) (*e.g.*, pine flatwoods);
- rock crevices (*e.g.*, limestone in Miami-Dade County); and/or
- artificial structures, mimicking natural roosting conditions (*e.g.*, bat houses, utility poles, buildings), situated in natural or semi-natural habitats.

In order for a building to be considered a roosting structure, it should be a minimum of 15 feet high and contain one or more of the following features: chimneys, gaps in soffits, gaps along gutters, or other structural gaps or crevices (outward entrance approximately 1 inch (2.5 centimeters) in size or greater. Structures similar to the above (*e.g.*, bridges, culverts, minimum of 15 feet high) are expected to also provide roosting habitat, based upon the species' morphology and behavior (Keeley and Tuttle 1999). Florida bonneted bat roosts will be situated in areas with sufficient open space for these bats to fly (*e.g.*, open or semi-open canopy, canopy gaps, above the canopy, and edges which provide relatively uncluttered conditions [*i.e.*, reduced numbers of obstacles, such as fewer tree branches and leaves, in the flight environment]).

***For the purpose of this Consultation Key:** Roosting habitat refers to habitat with structures that can be used for daytime and maternity roosting. Roosting at night between periods of foraging can occur in a broader range of structure types. For the purposes of this guidance we are focusing on day roosting habitat.*

ROOSTING IS LIKELY– Determining likelihood of roosting is challenging. The Service has provided the following definition for the express purpose of these Guidelines. Researchers use additional cues to assist in locating roosts. As additional indicators are identified and described we expect our Guidelines will be improved.

In this Consultation Key the Service will consider the following evidence indicative that roosting is likely nearby (*i.e.*, reasonably certain to occur) if **ANY** of the following are documented: (a) Florida bonneted bat calls are recorded within 30 minutes before sunset to 1½ hours following sunset or within 1½ hours before sunrise; (b) emergence calls are recorded; (c) human observers see (or hear) Florida bonneted bats flying from or to potential roosts; (d) human observers see and identify Florida bonneted bats within a natural roost or artificial roost; and/or (e) other bat sign (*e.g.*, guano, staining, etc.) is found that is identified to be Florida bonneted bat through additional follow-up.

In addition to the aforementioned events, researchers consider roosting likely in an area when (1) large numbers of Florida bonneted bat calls are recorded throughout the night (*e.g.*, ≥ 25 files per night at a single acoustic station when 5 second file lengths are recorded); (2) large numbers of FBB calls are recorded over multiple nights (*e.g.*, an average of ≥ 20 files per night from a single detector when 5 second file lengths are recorded); or (3) social calls are recorded. Because social calls and large numbers of calls recorded over one or more nights can be indicative of high

FBB activity/use or when roosting is likely, the Service is choosing not to use these as indicators to make the determination that roosting is likely. Instead we are relying on the indicators that are only expected to occur at or very close to a roost location [(a)-(e) above].

TAKE - to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. [ESA §3(19)] Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined by the Service as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. [50 CFR §17.3].

Literature Cited

- Bailey, A.M., H.K. Ober, A.R. Sovie, and R.A. McCleery. 2017. Impact of land use and climate on the distribution of the endangered Florida bonneted bat. *Journal of Mammalogy*. 98:1586-1593.
- Braun de Torrez, E. 2019. Email from biologist E. Braun de Torrez, Florida Fish and Wildlife Conservation Commission to biologist, S. Sneckenberger, U.S. Fish and Wildlife Service. July 24, 2019. Gainesville, Florida.
- Keeley, B.W., and M.D. Tuttle. 1999. Bats in American bridges. Bat Conservation International, Inc. Austin, Texas.
- Ober, H.K., E.C. Braun de Torrez, J.A. Gore, A.M. Bailey, J.K. Myers, K.N. Smith, and R.A. McCleery. 2016. Social organization of an endangered subtropical species, *Eumops floridanus*, the Florida bonneted bat. *Mammalia* 2016:1-9.
- U.S. Fish and Wildlife Service. 2013. Endangered and threatened wildlife and plants; endangered species status for the Florida bonneted bat. *Federal Register* 78:61004-61043.

Appendix A. Delineation and Justification for Consultation Area

The Consultation Area (Figure 1) represents the general range of the species. The Consultation Area represents the area within which consideration should be given to potential effects to Florida bonneted bats from proposed projects or actions. Coordination and consultation with the Service helps to determine whether proposed actions and activities may affect listed species. This Consultation Area defines the area where proposed actions and activities may affect the Florida bonneted bat.

This area was delineated using confirmed presence data, key habitat features, reasonable flight distances and home range sizes. Where data were lacking, we used available occupancy models that predict probability of occurrence (Bailey *et al.* 2017). Below we describe how each one of these data sources was used to determine the overall Consultation Area.

Presence data: Presence data included locations for: (1) confirmed Florida bonneted bat acoustic detections; (2) known roost sites (occupied or formerly occupied; includes natural roosts, bat houses, and utility poles); (3) live Florida bonneted bats observed or found injured; (4) live Florida bonneted bats captured during research activities; and (5) Florida bonneted bats reported as dead. The Geographic Information Systems (GIS) dataset incorporates information from January 2003 to May 2019.

The vast majority of the presence data came from acoustic surveys. The species' audible, low frequency, distinct, echolocation calls are conducive for acoustic surveys. However, there are limitations in the range of detection from ultrasonic devices, and the fast, high-flying habits of this species can confound this. Overall, detection probabilities for Florida bonneted bats are generally considered to be low. For example, in one study designed to investigate the distribution and environmental associations of Florida bonneted bat, Bailey *et al.* 2017 found overall nightly detection probability was 0.29. Based on the estimated detection probabilities in that study, it would take 9 survey nights (1 detector per night) to determine with 95% certainty whether Florida bonneted bat are present at a sampling point. Positive acoustic detection data are extremely valuable. However, it is important to recognize that there are issues with false negatives due to limitations of equipment, low detection probabilities, difference in detection due to prey availability and seasonal movement over the landscape, and in some circumstances improperly conducted surveys (*i.e.*, short duration or in unsuitable weather conditions).

Key habitat features: We considered important physical and biological features with a focus on potential roosting habitat and applied key concepts of bat conservation (*i.e.*, need to conserve roosting habitat, foraging habitat, and prey base). To date, all known natural Florida bonneted bat roosts (n=19) have been found in live trees and snags of the following types: slash pine, longleaf pine, royal palm, and cypress (Braun de Torrez 2018). Several of the recent roost discoveries are located in fire-maintained vegetation communities, and it appears that Florida bonneted bats are fire-adapted and can benefit from prescribed burn regimes that closely mimic historical fire patterns (Ober *et al.* 2018).

From a landscape and roosting perspective, we consider key habitat features to include forested areas and other areas with mature trees, wetlands, areas used by red-cockaded woodpeckers

(*Picoides borealis*; RCW), and fire-managed and other conservation areas. However, recent work suggests that Florida bonneted bats do not use pinelands more than other land cover types (Bailey *et al.* 2017). In fact, Bailey *et al.* 2017 detected Florida bonneted bats in all land cover types investigated in their study (e.g., agricultural, developed, upland, and wetland). For the purposes of these consultation guidelines, we are focusing on the conservation of potential roosting habitats across the species' range. However, we also recognize the need for comprehensive consideration of foraging habitats, habitat connectivity, and long-term suitability.

Flight distances and home range sizes: Like most bats, Florida bonneted bats are colonial central-place foragers that exploit distant and scattered resources (Rainho and Palmeirim 2011). Morphological characteristics (narrow wings, high wing-aspect ratio) make *Eumops* spp. well-adapted for efficient, low-cost, swift, and prolonged flight in open areas (Findley *et al.* 1972, Norberg and Rayner 1987). Other *Eumops* including Underwood's mastiff bat (*Eumops underwoodi*), and Greater mastiff bat or Western mastiff bat (*Eumops perotis*) are known to forage and/or travel distances ranging from 6.2 miles to 62 miles from the roost with multiple studies documenting flight distances approximately 15- 18 miles from the roost (Tibbitts *et al.* 2002, Vaughn 1959 as cited in Best *et al.* 1996, Siders *et al.* 1999, Siders 2005, Vaughan 1959 as cited in Siders 2005.)

Like other *Eumops*, Florida bonneted bats are strong fliers, capable of travelling long distances (Belwood 1992). Recent Global Positioning System (GPS) and radio-telemetry data for Florida bonneted bats documents that they also move large distances and likely have large home ranges. Data from recovered GPS satellite tags on Florida bonneted bats tagged at Babcock-Webb Wildlife Management Area (WMA), found the maximum distance detected from a capture site was 24.2 mi (38.9 km); the greatest path length travelled in a single night was 56.3 mi (90.6 km) (Ober 2016; Webb 2018a-b). Additional data collected during the month of December documented the mean maximum distance of Florida bonneted bats (n=8) with tags traveled from the roost was 9.5 mi (Webb 2018b). The Service recognizes that the movement information comes from only one site (Babcock-Webb WMA and vicinity), and data are from small numbers (n=20) of tagged individuals for only short periods of time (Webb 2018a-b). We expect that across the Florida bonneted bat's range differences in habitat quality, prey availability, and other factors will result in variable habitat use and home range sizes between locations. Foraging distances and home range sizes in high quality habitats are expected to be smaller while foraging distances and home range sizes in low quality habitat would be expected to be larger. Consequently, because Babcock-Webb WMA provides high quality roosting habitat, this movement data could represent the low end of individual flight distances from a roost.

Given the species' morphology and habits (e.g., central-place forager) and considering available movement data from other *Eumops* and Florida bonneted bats discussed above, we opted to use 15 miles (24 km) as a reasonable estimate of the distance Florida bonneted bats would be expected to travel from a roost on any given night. For the purposes of delineating a majority of the Consultation Area, we used available confirmed presence point location data and extended out 15 miles (24 km), with modifications for habitat features (as described above). As more movement data are obtained and made available, this distance estimate may change in the future.

Occupancy model – Research by Bailey *et al.* (2017) indicates the species' range is larger than previously known. Their model performed well across a large portion of the previously known

range when considering confirmed Florida bonneted bat locations; thus it is anticipated to be useful where limited information is available for the species.

We used the model output from Bailey *et al.* (2017) to more closely examine areas where we are data-deficient (*i.e.*, areas where survey information is particularly lacking). We considered 0.27 probability of occurrence a filter for high likelihood of occurrence because 0.27 was the model output for Babcock-Webb WMA, an area where Florida bonneted bats are known to occupy and heavily use. Large portions of Sarasota, Martin, and Palm Beach counties were identified as having probability of occurrence of 0.27. The consultation area should include areas where the species has a high likelihood of occurring. Based on this reasoned approach, all of Sarasota County, portions of Martin County, and greater parts of Palm Beach County were included in the Consultation Area.

We recognize that there are areas in the northern portion of the range where the model is less successful predicting occurrence based on the known Florida bonneted bat locations (*i.e.*, the model predicts low likelihood of occurrence on Avon Park Air Force range, where the species is known to roost). Consequently, the Service is proactively working with partners to conduct surveys in the areas added based on the model to confirm that inclusion of these portions of the aforementioned counties is appropriate. The Consultation Area may be adjusted based on changes in this information.

Literature Cited -Appendix A

- Bailey, A.M., H.K. Ober, A.R. Sovie, and R.A. McCleery. 2017. Impact of land use and climate on the distribution of the endangered Florida bonneted bat. *Journal of Mammalogy*. 98:1586-1593.
- Belwood, J.J. 1992. Florida mastiff bat *Eumops glaucinus floridanus*. Pages 216-223 in S.R. Humphrey (ed.), *Rare and Endangered Biota of Florida*. Vol. I. Mammals. University Press of Florida. Gainesville, Florida.
- Best, T.L., Kiser, W.M., and P.W. Freeman. 1996. *Eumops perotis*. *Mammalogy Papers: University of Nebraska State Museum*. Lincoln.
- Braun de Torrez, E.C. 2018c. Presentation given at Florida bonneted bat working group meeting at The Conservancy of Southwest Florida. Florida Fish and Wildlife Research Institute, Florida Fish and Wildlife Conservation Commission. Gainesville, Florida. May 23, 2016.
- Findley, J.S., E.H. Studier, and D.E. Wilson. 1972. Morphologic properties of bat wings. *Journal of Mammalogy* 53(3): 429-444.
- Norberg, U.M. and J.M.V. Rayner. 1987. Ecological morphology and flight in bats (Mammalia; Chiroptera): wing adaptations, flight performance, foraging strategy and echolocation. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences* 316(1179):335-427.
- Ober, H. 2016. Annual report to USFWS for calendar year 2016. Permit number TE23583B-1. University of Florida, Department of Wildlife Ecology and Conservation, North Florida Research and Education Center. Quincy, Florida.
- Ober, H.K., R.A. McCleery, and E.C. Braun de Torrez. 2018. Managing with fire to promote the recently listed Florida bonneted bat, *Eumops floridanus*. Final report. JFSP Project ID: 14-1-05-7. University of Florida, Department of Wildlife Ecology and Conservation. Gainesville, Florida.
- Rainho, A., and J.M. Palmeirim. 2011. The importance of distance to resources in the spatial modelling of bat foraging habitat. *PLoS ONE* 6(4): e19227.
- Siders, M. 2005. *Eumops perotis*, Western mastiff bat. Western Bat Working Group. Species Accounts. Updated at the 2005 Portland Biennial Meeting. http://www.wbwg.org/species_accounts
- Siders, M. S., Rabe, M. J., Snow, T. K., and K. Yasuda. 1999. Long foraging distances in two uncommon bat species (*Euderma maculatum* and *Eumops perotis*) in northern Arizona. In *Proceedings of the Fourth Biennial Conference of Research on the Colorado Plateau*. US Geological Survey, Flagstaff, AZ, Vol. 4.
- Tibbitts, T., A. Pate, Y. Petryszyn, and B. Barns. 2002. Determining foraging and roosting areas

for Underwood's mastiff bat (*Eumops underwoodi*) using radiotelemetry, at Organ Pipe Cactus National Monument, Arizona. Final summary report, year two – December 2002. Organ Pipe Cactus National Monument. Ajo, Arizona.

Webb, E.N. 2018a. Email to Paula Halupa *et al.* University of Florida, Department of Wildlife Ecology and Conservation. Gainesville, Florida. April 1, 2018.

Webb, E.N. 2018b. Presentation given at Florida bonneted bat working group meeting at The Conservancy of Southwest Florida. University of Florida, Department of Wildlife Ecology and Conservation. Gainesville, Florida. May 24, 2016.

Appendix B: Full Acoustic / Roost Survey Framework

Purpose: The purpose of this survey is to: (1) determine if Florida bonneted bats are likely to be actively roosting or using the site; (2) locate active roost(s) and avoid the loss of the structure, if possible; and, (3) avoid or minimize the take of individuals. In some cases, changes in project designs or activities can help avoid and minimize take. For example, project proponents may be able to retain suspected roosts or conserve roosting and foraging habitats. Changing the timing or nature of activities can also help reduce the losses of non-volant young or effects to pregnant or lactating females. If properly conducted, acoustic surveys are the most effective way to determine presence and assess habitat use. If the applicant is unable to follow or does not want to follow the Full Acoustic/Roost Survey framework when recommended according to the Key, the Corps (or other Action Agency) will not be able to use these Guidelines and will need to provide a biologically supported rationale using the best available information for their determination in their request for consultation.

General Description: This is a *comprehensive survey effort*, and robust acoustic surveys (*i.e.*, surveys conducted 30 minutes prior to sunset to 30 minutes after sunrise, over multiple nights) are a fundamental component of the approach. Depending upon acoustic results and habitat type, it may also include: observations at emergence (*e.g.*, emergence surveys during which observers look and listen for bats to come out of roost structures around sunset), visual inspection of trees/snags (*i.e.*, those with cavities, hollows, and loose bark) and other roost structures with tree-top cameras, or follow-up targeted acoustic surveys. Methods are dependent upon composition and configuration of project site and willingness and ability of applicant and partners to conserve roosting and foraging habitats on site.

General Survey Protocol:

[Note: The Service will provide more information in separate detailed survey protocols in the near future. This will include specific information on: detector types, placement, orientation, verification of proper functioning, analysis, reporting requirements, etc.]

- Approach is intended for project sites > 5 acres (2 hectares).
- For sites containing roosting habitat, acoustic surveys should primarily focus on assessing roosting habitat within the project site that will be lost or modified (*i.e.*, areas that will not be conserved), and locations on the property within 250 feet (76.2 meters) of areas that will not be conserved. This will help avoid or minimize the loss of an active roost and individuals. Secondly, since part of the purpose is to determine if Florida bonneted bats are using the site, acoustic devices should also be placed near open water and wetlands to maximize chances of detection and aid in assessing foraging habitat that may be lost.
- For sites that do not contain ANY roosting habitat, but do contain foraging habitat (see Figure 3 - Consultation Flowchart and Key, Step 2 [no], Step 13 [yes]), efforts should focus on assessing foraging habitat within the project site that will be lost or modified (*i.e.*, areas that will not be conserved).
- Acoustic surveys should be performed by those who are trained and experienced in setting up, operating, and maintaining acoustic equipment; and retrieving, saving,

analyzing, and interpreting data. Surveyors should have completed one or more of the available bat acoustic courses/workshops, or be able to show similar on-the-job or academic experience (Service 2018).

- Due to the variation in the quality of recordings, the influence of clutter, the changing performances of software packages over time, and other factors, manual verification is recommended (Loeb *et al.* 2015). Files that are identified to species from auto-ID programs must be visually reviewed and manually verified by experienced personnel.
- Acoustic devices should be set up to record from 30 minutes prior to sunset to 30 minutes after sunrise for multiple nights, under suitable weather conditions.
- Acoustic surveys can be conducted any time of year as long as weather conditions meet the criteria. If any of the following weather conditions exist at a survey site during acoustic sampling, note the time and duration of such conditions, and repeat the acoustic sampling effort for that night: (a) temperatures fall below 65°F (18.3°C) during the first 5 hours of survey period; (b) precipitation, including rain and/or fog, that exceeds 30 minutes or continues intermittently during the first 5 hours of the survey period; and (c) sustained wind speeds greater than 9 miles/hour (4 meters/second; 3 on Beaufort scale) for 30 minutes or more during the first 5 hours of the survey period (Service 2018). At a minimum, nightly weather conditions for survey sites should be checked using the nearest NOAA National Weather Service station and summarized in the survey reports. Although not required at this time, it has been demonstrated that conducting surveys on warm nights late in the spring can help maximize detection probabilities (Ober *et al.* 2016; Bailey *et al.* 2017).
- Acoustic devices should be calibrated and properly placed. Microphones should be directed away from surrounding vegetation, not beneath tree canopy, away from electrical wires and transmission lines, away from echo-producing surfaces, and away from external noises. Directional microphones should be aimed to sample the majority of the flight path/zone. Omnidirectional microphones should be deployed on a pole in the center of the flight path/zone and oriented horizontally. For monitoring possible roost sites, microphones should be directed to maximize likelihood of detection.
- To standardize recordings, acoustic device recordings should have a 2-second trigger window and a maximum file length of 15 seconds.
- The number of acoustic survey sites and nights needed for the assessment is dependent upon the overall acreage of suitable habitat proposed to be impacted by the action.
 - For non-linear projects, a minimum of 16 detector nights per 20 acres of suitable habitat expected to be impacted is recommended.
 - For linear projects (*e.g.*, roadways, transmission lines), a minimum of five detector nights per 0.6 mi (0.97 km) is recommended. Detectors can be moved to multiple locations within each kilometer surveyed, but must remain in a single location throughout any given night.
 - For any site, and in particular for sites > 250 acres, please contact the Service to assist in designing an appropriate approach.
- If results of acoustic surveys show **high Florida bonneted bat activity** or **Florida bonneted bat roosting likely** (*e.g.*, high activity early in the evening) (see definitions in Glossary), follow-up methods such as emergence surveys, visual inspection of the roosting structures, or follow-up acoustic surveys are recommended to locate potential roosts. Using a combination of methods may be helpful.

- For bat emergence surveys, multiple observers should be stationed at potential roosts if weather conditions (as above) are suitable. Surveyors should be quietly stationed 30 minutes before sunset so they are ready to look and listen for emerging FBBs from sunset to 1½ hours after sunset. When conducting emergence surveys it is best to orient observers so that the roost is silhouetted in the remaining daylight; facing west can help maximize the ability to notice movement of animals out of a roost structure.
- Visual inspection of trees with cavities and loose bark during the day may be helpful. Active RCW trees should not be visually inspected during the RCW breeding season (April 15 through June 15).
- Visual inspection alone is not recommended due to the potential for roosts to be too high for cameras to reach, too small for cameras to fit, or shaped in a way that contents are out of view (Braun de Torrez *et al.* 2016).
- If roosting is suspected on site, use tree-top cameras during the day to search those trees/snags or other structures that have potential roost features (*i.e.*, cavities, hollows, crevices, or other structure for permanent shelter). If unsuccessful (*e.g.*, cannot see entire contents within a given cavity, cannot reach cavity, cannot see full extent of cavity) OR occupied roosts are found with the tree-top camera within the area in which high Florida bonneted bat activity/likely Florida bonneted bats roosting were identified, we recommend emergence surveys and/or acoustics to verify occupancy and/or identify bat species.
- Provide report showing effort, methods, weather conditions, findings, and summary of acoustic data relating to Florida bonneted bats (*e.g.*, # of calls, time of calls, and station number) organized by the date on which the data were collected. Sonograms of all calls with signatures at or below 20kHz shall be included in the report. The report shall be provided to the Corps project manager assigned to the project for which the survey was conducted and to the Service via the email address verobeach@fws.gov. **Raw acoustic data should be provided to the Service for all surveys. Raw acoustic data should be provided as “all raw data” and “all raw data with signatures at or below 20kHz”. Data can be submitted to the Service via flash drive, memory stick, or hard drive. Data can be submitted digitally to verobeach@fws.gov or via mail to U.S. Fish and Wildlife Service, Attn: Florida bonneted bat data manager, 1339 20th Street, Vero Beach, Florida 32960.**
- Negative surveys are valid for 1 year after completion of the survey.

If you have comments, or suggestions on this survey protocols, please email your comments to FBBguidelines@fws.gov. These comments will be reviewed and incorporated in an annual review.

Literature Cited – Appendix B

- Bailey, A.M., H.K. Ober, A.R. Sovie, and R.A. McCleery. 2017. Impact of land use and climate on the distribution of the endangered Florida bonneted bat. *Journal of Mammalogy*. 98:1586-1593.
- Braun de Torrez, E.C., H.K. Ober, and R.A. McCleery. 2016. Use of a multi-tactic approach to locate and endangered Florida bonneted bat roost. *Southeastern Naturalist* 15(2):235-242.
- Loeb, S.C., T.J. Rodhouse, L.E. Ellison, C.L. Lausen, J.D. Reichard, K.M. Irvine, T.E. Ingersoll, J.T.H. Coleman, W.E. Thogmartin, J.R. Sauer, C.M. Francis, M.L. Bayless, T.R. Stanley, and D.H. Johnson. 2015. A plan for the North American bat monitoring program (NABat). United States Department of Agriculture. Forest Service. Research & Development, Southern Research Station. General Technical Report SRS-208.
- Ober, H.K., E.C. Braun de Torrez, J.A. Gore, A.M. Bailey, J.K. Myers, K.N. Smith, and R.A. McCleery. 2016. Social organization of an endangered subtropical species, *Eumops floridanus*, the Florida bonneted bat. *Mammalia* 2016:1-9.
- U.S. Fish and Wildlife Service. 2018. Range-wide Indiana bat survey guidelines. <https://www.fws.gov/midwest/endangered/mammals/inba/surveys/pdf/2018RangewideIBatSurveyGuidelines.pdf>

Appendix C: Limited Roost Survey Framework

Purpose: The purpose of this survey is to: (1) determine if Florida bonneted bats are likely to be actively roosting within suitable structures on-site; (2) locate active roost(s) and avoid the loss of the structure, if possible; and, (3) avoid or minimize the take of individuals. In some cases, changes in project designs or activities can help avoid and minimize take. For example, applicants and partners may be able to retain the suspected roosts or conserve roosting and foraging habitats. Changing the timing of activities can also help reduce the losses of non-volant young or effects to pregnant or lactating females.

General Description: This is a *reduced survey effort* that may include the following methods: visual inspection of trees/snags (*i.e.*, those with cavities, hollows, and loose bark) and other roost structures with tree-top cameras, observations at emergence (*e.g.*, emergence surveys during which observers look and listen for bats to come out of roost structures around sunset), acoustic surveys, or a combination of these methods. Methods are fairly flexible and dependent upon composition and configuration of project site and willingness and ability of applicant and partners to conserve roosting habitat on site.

General Survey Protocol:

[Note: The Service will provide more information in separate, detailed survey protocols in the near future. This will include specific information on: detector types, placement, orientation, verification of proper functioning, analysis, reporting requirements, etc.]

- Approach is **intended only for small project sites** (*i.e.*, sites ≤ 5 acres [2 hectares]).
- Efforts should focus on assessing potential roosting structures within the project site that will be lost or modified (*i.e.*, areas that will not be conserved), or are located on the property within 250 feet (76.2 meters) of areas that will not be conserved.

Identification of potential roost structures

- This step is necessary prior to any of the methods that follow.
- Run line transects through roosting habitat close enough that all trees and snags are easily inspected. Transect spacing will vary with habitat structure and season from a maximum of 91 m (300 ft) between transects in very open pine stands to 46 m (150 ft) or less in areas with dense mid-story. Transects should be oriented north to south, to optimize cavity detectability because many RCW cavity entrances are oriented in a westerly direction (Service 2004).
- Visually inspect all trees and snags or other structures for evidence of cavities, hollows, crevices that can be used for permanent shelter. Using binoculars, examine structures for cavities, loose bark, hollows, or other crevices that are large enough for Florida bonneted bats (diameter of opening $>$ or $=$ to 1 inch (2.5 cm) (Braun de Torrez *et al.* 2016).
- When potential roosting structures are found, record their location in the field using a Global Positioning System (GPS) unit.

Visual Inspection of trees and snags with tree-top cameras

- Visually inspect all cavities using a video probe (peeper) and assess the cavity contents.

Active RCW trees should not be visually inspected during the RCW breeding season (April 15 through June 15).

- Visual inspection alone is valid only when the entire cavity is observed and the contents can be identified. Typically, acoustics at emergence will also be needed to definitively identify bat species, if bats are present or suspected.
- If bats are suspected, or if contents cannot be determined, or if the entire cavity cannot be observed with the video probe; follow methods for an Acoustic Survey or an Emergence Survey (below). If the Corps (or other action agency) or applicant does not wish to conduct acoustic or emergence surveys, the Corps (or other action agency) cannot use the key and must request formal consultation with the Service.
- Record tree species or type of cavity structure, tree diameter and height, cavity height, cavity orientation and cavity contents.

Emergence Surveys

- For bat emergence surveys, multiple observers should be stationed at potential roosts if weather conditions (as described below in Acoustic Surveys) are suitable.
- Surveyors should be quietly stationed 30 minutes prior to sunset so they are ready to look and listen for emerging Florida bonneted bats from sunset to 1½ hours after sunset.
- When conducting emergence surveys it is best to orient observers so that the roost is silhouetted in the remaining daylight; facing west can help maximize the ability to notice movement of animals out of a roost structure.
- Record number of bats that emerged, the time of emergence, and if bat calls were heard.

Acoustic surveys

- Acoustic surveys should be performed by those who are trained and experienced in setting up, operating, and maintaining acoustic equipment; and retrieving, saving, analyzing, and interpreting data. Surveyors should have completed one or more of the available bat acoustic courses/workshops, or be able to show similar on-the-job or academic experience (Service 2018).
- Due to the variation in the quality of recordings, the influence of clutter, and the changing performances of software packages over time, and other factors, manual verification is recommended (Loeb *et al.* 2015). Files that are identified to species from auto-ID programs must be visually reviewed and manually verified by experienced personnel.
- Acoustic devices should be set up to record from 30 minutes prior to sunset to 30 minutes after sunrise for multiple nights, under suitable weather conditions.
- Acoustic surveys can be conducted any time of year as long as weather conditions meet the criteria. If any of the following weather conditions exist at a survey site during acoustic sampling, note the time and duration of such conditions, and repeat the acoustic sampling effort for that night: (a) temperatures fall below 65°F (18.3°C) during the first 5 hours of survey period; (b) precipitation, including rain and/or fog, that exceeds 30 minutes or continues intermittently during the first 5 hours of the survey period; and (c) sustained wind speeds greater than 9 miles/hour (4 meters/second; 3 on Beaufort scale) for 30 minutes or more during the first 5 hours of the survey period (Service 2018). At a minimum, nightly weather conditions for survey sites should be checked using the nearest NOAA National Weather Service station and summarized in the survey reports. Although not required at this time, it has been demonstrated that conducting surveys on

warm nights late in the spring can help maximize detection probabilities (Ober *et al.* 2016; Bailey *et al.* 2017).

- Acoustic devices should be calibrated and properly placed. Microphones should be directed away from surrounding vegetation, not beneath tree canopy, away from electrical wires and transmission lines, away from echo-producing surfaces, and away from external noises. Directional microphones should be aimed to sample the majority of the flight path/zone. Omnidirectional microphones should be deployed on a pole in the center of the flight path/zone and oriented horizontally. For monitoring possible roost sites, microphones should be directed to maximize likelihood of detection.
- To standardize recordings, acoustic device recordings should have a 2-second trigger window and a maximum file length of 15 seconds.
- Acoustic surveys should be conducted over a minimum of four nights.
- If acoustic devices cannot be left in place for the entire night for multiple nights as above, then a combination of short acoustic surveys (from sunset and extending for 1½ hours), stationed observers for emergence surveys or visual inspection of trees/snags with tree-top cameras may be acceptable. Contact the Service for guidance under this circumstance.

Reporting

- Provide report showing effort, methods, weather conditions, findings, and summary of acoustic data relating to Florida bonneted bat by date (*e.g.*, # of calls, time of calls). Sonograms of all calls with signatures at or below 20kHz shall be included in the report. The report shall be provided to the Corps project manager assigned to the project for which the survey was conducted and to the Service via the email address **verobeach@fws.gov**. **Raw acoustic data should be provided to the Service for all surveys. Raw acoustic data should be provided as “all raw data” and “all raw data with signatures at or below 20kHz”. Data can be submitted to the Service via flash drive, memory stick, or hard drive. Data can be submitted digitally to verobeach@fws.gov or via mail to U.S. Fish and Wildlife Service, Attn: Florida bonneted bat data manager, 1339 20th Street, Vero Beach, Florida 32960.**
- Negative surveys are valid for 1 year after completion of the survey

If you have comments, or suggestions on this survey protocols, please email your comments to FBBguidelines@fws.gov. These comments will be reviewed and incorporated in an annual review.

Literature Cited – Appendix C

- Bailey, A.M., H.K. Ober, A.R. Sovie, and R.A. McCleery. 2017. Impact of land use and climate on the distribution of the endangered Florida bonneted bat. *Journal of Mammalogy*. 98:1586-1593.
- Braun de Torrez, E.C., H.K. Ober, and R.A. McCleery. 2016. Use of a multi-tactic approach to locate and endangered Florida bonneted bat roost. *Southeastern Naturalist* 15(2):235-242.
- Loeb, S.C., T.J. Rodhouse, L.E. Ellison, C.L. Lausen, J.D. Reichard, K.M. Irvine, T.E. Ingersoll, J.T.H. Coleman, W.E. Thogmartin, J.R. Sauer, C.M. Francis, M.L. Bayless, T.R. Stanley, and D.H. Johnson. 2015. A plan for the North American bat monitoring program (NABat). United States Department of Agriculture. Forest Service. Research & Development, Southern Research Station. General Technical Report SRS-208.
- Ober, H.K., E.C. Braun de Torrez, J.A. Gore, A.M. Bailey, J.K. Myers, K.N. Smith, and R.A. McCleery. 2016. Social organization of an endangered subtropical species, *Eumops floridanus*, the Florida bonneted bat. *Mammalia* 2016:1-9.
- U.S. Fish and Wildlife Service. 2004. South Florida Ecological Services Office DRAFT July 12, 2004 Species Conservation Guidelines South Florida Red-cockaded Woodpecker. Appendix A. Red-cockaded Woodpecker South Florida Survey Protocol. July 12, 2004. South Florida Ecological Service Office, Vero Beach Florida.
<https://www.fws.gov/verobeach/BirdsPDFs/200407SlopesCompleteRedCockadedWoodpecker.pdf>
- U.S. Fish and Wildlife Service. 2018. Range-wide Indiana bat survey guidelines.
<https://www.fws.gov/midwest/endangered/mammals/inba/surveys/pdf/2018RangewideIBatSurveyGuidelines.pdf>

Appendix D: Best Management Practices (BMPs) for Development Projects

Ongoing research and monitoring will continue to increase the understanding of the Florida bonneted bat and its habitat needs and will continue to inform habitat and species management recommendations. These BMPs incorporate what is known about the species and also include recommendations that are beneficial to all bat species in Florida. These BMPs are intended to provide recommendations for improving conditions for use by Florida bonneted bats, and to help conserve Florida bonneted bats that may be foraging or roosting in an area.

The BMPs required to reach a “may affect, but is not likely to adversely affect” (MANLAA) determination vary depending on the couplet from the Consultation Key used to reach that particular MANLAA. The requirements for each couplet are provided below followed by the list of BMPs. If the applicant is unable or does not want to do the required BMPs, then the Corps (or other Action Agency) will not be able to use this Guidance and formal consultation with the Service is required.

Couplet Number for MANLAA from Consultation Key	Required BMPs
4b	BMP number 1 if more than 3 months has occurred between the survey and start of the project, and any 3 BMPs out of BMPs 4 through 13
5b	BMP number 2, and any 3 BMPs out of BMPs 3 through 13
9b	BMPs number 2 and 3, and any 4 BMPs out of BMPs 5 through 13
11b	BMPs number 1 and 4, and any 4 BMPs out of BMPs 5 through 13
12b	BMP number 1, and any 3 BMPs out of BMPs 3 through 13
14b	Any 2 BMPs out of BMPs 3 through 13
15b	Any 3 BMPs out of BMPs 3 through 13
17b	Any 4 BMPs out of BMPs 3 through 13

BMPs for development, construction, and other general activities:

1. If potential roost trees or structures need to be removed, check cavities for bats within 30 days prior to removal of trees, snags, or structures. When possible, remove structure outside of breeding season (*e.g.*, January 1 – April 15). If evidence of use by any bat species is observed, discontinue removal efforts in that area and coordinate with the Service on how to proceed.
2. When using heavy equipment, establish a 250 foot (76 m) buffer around known or suspected roosts to limit disturbance to roosting bats.
3. For every 5 acres of impact, retain a minimum of 1.0 acre of native vegetation. If upland habitat is impacted, then upland habitat with native vegetation should be retained.
4. For every 5 acres of impact, retain a minimum of 0.25 acre of native vegetation. If upland habitat is impacted, then upland habitat with native vegetation should be retained..
5. Conserve open freshwater and wetland habitats to promote foraging opportunities and avoid impacting water quality. Created/restored habitat should be designed to replace the function of native habitat.

6. Conserve and/or enhance riparian habitat. A 50-ft (15.2 m) buffer is recommended around water bodies and stream edges. In cases where artificial water bodies (*i.e.*, stormwater ponds) are created, enhance edges with native plantings especially in cases in which wetland habitat was affected.
7. Avoid or limit widespread application of insecticides (*e.g.*, mosquito control, agricultural pest control) in areas where Florida bonneted bats are known or expected to forage or roost.
8. Conserve natural vegetation to promote insect diversity, availability, and abundance. For example, retain or restore 25% of the parcel in native contiguous vegetation.
9. Retain mature trees and snags that could provide roosting habitat. These may include live trees of various sizes and dead or dying trees with cavities, hollows, crevices, and loose bark. See “Roosting Habitat” in “Background” above.
10. Protect known Florida bonneted bat roost trees, snags or structures and trees or snags that have been historically used by Florida bonneted bats for roosting, even if not currently occupied, by retaining a 250 foot (76 m) disturbance buffer around the roost tree, snag, or structure to ensure that roost sites remain suitable for use in the future.
11. Avoid and minimize the use of artificial lighting, retain natural light conditions, and install wildlife friendly lighting (*i.e.*, downward facing and lowest lumens possible). Avoid permanent night-time lighting to the greatest extent practicable.
12. Incorporate engineering designs that discourage bats from using buildings or structures. If Florida bonneted bats take residence within a structure, contact the Service and Florida Fish and Wildlife Conservation Commission prior to attempting removal or when conducting maintenance activities on the structure.
13. Use or allow prescribed fire to promote foraging habitat.

Appendix E: Additional Best Management Practices (BMPs) for Land Management Projects

Ecological Land Management

The Service reviews and develops Ecological Land Management projects that use land management activities to restore and maintain native, natural communities that are beneficial to bats. These activities include prescribed fire, mechanical treatments to reduce vegetation densities, timber thinning to promote forest health, trail maintenance, and the treatment of exotic vegetation. The following BMPs provide recommendations for conserving Florida bonneted bat roosting and foraging habitat during ecological land management activities. The Service recommends incorporating these BMP into ecological land management plans.

If potential roost trees need to be removed, check cavities for bats prior to removal of trees or snags. If evidence of use by any bat species is observed, discontinue removal efforts in that area and coordinate with the Service on how to proceed.

Ecological Land Management BMPs:

- Protect potential roosting habitat during ecological land management activities, if feasible. Avoid removing trees or snags with cavities.
- Rake and/or manually clear vegetation around the base of known or suspected roost trees to remove fuel prior to prescribed burning.
- If possible, use ignition techniques such as spot fires or backing fire to limit the intensity of fire around the base of the tree or snag containing the roost. The purpose of this action is to prevent the known or suspected roost tree or snag from catching fire and also to attempt to limit the exposure of the roosting bats to heat and smoke. A 250-ft (76 m) buffer is recommended.
- If prescribed fire is being implemented to benefit Florida bonneted bats, Braun de Torrez et al. (2018) noted that fire in the dry/spring season could be most beneficial.
- When creating firebreaks or conducting fire-related mechanical treatment, mark and avoid any known or suspected bat roosts.
- When using heavy equipment, establish a buffer of 250 feet (76 m) around known roosts to limit disturbance to roosting bats.
- Establish forest management efforts to maintain tree species and size class diversity to ensure long-term supply of potential roost sites.
- For every 5 acres (2 hectares) of timber that is harvested, retain a clump of trees 1-2 acres (0.4 - 0.8 hectare) in size containing potential roost trees, especially pines and royal palms (live or dead). Additionally, large snags in open canopy should be preserved.

Literature Cited – Appendix E

Braun de Torrez, E.C., H.K. Ober, and R.A. McCleery. 2018. Activity of an Endangered Bat Increases Immediately Following Prescribed Fire. *The Journal of Wildlife Management*.

RON DESANTIS
GOVERNOR

Florida Department of Transportation

801 N



Florida Ecological Services Field Office

Service Project **2024-0042319**
Code No.

The U.S. Fish and Wildlife Service has reviewed the information provided and finds that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et. seq.). A record of this consultation is on file at the Florida Ecological Services Field Office.

This fulfills the requirements of section 7 of the Act and further action is not required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

**ROBERT
CAREY**

Digitally signed by ROBERT
CAREY
Date: 2024.02.02 11:16:52
-05'00'

Environmental Review Supervisor

January 26, 2024

**RE: Natural Resources Evaluation
Harborview Road from Melbourne
Charlotte County, Florida
FPID No.: 434965-2-32-01**

To Whom It May Concern:

The Florida Department of Transportation (FDOT) District One is proposing improvements to Harborview Road from Melbourne Street to I-75 in Charlotte County, Florida. The purpose of this project is to provide additional roadway capacity by widening from two to four lanes to address capacity needs based on projected travel demand generated by future population and economic growth. Multimodal considerations were addressed and the typical section includes shared-use paths on both sides of the roadway. The total project length is approximately 2.3 miles. The project was evaluated by the Environmental Technical Advisory Team (ETAT) through FDOT's Efficient Transportation Decision Making (ETDM) process as project #5351.

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.

The January 2019 Natural Resources Evaluation (NRE), completed as part of the PD&E Study, was provided to the Florida Fish and Wildlife Commission (FWC), Florida Department of Environmental Protection (FDEP), Southwest Florida Water Management District (SWFWMD), U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency (USEPA), U.S. Fish and Wildlife Services (USFWS), and National Marine Fisheries Service (NMFS).

During correspondence with USFWS, it was determined that consultation would be deferred to the design phase since information (e.g. project acoustic survey) was not yet available for the Florida bonneted bat. The project is now in the design phase, and some changes were made to the roadway typical section and horizontal alignment. The NRE Addendum (January 2024), prepared for the PD&E Re-evaluation, addresses the changes in the project and the subsequent changes to the natural environment, including listed

species. The identification of measures to avoid, minimize, and mitigate for any potential impacts is also discussed.

During correspondence with NMFS, it was determined that since bridge culvert construction details were not yet known, that consultation would be deferred to the design phase as well. The NRE Addendum includes this information required by the NMFS.

An acoustic survey for the Florida bonneted bat was conducted in April 2023 to assess the involvement of this species. Given the survey results and use of the finalized 2019 consultation key for the species, a determination of *may affect, not likely to adversely affect-Programmatic (MANLAA-P)* was made. This programmatic concurrence does not require further consultation with USFWS; however, Best Management Practices (BMPs) will be incorporated as per the key.

Proposed impacts to West Indian manatee Critical Habitat (CH) have been refined from the 0.14-acre PD&E estimate to 0.03-acre as per the proposed design. The PD&E phase commitment to implement construction precautions during in-water work will protect the species. There are no changes to the anticipated determination of effect of *may affect, not likely to adversely affect*. Since this effect determination was made with use of the species key, USFWS concurrence is not required. The effect determination for CH remains as *no adverse modification or destruction of Critical Habitat*. Concurrence is requested for this CH determination of effect.

The NRE Addendum details additional evaluation of listed species involvement under USFWS purview; however only the piping plover, with a determination of *may affect, not likely to adversely affect* requires USFWS informal consultation.

NMFS consultation is being requested for the smalltooth sawfish, smalltooth sawfish CH, and sea turtles. Proposed impacts to smalltooth sawfish CH have changed from 0.38-acre as estimated during the PD&E Study to 0.03-acre as per the proposed design. There is also 0.13-acre of presumed accessible habitat proposed for impact. In addition, 783 linear feet of mangrove shoreline, accessible to the species, is anticipated to be impacted. Other details of the proposed construction and project effects, including construction methods at the box culverts/cross-drains where in-water work will occur, are detailed in the NRE Addendum. Based on efforts to reduce potential construction-related impacts to the species and the PD&E phase commitment to implement construction precautions during in-water work, the effect determination is anticipated to change from *may affect, likely to adversely affect* to *may affect, not likely to adversely affect* after consultation with NMFS. The effect determination for CH remains as *no adverse modification or destruction of Critical Habitat*.

The NRE addendum documents the original determinations of effect for the leatherback sea turtles, green sea turtle, loggerhead sea turtle, and Kemp's ridley sea turtle as *may affect, not likely to adversely affect*. NMFS consultation is requested for these species.

The project is within Essential Fish habitat (EFH) for 55 managed species and the coral complex listed by the Gulf of Mexico Fishery Management Council (GMFMC). During the PD&E Study and subsequent design-phase field surveys, no seagrass or shellfish habitat was identified within the project area. EFH in the project footprint was refined to include the vegetated wetlands (primarily mangrove) surrounding estuarine open water habitats. Total impacts to EFH habitat changed from 0.38-acre to 0.30-acre. Therefore, the effect determination for these impacts will remain *minimal* on EFH. Impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 22 U.S.C. 1344.

Direct impacts to jurisdictional wetlands and surface waters were quantified and evaluated for the design change. There are 0.46 acres of direct impacts proposed to jurisdictional wetlands and 1.99 acres of direct impacts proposed to surface waters for a total of 2.45 acres. In the January 2019 NRE, wetland and surface water impacts resulting from the preferred alternative totaled 3.50 acres which included 0.80 acres of wetlands and 2.70 acres of surface waters. This reduction in impacts is due to more refined wetland and surface water boundaries. The exact type of mitigation to offset impacts will be coordinated with the USACE and the SWFWMD during the permitting phase of this project. Mitigation will be addressed pursuant to Chapter 373.4137, Florida Statutes (F.S.) in order to satisfy all mitigation requirements of Part IV, Chapter 373, F.S. and 33 U.S.C. 1344.

If you have any questions, feel free to contact me by phone at (863) 519-2375 or email at ryan.ellis@dot.state.fl.us at your convenience. Thank you for your assistance with this project.

Sincerely,



Ryan Ellis
Environmental Project Manager
Florida Department of Transportation, District One
801 North Broadway Avenue
Bartow, Florida 33830

From: [Ellis, Ryan](#)
To: [Kristin Caruso](#)
Subject: Fw: Document Review Confirmation for NRE Addendum
Date: Wednesday, February 21, 2024 10:32:35 AM

FWC comments

Ryan Ellis
Environmental Project Manager
Florida Department of Transportation, District One
801 North Broadway Avenue
Bartow, Florida 33830
(863) 519-2515
ryan.ellis@dot.state.fl



From: admin@fla-etat.org <admin@fla-etat.org>
Sent: Wednesday, February 21, 2024 10:31 AM
To: DiGruttolo, Laura <Laura.digruttolo@myfwc.com>
Cc: Ellis, Ryan <Ryan.Ellis@dot.state.fl.us>; ConservationPlanningServices@MyFWC.com
<ConservationPlanningServices@MyFWC.com>
Subject: Document Review Confirmation for NRE Addendum

EXTERNAL SENDER: Use caution with links and attachments.

A review was received for the following:

Event: 434965-2 NRE addendum Harborview rd
Document: NRE Addendum
Submitted By: Laura DiGruttolo
Global: Yes

Comments:

FWC staff agrees with the effect determinations for state-listed and managed wildlife species and supports the project implementation measures and commitments for protected species. Further coordination could be required during future species-specific surveys and project permitting.

Please note that Florida sandhill crane is species *Antigone canadensis pratensis* (State Threatened).

From: Mason, Heather M CIV USARMY CESAJ (USA) <Heather.M.Mason@usace.army.mil>
Sent: Monday, March 25, 2024 10:19 AM
To: Ellis, Ryan <Ryan.Ellis@dot.state.fl.us>
Subject: RE: 434965-2 NRE addendum Harborview rd

EXTERNAL SENDER: Use caution with links and attachments.

Thank you Ryan! I appreciate the explanation.

I don't have any other concerns at this time.

Heather M. Mason
Project Manager, FDOT Team
US Army Corps of Engineers
(239) 850-2171

From: Ellis, Ryan <Ryan.Ellis@dot.state.fl.us>

Sent: Monday, March 25, 2024 10:16 AM

To: Mason, Heather M CIV USARMY CESAJ (USA) <Heather.M.Mason@usace.army.mil>

Subject: [Non-DoD Source] 434965-2 NRE addendum Harborview rd

Good Morning Heather,

The acreage break down I may have worded in a confusing way.

The 0.03 break down is for CH for Small tooth sawfish for the section 7 consultation it went from 0.38 acres to 0.03 acres.

The acreage of CH for west Indian Manatee also went down to 0.03 acres.

But you are correct the EFH is still 0.30 acres.

I apologize I may have worded that badly, and hopefully this email clears up the confusion.

Let me know if you had any other concerns on the project.

Ryan Ellis
Environmental Project Manager
Florida Department of Transportation, District One
801 North Broadway Avenue
Bartow, Florida 33830
(863) 519-2515
ryan.ellis@dot.state.fl.



From: [Ellis, Ryan](#)
To: [Kristin Caruso](#)
Subject: Fw: Document Review Confirmation for NRE Addendum
Date: Monday, February 26, 2024 3:54:40 PM

See swfwmd comments

From: admin@fla-etat.org <admin@fla-etat.org>
Sent: Monday, February 26, 2024 3:53 PM
To: Chris.Kuzlo@swfwmd.state.fl.us <Chris.Kuzlo@swfwmd.state.fl.us>
Cc: Ellis, Ryan <Ryan.Ellis@dot.state.fl.us>
Subject: Document Review Confirmation for NRE Addendum

EXTERNAL SENDER: Use caution with links and attachments.

A review was received for the following:

Event: 434965-2 NRE addendum Harborview rd
Document: NRE Addendum
Submitted By: Przemyslaw Kuzlo
Global: Yes

Comments:

The Southwest Florida Water Management District (SWFWMD) has reviewed the Natural Resources Evaluation (NRE) for the referenced project. The SWFWMD is providing the following comments for consideration for the provided NRE:

1. Please note that as of February 15, 2024, the Environmental Protection Agency (EPA) has placed a hold on the Florida Department of Environmental Protection (FDEP) delegation of the Federal 404 Permitting. The District will continue processing the Environmental Resource Permit (ERP) as they have in recent years (i.e. data points and approximate wetland lines). The binding of wetland and surface water lines, associated with a project area, can only be accomplished through a Formal Wetland Delineation, as of the time of this report. Wetlands located in the project area are now considered to be retained by the Army Corp of Engineers (ACOE).
2. The NRE report identified wetland systems located outside of the project limits but within the 300-foot buffer used for this stage of project review. Please note that Subsection 7.2.2(e)(2)(e) of the ERP Applicant's Handbook Volume I indicates regulated activities within 200 feet of the landward extent of a wetland will require field established flags pursuant to Chapter 62-340, F.A.C.
3. The NRE provided the Uniform Mitigation Assessment Method (UMAM) forms for the impacted wetlands. Please note that the UMAMs will only be reviewed during the permitting process with the District and are not being agreed upon through this NRE review.
4. This project is located within the Peace River Basin. Mitigation banks located within this basin may be used to offset wetland impacts. The project appears to be located within the service areas for Peace River Mitigation Bank, Boran Ranch 1 Mitigation Bank, Boran Ranch 2 Mitigation Bank, Horse Creek Mitigation Bank, and Tippen Bay Mitigation Bank. Wetland mitigation should be offset within the watershed basin where the wetland impact is located unless a cumulative impact analysis is accepted by the

District. The mitigation banks listed above are determined as of the date of this memo and should be confirmed by the Department prior to submitting the permit application.

5. Due to the high demand for mitigation bank credits, a letter of reservation will be required once the functional loss is agreed upon by the District to demonstrate adequate quantities and type of functional gain credits are available to offset the wetland/surface water impacts being authorized through the permit.
6. Review of the District's permitting files indicates there are historical permits over the project area. While the wetland limits have exceeded the timeframe for binding the wetland lines, the information in the permits can provide some guidance.
7. Review of the aeriels in the District's ArcMap GIS indicates a Conservation Easement (CE) associated with Charlotte County Environmental Campus, ERP 44001960.003. It appears the CE is located outside of the project area; however, it is directly adjacent to the project so it should be noted.

See FDAC's comments

thanks

Ryan Ellis
Environmental Project Manager
Florida Department of Transportation, District One
801 North Broadway Avenue
Bartow, Florida 33830
(863) 519-2515
ryan.ellis@dot.state.fl.



From: admin@fla-etat.org <admin@fla-etat.org>
Sent: Tuesday, January 30, 2024 9:26 AM
To: Mark.Kiser@fdacs.gov <Mark.Kiser@fdacs.gov>
Cc: Ellis, Ryan <Ryan.Ellis@dot.state.fl.us>
Subject: Document Review Confirmation for NRE Addendum

EXTERNAL SENDER: Use caution with links and attachments.

A review was received for the following:

Event: 434965-2 NRE addendum Harborview rd

Document: NRE Addendum

Submitted By: Mark Kiser

Global: Yes

Comments:

The FFS concurs with the NRE addendum's updated determinations and commitments for protected species.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
<https://www.fisheries.noaa.gov/region/southeast>

F/SER46:DR
SERO-2024-00355

Katlin Kuhn-Hendricks
Project Delivery Coordinator
Florida Department of Transportation
Office of Environmental Management
605 Suwannee Street
Tallahassee, Florida 32399-6544

Ref.: Financial Management Number 434965-2-32-01, Harborview Road widening from
Melbourne Street to I-75, Port Charlotte, Charlotte County, Florida

Dear Katlin Kuhn-Hendricks,

The enclosed Biological Opinion responds to your request for consultation with us, the National Marine Fisheries Service (NMFS), pursuant to Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 et seq.) for the above referenced action. The Opinion has been given the NMFS tracking number SERO-2024-00355. Please use the NMFS tracking number in all future correspondence related to this action. The Florida Department of Transportation (FDOT) has received National Environmental Policy Act assignment authority from the Federal Highway Administration and is acting as their representative for this ESA Section 7 consultation.

The Opinion considers the effects of the FDOT's proposal to carry out the widening of Harborview Road from Melbourne Street to I-75 in Port Charlotte, Charlotte County, Florida on the following listed species and critical habitat: green sea turtle (North Atlantic Distinct Population Segment [DPS]), Kemp's ridley sea turtle, leatherback sea turtle, loggerhead sea turtle (Northwest Atlantic DPS), and smalltooth sawfish (U.S. DPS) and its designated critical habitat. The Opinion is based on information provided by the FDOT, and the published literature cited within. NMFS concludes that the proposed action will have no effect on leatherback sea turtle. NMFS concludes that the proposed action is not likely to adversely affect green sea turtle (North Atlantic DPS), Kemp's ridley sea turtle, loggerhead sea turtle (Northwest Atlantic DPS), and smalltooth sawfish. NMFS concludes that the proposed action is likely to adversely affect, but is not likely to result in the destruction or adverse modification of designated critical habitat (Charlotte Harbor Estuary Unit) for smalltooth sawfish.

We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and critical habitat. If you have any questions on



this consultation, please contact Dr. Dave Rydene, Consultation Biologist, at (727) 824-5379 or by email at David.Rydene@noaa.gov.

Sincerely,

Andrew J. Strelcheck
Regional Administrator

Enclosure:
NMFS Biological Opinion SERO-2024-00355
cc: Ryan.Ellis@dot.state.fl.us
nmfs.ser.esa.consultations@noaa.gov
File: 1514-22.1.4

**Endangered Species Act - Section 7 Consultation
Biological Opinion**

Action Agency: Florida Department of Transportation on behalf of the Federal Highways Administration

Financial Management Number 434965-2-32-01

Applicant: Florida Department of Transportation

Activity: Harborview Road widening from Melbourne Street to I-75

Location: Port Charlotte, Charlotte County, Florida

Consulting Agency: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Regional Office, Protected Resources Division, St. Petersburg, Florida

NMFS Tracking Number: SERO-2024-00355

Approved by:

Andrew J. Strelcheck, Regional Administrator
NMFS, Southeast Regional Office
St. Petersburg, Florida

Date Issued:

TABLE OF CONTENTS

Table of Contents	i
List of Figures.....	ii
List of Tables	ii
Acronyms, Abbreviations, and Units of Measure	ii
1 INTRODUCTION.....	1
1.1 Overview	1
1.2 Consultation History	2
2 PROPOSED ACTION.....	2
2.1 Project Details	2
2.1.1 Project Description.....	2
2.1.2 Mitigation Measures	3
2.1.3 Best Practices	3
2.2 Action Area.....	3
3 EFFECTS DETERMINATIONS	5
3.1 Effects Determinations for ESA-Listed Species.....	5
3.1.1 Agency Effects Determinations	5
3.1.2 Effects Analysis for ESA-Listed Species Not Likely to be Adversely Affected by the Proposed Action.....	6
3.1.3 ESA-Listed Species Likely to be Adversely Affected by the Proposed Action	8
3.2 Effects Determination for Critical Habitat.....	8
3.2.1 Agency Effects Determination.....	8
3.2.2 Critical Habitat Likely to be Adversely Affected by the Proposed Action	8
4 STATUS OF CRITICAL HABITAT CONSIDERED FOR FURTHER ANALYSIS	9
5 ENVIRONMENTAL BASELINE	19
5.1 Overview	19
5.2 Baseline Status of Critical Habitat Considered for Further Analysis	19
5.3 Additional Factors Affecting the Baseline Status of Critical Habitat Considered for Further Analysis.....	20
5.3.1 Federal Actions	20
5.3.2 State and Private Actions	20
5.3.3 Habitat Modification and Degradation	20
5.3.4 Stochastic Events	20
5.3.5 Climate Change.....	21
5.3.6 Conservation and Recovery Actions Shaping the Environmental Baseline	21
6 EFFECTS OF THE ACTION	21
6.1 Overview	21
6.2 Effects of the Proposed Action on Critical Habitat Considered for Further Analysis.....	22
6.2.1 Routes of Effect that Are Likely to Adversely Affect Critical Habitat	22
7 CUMULATIVE EFFECTS.....	23
8 DESTRUCTION OR ADVERSE MODIFICATION ANALYSIS	23
8.1 Protect and Restore Smalltooth Sawfish Habitat (Recovery Objective #2)	23
8.1.1 Red Mangrove Essential Feature Impacts.....	24
1.1.1 Summary of Impacts to the Essential Features	26
8.1.2 Ensure Smalltooth Sawfish Abundance Increases (Recovery Objective #3)	26
9 CONCLUSION	27

10	INCIDENTAL TAKE STATEMENT	27
10.1	Overview.....	27
11	CONSERVATION RECOMMENDATIONS	28
12	REINITIATION OF CONSULTATION	29
13	LITERATURE CITED	29

LIST OF FIGURES

Figure 1. The project site at Harborview Road in relation to the Peace River and the greater Charlotte Harbor System	4
Figure 2. The project site at Harborview Road, showing the location of the box culvert bridge crossing an unnamed salt creek.....	5
Figure 3. Map of smalltooth sawfish critical habitat – Charlotte Harbor Estuary Unit	10
Figure 4. Diagram A depicts a cross section of a historically dredged channel/canal within the boundaries of the critical habitat units that has not been maintained. Diagram B depicts the typical cross section of a maintenance-dredged channel/canal. Diagram C depicts a cross section of a maintained dredged channel/canal after sea level rise of > 1 ft.	15
Figure 5. From left to right: current shoreline, + 3.5 in (+ 9 cm); + 18.5 in (+ 47 cm); and + 38.97 in (+ 99 cm) sea level rise by 2060	17

LIST OF TABLES

Table 1. ESA-listed Species in the Action Area and Effect Determinations.....	5
Table 2. Critical Habitat in the Action Area and Effect Determinations.....	8

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

ac	acre(s)
°C	degrees Celsius
CFR	Code of Federal Regulations
CHEU	Charlotte Harbor Estuary Unit
cm	centimeter(s)
CO ₂	Carbon Dioxide
DPS	Distinct Population Segment
ECO	Environmental Consultation Organizer
EFH	Essential Fish Habitat
ESA	Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 et seq.)
°F	degrees Fahrenheit
FDEP	Florida Department of Environmental Protection
ft	foot/feet
FR	Federal Register
ft ²	square foot/feet
FWC	Florida Fish and Wildlife Conservation Commission
FWRI	Florida Fish and Wildlife Research Institute
FR	Federal Register
in	inch(es)

IPCC	Intergovernmental Panel on Climate Change
km	kilometer(s)
lin ft	linear foot/feet
m	meter(s)
MHW	Mean High Water
mi	mile(s)
mi ²	square mile(s)
MIT	Massachusetts Institute of Technology
MLLW	Mean Lower Low Water
MMPA	Marine Mammal Protection Act
MMF	Marine Megafauna Foundation
MSA	Magnuson-Stevens Fishery Conservation and Management Act
N/A	not applicable
NAD 83	North American Datum of 1983
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
Opinion	Biological Opinion, Conference Biological Opinion, or Draft Biological Opinion
PK	Peak Pressure injury threshold
PTS	Permanent Threshold Shift
SERO PRD	NMFS Southeast Regional Office, Protected Resources Division
SAV	Submerged Aquatic Vegetation
SELcum	Cumulative Sound Exposure Level injury threshold
SSRIT	Smalltooth Sawfish Recovery Implementation Team
STSSN	Sea Turtle Stranding and Salvage Network
TTIEU	Ten Thousand Islands/Everglades Unit
U.S.	United States of America
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
YOY	young-of-the-year

1 INTRODUCTION

1.1 Overview

Section 7(a)(2) of the ESA, requires that each federal agency ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. Section 7(a)(2) requires federal agencies to consult with the appropriate Secretary in carrying out these responsibilities. The NMFS and the USFWS share responsibilities for administering the ESA. Consultations on most ESA-listed marine species and their critical habitat are conducted between the federal action agency and NMFS (hereafter, may also be referred to as we, us, or our).

Consultation is required when a federal action agency determines that a proposed action “may affect” ESA-listed species or critical habitat and can be conducted informally or formally. Informal consultation is concluded after NMFS issues a Letter of Concurrence that concludes that the action is “not likely to adversely affect” ESA-listed species or critical habitat. Formal consultation is concluded after we issue a Biological Opinion (hereafter, referred to as an/the Opinion) that identifies whether a proposed action is “likely to jeopardize the continued existence of an ESA-listed species” or “destroy or adversely modify critical habitat,” in which case Reasonable and Prudent Alternatives to the action as proposed must be identified to avoid these outcomes. An Opinion often states the amount or extent of anticipated incidental take of ESA-listed species that may occur, develops Reasonable and Prudent Measures necessary to minimize the impacts, i.e., amount or extent, of the anticipated incidental take, and lists the Terms and Conditions to implement those measures. An Opinion may also develop Conservation Recommendations that help benefit ESA-listed species.

This document represents NMFS’s Opinion based on our review of potential effects of the FDOT’s proposal to carry out the widening of Harborview Road from Melbourne Street to I-75 in Port Charlotte, Charlotte County, Florida on the following listed species and critical habitat: green sea turtle (North Atlantic Distinct Population Segment [DPS]), Kemp’s ridley sea turtle, leatherback sea turtle, loggerhead sea turtle (Northwest Atlantic DPS), and smalltooth sawfish (U.S. DPS) and its designated critical habitat. Our Opinion is based on information provided by the FDOT, and the published literature cited within.

On July 5, 2022, the U.S. District Court for the Northern District of California issued an order vacating the 2019 regulations that were revised or added to 50 CFR part 402 in 2019 (“2019 Regulations,” see 84 FR 44976, August 27, 2019) without making a finding on the merits. On September 21, 2022, the U.S. Court of Appeals for the Ninth Circuit granted a temporary stay of the district court’s July 5 order. On November 14, 2022, the Northern District of California issued an order granting the government’s request for voluntary remand without vacating the 2019 regulations. The District Court issued a slightly amended order two days later on November 16, 2022. As a result, the 2019 regulations remain in effect, and we are applying the 2019 regulations here. For purposes of this consultation and in an abundance of caution, we considered whether the substantive analysis and conclusions articulated in the Opinion and

Incidental Take Statement would be any different under the pre-2019 regulations. We have determined that our analysis and conclusions would not be any different.

1.2 Consultation History

The following is the consultation history for the NMFS ECO tracking number SERO-2024-00355, Harborview Road Widening.

We received a request for formal consultation under Section 7 of the ESA from the FDOT to carry out the widening of Harborview Road from Melbourne Street to I-75 in Port Charlotte, Charlotte County, Florida, in a letter dated February 22, 2024. We initiated formal consultation that day.

2 PROPOSED ACTION

2.1 Project Details

2.1.1 Project Description

The FDOT proposes widening Harborview Road from Melbourne Street to I-75 in Charlotte County, Florida. The road would be widened from 2 lanes to 4 lanes, and the project includes the replacement of a small box culvert bridge (10 ft by 7 ft) that spans an unnamed salt creek that connects to the Peace River and lies at the boundary of designated critical habitat for smalltooth sawfish (Charlotte Harbor Estuary Unit). The overall project is expected to take approximately 4 years to complete, starting during November 2025 and ending in 2029. However, the box culvert bridge portion of the project (where the NMFS has concerns) will only take 6 to 8 months to complete.

The culvert replacement will require the temporary installation of steel sheet pile cofferdams on each side of the culvert. These cofferdams will be dewatered once they are in place. A total of 78 in-water sheet piles will be installed by vibratory hammer. Approximately 10 to 15 sheet piles will be installed each day. During the blockage period, pumps will be used to maintain water exchange between the creek and the river.

The cofferdams will block ingress and egress into and out of the creek for 2 weeks, but blockage will not be allowed during the sawfish pupping season from March 1 through July 31. Prior to cofferdam installation, staff from the FWC will be notified to allow them to sweep the creek with nets and remove any sawfish that may be in the creek. This will prevent any sawfish from being trapped in the creek during the 2-week closure period. Except for the 2-week blockage, the project will proceed with a staged construction approach to maintain an unobstructed connection between the salt creek and the Peace River. Up to 400 ft² (60 lin ft) of riprap may be placed at the base of the new culvert.

The demolition of the existing culvert may require the use of jack hammers and/or saw-cuts to mechanically dismantle it. A ramp-up technique will be used at the onset to allow animals time to leave the area before work proceeds at full volume. Demolition debris will be removed and

disposed of at an off-site location. No blasting is proposed as part of the demolition.

In-water work will only occur during daylight hours, and best management practices and turbidity controls will be implemented to maintain water quality surrounding the project area. Water depths at the project site will not be altered due to the project. No dredging is proposed and no work boats or barges will be used.

2.1.2 Mitigation Measures

FDOT agrees to adhere to NMFS Southeast Region's *Protected Species Construction Conditions*. In-water pile driving will only occur during daylight hours. The contractor will use a "ramp up" or "soft-start" technique at the onset of each day's demolition activities (jack hammering or saw cutting), using low force blows or sawing initially and gradually increasing to full force blows or sawing. Best Management Practices, including turbidity curtains and sediment control devices, will be employed to prevent erosion and contain turbidity. Turbidity curtains will not be removed until turbidity levels have returned to background levels. Blockage of the unnamed creek by cofferdams will not be allowed during the sawfish pupping season from March 1 through July 31, and the creek will only be blocked for a 2-week period outside of the pupping season. Prior to cofferdam installation, staff from the FWC will be notified to allow them to sweep the creek with nets and remove any sawfish that may be in the creek, and prevent their entrapment in the creek. Installation of cofferdam sheet piles may only be accomplished by the vibratory hammer method.

2.1.3 Best Practices

The applicant will report all future sightings of smalltooth sawfish at the property to the FWC via E-mail: Sawfish@MyFWC.com, or telephone: 844-472-9347 (1-844-4SAWFISH).

2.2 Action Area

The project site is located at 26.972016°N and 82.032762°W (NAD 83) in Port Charlotte, Charlotte County, Florida. The project site is located adjacent to the shoreline of the Peace River and crosses an unnamed salt creek connected to the Peace River. The salt creek is tidally-influenced and connects with the Peace River near the river's mouth in Port Charlotte, Florida. The bottom type at the project location is sand, and water depths at the box culvert bridge are approximately 4 ft at MLLW. The project is expected to have direct impacts to 62 lin ft of red mangrove shoreline that lies within the boundaries of smalltooth sawfish designated critical habitat. The project will also impact 166 lin ft of red mangrove shoreline that lies outside of the sawfish critical habitat boundary.

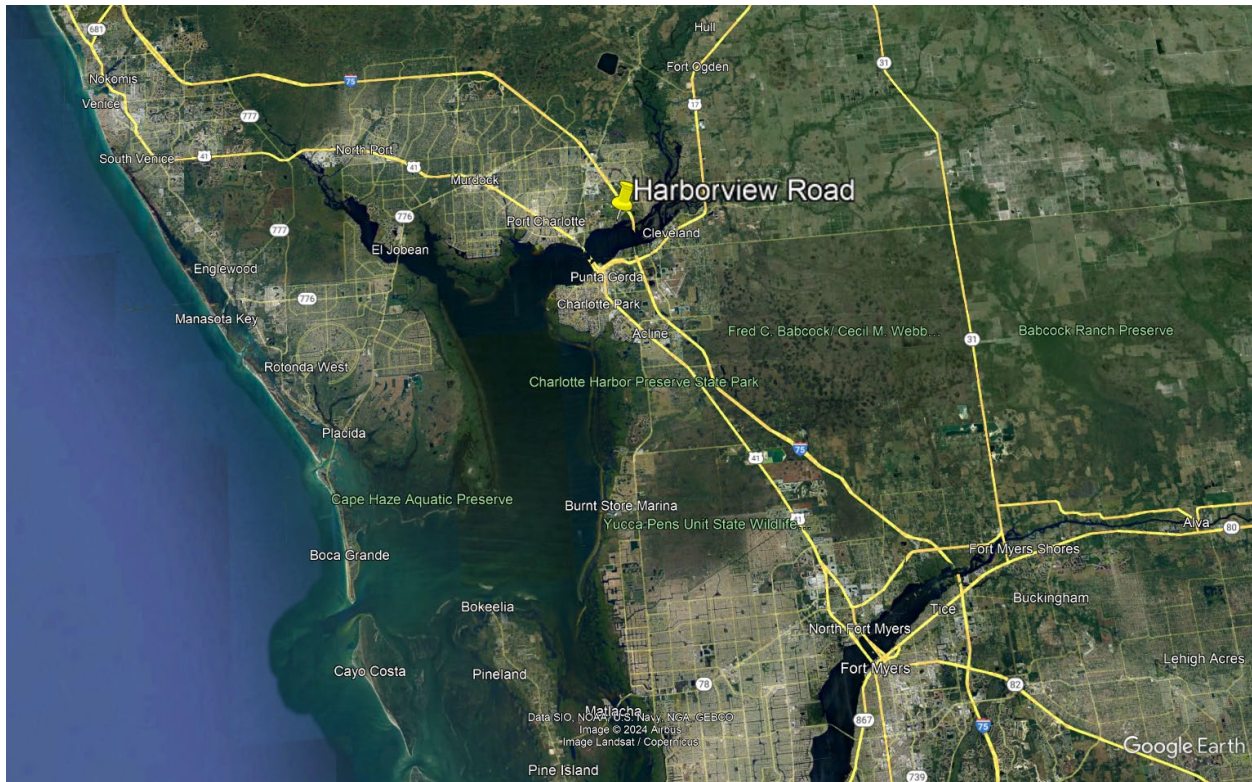


Figure 1.
The project site at Harborview Road in relation to the Peace River and the greater Charlotte Harbor System (©2024 Google).

The action area is defined by regulation as all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action (50 CFR 402.02). For the purposes of this federal action, the action area includes the sandy bottom of the unnamed creek and associated shoreline mangroves. For this project, the action area includes a zone extending 241.4 ft from box culvert bridge construction activities (due to potential behavioral disturbance effects from in-water vibratory pile-driving noise). The bridge is located at approximately 26.972016°N and 82.032762°W (North American Datum 1983). There are no corals or SAV within the action area. A portion of the action area is within the boundary of smalltooth sawfish designated critical habitat (Charlotte Harbor Estuary Unit).



Figure 2.
 The project site at Harborview Road, showing the location of the box culvert bridge crossing an unnamed salt creek (©2024 Google).

3 EFFECTS DETERMINATIONS

Please note the following abbreviations are only used in **Table 1** and **Table 2** and are not, therefore, included in the list of acronyms: E = endangered; T = threatened; LAA = likely to adversely affect; NLAA = may affect, not likely to adversely affect; NE = no effect.

3.1 Effects Determinations for ESA-Listed Species

3.1.1 Agency Effects Determinations

We have assessed the ESA-listed species that may be present in the action area and our determination of the project’s potential effects is shown in **Table 1** below.

Table 1. ESA-listed Species in the Action Area and Effect Determinations

Species (DPS)	ESA Listing Status	Listing Rule/Date	Most Recent Recovery Plan (or Outline) Date	Action Agency Effect Determination	NMFS Effect Determination
Sea Turtles					

Species (DPS)	ESA Listing Status	Listing Rule/Date	Most Recent Recovery Plan (or Outline) Date	Action Agency Effect Determination	NMFS Effect Determination
Green sea turtle (North Atlantic DPS)	T	81 FR 20057/ April 6, 2016	October 1991	<u>NLAA</u>	<u>NLAA</u>
Kemp's ridley sea turtle	E	35 FR 18319/ December 2, 1970	September 2011	<u>NLAA</u>	<u>NLAA</u>
Leatherback sea turtle	E	35 FR 8491/ June 2, 1970	April 1992	<u>NLAA</u>	<u>NE</u>
Loggerhead sea turtle (Northwest Atlantic DPS)	T	76 FR 58868/ September 22, 2011	December 2008	<u>NLAA</u>	<u>NLAA</u>
Fishes					
Smalltooth sawfish (U.S. DPS)	E	68 FR 15674/ April 1, 2003	January 2009	<u>NLAA</u>	<u>NLAA</u>

We believe the project will have no effect on leatherback sea turtles due to the species' very specific life history strategies, which are not supported in the action area. Leatherback sea turtles have pelagic, deepwater life history, where they forage primarily on jellyfish. The action area occurs inshore.

3.1.2 Effects Analysis for ESA-Listed Species Not Likely to be Adversely Affected by the Proposed Action

Effects to ESA-listed species include the risk of injury from direct impact by construction machinery and associated activities (e.g., heavy equipment operation, pile-driving operations). We believe this will be extremely unlikely to occur because ESA-listed species are likely to exhibit avoidance behavior and move away from the project site. The applicant's compliance with NMFS Southeast Region's *Protected Species Construction Conditions* will provide an additional measure of protection by requiring in-water construction activities to stop if ESA-listed species are spotted within 150 ft of operations.

The project will result in the permanent loss of a total 228 lin ft of red mangrove shoreline (62 lin ft of which are within the CHEU of critical habitat for smalltooth sawfish). Smalltooth sawfish and sea turtles may be affected by the permanent removal of these resources, which these species may use as habitat for sheltering and foraging for prey. We believe the effects on smalltooth sawfish and sea turtles caused by this loss of habitat will be insignificant because similar red mangrove habitat is highly abundant in the vicinity of the project area.

The installation of the temporary cofferdam will prevent the movement of ESA-listed species between the salt creek and the Peace River for a 2-week period outside of the smalltooth sawfish pupping season. We consider this effect to be insignificant as FWC sawfish researchers will be given the opportunity to sweep the creek to capture and relocate animals that may be in the creek before the cofferdams are put in place (to prevent entrapment). Additionally, the closure period is short in duration.

Of the 3 types of noise-producing activities proposed (jack hammering of the existing box culvert, saw-cutting of the existing box culvert, and vibratory hammer installation of steel sheet piles for temporary cofferdams), the vibratory hammer installation of steel sheet piles for temporary cofferdams creates the greatest amount of in-water noise and has the most potential to impact ESA-listed species under the NMFS's purview. Therefore, the vibratory hammer installation of steel sheet piles for temporary cofferdams will be analyzed as the scenario with the most potential for extensive in-water noise effects.

Noise created by pile driving activities can physically injure animals or change animal behavior in the affected areas. Injurious effects can occur in two ways. First, immediate adverse effects can occur if a single noise event exceeds the threshold for direct physical injury. Second, effects can result from prolonged exposure to noise levels that exceed the daily cumulative sound exposure level (SELcum) threshold for the animals, and these can constitute adverse effects if animals are exposed to the noise levels for sufficient periods. Behavioral effects can be adverse if such effects interfere with an animal's behavior such as migrating, feeding, resting, or reproducing. The noise analysis in this consultation evaluates effects to ESA-listed fish and sea turtles, identified by FDOT that may be affected by the proposed action. NMFS uses the U.S. Navy Phase III criteria (U.S. Department of the Navy, 2017) as the thresholds for vibratory pile driving listed below. Root Mean Square (RMS) sound pressure is referenced to dB 1 μ PA. Sound Exposure Level (SEL) and SELcum are referenced to dB 1 μ PA²-second. For vibratory hammer pile driving, the behavioral disturbance threshold for ESA-listed fishes is 150 dB RMS. For vibratory pile driving, the SELcum injury threshold for sea turtles based on a potential Permanent Threshold Shift (i.e., hearing loss or PTS) is 220 dB SELcum, while the behavioral disturbance threshold for sea turtles is 175 dB RMS.

According to the NMFS Multi-Species Pile Driving Tool (2021), the installation of up to 15 steel sheet piles per day by vibratory hammer (480 minutes total vibratory driving per day) may cause SELcum injurious noise effects to ESA-listed sea turtles at a radius of up to 4.9 ft away from the pile-driving operations. The proposed pile installation will not result in any SELcum injurious noise effects to ESA-listed fishes. We believe SELcum injurious noise effects (i.e., PTS) are extremely unlikely to occur because this distance is well within the 150 ft "stop-work" radius defined in SERO's *Protected Species Construction Conditions* (2021). Movement away from the injurious sound radius is a behavioral response, which is discussed below.

According to the NMFS Multi-Species Pile Driving Tool (2021), the installation of up to 15 steel sheet piles per day by vibratory hammer (480 minutes total vibratory driving per day) could result in behavioral noise effects to ESA-listed fishes at a radius of up to 241.4 ft from the pile driving operations, and sea turtles at a radius of up to 5.2 ft from the pile driving operations. We believe behavioral noise effects will be insignificant due to the mobility of these species and the similarity of nearby habitat in this open-water environment. If an individual chooses to remain

within the behavioral response zone, it could be exposed to behavioral noise effects during sheet pile installations. Since in-water pile installations will occur intermittently during daylight hours only, these species will be able to resume normal activities during quiet periods between pile installations and at night.

3.1.3 ESA-Listed Species Likely to be Adversely Affected by the Proposed Action

We have determined that none of the species that appear in Table 1 are likely to be adversely affected by the proposed action and thus do not require further analysis.

3.2 Effects Determination for Critical Habitat

3.2.1 Agency Effects Determination

We have assessed the critical habitat that overlaps with the action area and our determination of the project’s potential effects is shown in **Table 2** below.

Table 2. Critical Habitat in the Action Area and Effect Determinations

Species (DPS)	Critical Habitat Unit in the Action Area	Critical Habitat Rule/Date	Action Agency Effect Determination	NMFS Effect Determination (Critical Habitat)
Fishes				
Smalltooth sawfish (U.S. DPS)	<u>Charlotte Harbor Estuary Unit</u>	74 FR 45353/ September 2, 2009	<u>NLAA</u>	<u>LAA</u>

3.2.2 Critical Habitat Likely to be Adversely Affected by the Proposed Action

The project is located within the boundary of smalltooth sawfish critical habitat (CHEU). The following physical or biological features essential for the conservation of the species (“essential features”) are present in the CHEU:

1. Red mangroves; and,
2. shallow, euryhaline habitats characterized by water depths between the MHW line and 3 ft (0.9 m) measured at MLLW.

Due to permanent impacts to the red mangrove shoreline essential feature, we have determined that smalltooth sawfish critical habitat (CHEU) is likely to be adversely affected by the proposed action and thus requires further analysis. We provide greater detail on the potential effects to critical habitat from the proposed action in the Effects of the Action (Section 6.2) and whether those effects, when considered in the context of the Status of the Critical Habitat (Section 4.2), the Environmental Baseline (Section 5), and the Cumulative Effects (Section 7), are likely to cause destruction or adverse modification of critical habitat.

4 STATUS OF CRITICAL HABITAT CONSIDERED FOR FURTHER ANALYSIS

Smalltooth Sawfish Critical Habitat

The U.S. DPS of smalltooth sawfish was listed as endangered on April 1, 2003; however, at that time, NMFS was unable to determine critical habitat. After funding additional studies necessary for the identification of specific habitats and environmental features important for the conservation of the species, establishing a smalltooth sawfish recovery team, and reviewing the best scientific data available, NMFS issued a Final Rule (74 FR 45353; see also 50 CFR 226.218) to designate critical habitat for the U.S. DPS of smalltooth sawfish on September 2, 2009. Through the additional studies, researchers identified 2 primary nursery areas in southwest Florida and centered the critical habitat designations around these nurseries. The critical habitat consists of 2 units located along the southwestern coast of Florida: the CHEU, which is comprised of approximately 221,459 ac (346 mi²) of coastal habitat, and the Ten Thousand Islands/Everglades Unit (TTIEU), which is comprised of approximately 619,013 ac (967 mi²) of coastal habitat.

Critical Habitat Unit Affected by this Action

This consultation focuses on an activity occurring in the CHEU, which encompasses portions of Charlotte and Lee Counties (Figure 3). The CHEU is comprised of Charlotte Harbor, Gasparilla Sound, Matlacha Pass, Pine Island Sound, San Carlos Bay, and Estero Bay. The unit is fed by the Myakka and Peace Rivers to the north and the Caloosahatchee River to the east. A series of passes between barrier islands connect the CHEU with the Gulf of Mexico. The CHEU is a relatively shallow estuary with large areas of submerged aquatic vegetation (SAV), oyster bars, saltwater marsh, freshwater wetlands, and mangroves. Freshwater flows from the Caloosahatchee River are controlled by the Franklin Lock and Dam, which periodically releases water, which thereby affects downstream salinity regimes. The CHEU boundaries are defined in detail in the Final Rule (74 FR 45353; see also 50 CFR 226.218).

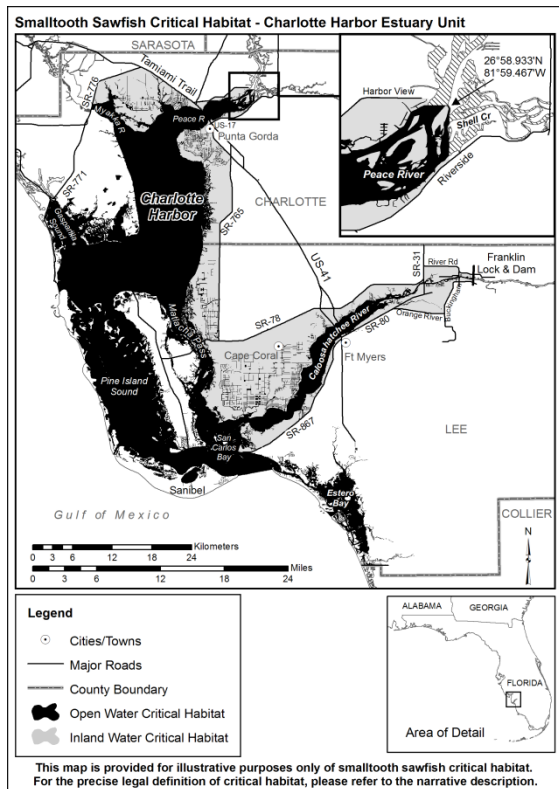


Figure 3.
Map of smalltooth sawfish critical habitat – Charlotte Harbor Estuary Unit

Essential Features of Critical Habitat

The recovery plan developed for the smalltooth sawfish, which represents NMFS’s best judgment about the objectives and actions necessary for the species’ recovery, identified a need to increase the number of juvenile smalltooth sawfish developing into adulthood by protecting or restoring nursery habitat (NMFS 2009). NMFS determined that without sufficient habitat, the population was unlikely to increase to a level associated with low extinction risk and de-listing. Therefore, within the 2 critical habitat units NMFS identified 2 habitat features essential for the conservation of this species: (1) red mangroves, and (2) shallow, euryhaline habitats characterized by water depths between the MHW line and 3 ft (0.9 m) measured at MLLW (Final Rule, 74 FR 45353). These essential features of critical habitat provide juveniles refuge from predation and forage opportunities within their nursery habitat. One or both of these essential features must be present in an action area for it to function as critical habitat for smalltooth sawfish.

Habitat Use

Juvenile smalltooth sawfish, identified as those up to 3 years of age or approximately 8 ft (2.4 m) in length (Simpfendorfer et al. 2008), inhabit the shallow waters of estuaries and can be found in sheltered bays, dredged canals, along banks and sandbars, and in rivers (NMFS 2000). Juvenile smalltooth sawfish occur in euryhaline waters (i.e., waters with a wide range of salinities) and are often closely associated with muddy or sandy substrates, and shorelines containing red mangroves (Simpfendorfer 2001; 2003). The structural complexity of red mangrove prop roots creates a unique habitat used by a variety of fish, invertebrates, and birds. Juvenile smalltooth sawfish, particularly YOY (measuring less than 39.4 in [100 cm in length]), use these areas as both refuge from predators and forage grounds, taking advantage of the large number of fish and invertebrates found there.

Tracking data from the Caloosahatchee River in Florida indicate very shallow depths and specific salinity ranges are important abiotic factors influencing juvenile smalltooth sawfish movement patterns, habitat use, and distribution (Simpfendorfer et al. 2011). An acoustic tagging study in a developed region of Charlotte Harbor, Florida, identified the importance of mangroves in close proximity to shallow-water habitat for juvenile smalltooth sawfish, stating that juveniles generally occur in shallow water within 328 ft (100 m) of mangrove shorelines (Simpfendorfer et al. 2010). Juvenile smalltooth sawfish spend the majority of their time in waters shallower than 13 ft (4 m) deep (Simpfendorfer et al. 2010) and are seldom found deeper than 32 ft (10 m) (Poulakis and Seitz 2004). Simpfendorfer et al. (2010) also indicated the following developmental differences in habitat use: the smallest YOY juveniles generally used water shallower than 1.6 ft (0.5 m), had small home ranges, and exhibited high levels of site fidelity. Although small juveniles exhibit high levels of site fidelity for specific nursery habitats for periods of time lasting up to 3 months (Wiley and Simpfendorfer 2007), they undergo small movements coinciding with changing tidal stages. These movements often involve moving from shallow sandbars at low tide and among red mangrove prop roots at higher tides (Simpfendorfer et al. 2010), behavior likely to reduce the risk of predation (Simpfendorfer 2006). As juveniles increase in size, they begin to expand their home ranges (Simpfendorfer et al. 2010; Simpfendorfer et al. 2011), eventually moving to more offshore habitats where they likely feed on larger prey and eventually reach sexual maturity.

Researchers have identified several areas within the Charlotte Harbor Estuary that are disproportionately more important to juvenile smalltooth sawfish, based on intra- or inter-annual capture rates during random sampling events within the estuary (Poulakis 2012; Poulakis et al. 2011). The areas, which were termed “hotspots” in Poulakis et al. (2011), correspond with areas where public encounters are most frequently reported. Use of these “hotspots” can be variable within and among years based on the amount and timing of freshwater inflow. Smalltooth sawfish use “hotspots” further upriver during drought (i.e., high salinity) conditions and areas closer to the mouth of the Caloosahatchee River during times of high freshwater inflow (Poulakis et al. 2011). At this time, researchers are unsure what specific biotic (e.g., presence or absence of predators and prey) or abiotic factors (e.g., flow rate, water temperature, etc.) influence this habitat selection. Still, they believe a variety of conditions in addition to salinity, such as temperature, dissolved oxygen, water depth, shoreline vegetation, and food availability, may influence smalltooth sawfish habitat selection (Poulakis et al. 2011).

Status and Threats to Critical Habitat

Modification and loss of smalltooth sawfish critical habitat is an ongoing threat contributing to the current status of the species. Activities such as agricultural and urban development, commercial activities, dredge-and-fill operations, boating, erosion, and diversions of freshwater runoff contribute to these losses (South Atlantic Fishery Management Council 1998). Large areas of coastal habitat were modified or lost between the mid-1970s and mid-1980s within the United States (Dahl and Johnson 1991; USFWS 1999). Since then, rates of loss have decreased even though habitat loss continues. Between 1998 and 2004, approximately 2,450 ac (3.8 mi²) of intertidal wetlands consisting of mangroves or other estuarine shrubs were lost along the Atlantic and Gulf coasts of the United States (Stedman and Dahl 2008). In another study, Orlando Jr. et al. (1994) analyzed 18 major southeastern estuaries and recorded over 703 mi (1,131 km) of navigation channels and 9,844 mi (15,842 km) of shoreline with modifications. Additionally, changes to the natural freshwater flows into estuarine and marine waters through construction of canals and other water-control devices have altered the temperature, salinity, and nutrient regimes, reduced both wetlands and SAV coverage, and degraded vast areas of coastal habitat utilized by smalltooth sawfish (Gilmore 1995; Quigley and Flannery 2002; Reddering 1988; Whitfield and Bruton 1989). Juvenile sawfish and their critical habitat are particularly vulnerable to these kinds of habitat losses or alterations due to the juveniles' affinity for (and developmental need of) shallow, estuarine systems. Although many forms of habitat modification are currently regulated, some permitted direct and/or indirect damage to habitat from increased urbanization still occurs and is expected to continue in the future.

In Florida, coastal development often involves the removal of mangroves, the armoring of shorelines through seawall construction, and the dredging of canals. This is especially apparent in master plan communities such as Cape Coral and Punta Gorda, which are located within the Charlotte Harbor Estuary. These communities were created through dredge-and-fill projects to increase the amount of waterfront property available for development, but in doing so, developers removed the majority of red mangrove habitat from the area. The canals created by these communities require periodic dredging for boat access, further affecting the shallow, euryhaline essential feature of critical habitat. Development continues along the shorelines of Charlotte Harbor in the form of docks, boat ramps, shoreline armoring, utility projects, and navigation channel dredging.

To protect critical habitat, federal agencies must ensure that their activities are not likely to result in the destruction or adverse modification of the physical and biological features that are essential to the conservation of sawfish, or the species' ability to access and use these features (ESA Section 7(a)(2); see also 50 CFR 424.12(b) [discussing essential features]). Therefore, proposed actions that may impact critical habitat require an analysis of potential impacts to each essential feature. As mentioned previously, there are 2 essential features of smalltooth sawfish critical habitat: (1) red mangroves; and (2) shallow, euryhaline habitats characterized by water depths between the MHW line and 3 ft (0.9 m) measured at MLLW. The USACE oversees the permitting process for residential and commercial marine development in the CHEU. The Florida Department of Environmental Protection (FDEP) and their designated authorities also regulate mangrove removal in Florida. All red mangrove removal permit requests within

smalltooth sawfish critical habitat necessitate ESA Section 7 consultation. NMFS Protected Resources Division tracks the loss of these essential features of smalltooth sawfish critical habitat.

Threats to Critical Habitat

Dock and Boat Ramp Construction

The USACE recommends that applicants construct docks in accordance with the NMFS-USACE *Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh, or Mangrove Habitat* (“Dock Construction Guidelines”) when possible. The current dock construction guidelines allow for some amount of mangrove removal; however, it is typically restricted to either (1) trimming to facilitate a dock, or (2) complete removal up to the width of the dock extending toward open water, which the guidelines define as a width of 4 ft.

Installation or replacement of boat ramps is often part of larger projects such as marinas, bridge approaches, and causeways where natural and previously created deepwater habitat access channels already exist. Boat ramps can result in the permanent loss of both the red mangrove and the shallow, euryhaline habitat features of critical habitat for smalltooth sawfish.

Marina Construction

Marinas have the potential to adversely affect aquatic habitats. Marinas are typically designed to be deeper than 3 ft MLLW to accommodate vessel traffic; therefore, most existing marinas lacking essential features are unlikely to function as critical habitat for smalltooth sawfish. The expansion of existing marinas and creation of new marinas can result in the permanent loss of large areas of this nursery habitat.

Bulkhead and Seawall Construction

Bulkheads and other shoreline stabilization structures are used to protect adjacent shorelines from wave and current action and to enhance water access. These projects may adversely impact critical habitat for smalltooth sawfish by removal of the essential features through direct filling and dredging to construct vertical or riprap seawalls. Generally, vegetation plantings, sloping riprap, or gabions are environmentally-preferred shoreline stabilization methods instead of vertical seawalls because they provide better quality fish and wildlife habitat. Nevertheless, placement of riprap material removes more of the shallow euryhaline essential feature than a vertical seawall. Also, many seawalls built along unconsolidated shorelines require the removal of red mangroves to accommodate the seawalls.

Cable, Pipeline, and Transmission Line Construction

While not as common as other activities, excavation of submerged lands is sometimes required for installing cables, pipelines, and transmission lines. Construction may also require temporary or permanent filling of submerged habitats. Open-cut trenching and installation of aerial

transmission line footers are activities that have the ability to temporarily or permanently impact critical habitat for smalltooth sawfish.

Transportation Infrastructure Construction

Potential adverse effects from federal transportation projects in smalltooth sawfish critical habitat (CHEU) include operations of the Federal Highway Administration, USACE, and the Federal Emergency Management Agency. Construction of road improvement projects typically follow the existing alignments and expand to compensate for the increase in public use. Transportation projects may impact critical habitat for smalltooth sawfish through installation of bridge footers, fenders, piles, and abutment armoring, or through removal of existing bridge materials by blasting or mechanical efforts.

Dredging

Riverine, nearshore, and offshore areas are dredged for navigation, construction of infrastructure, and marine mining. An analysis of 18 major southeastern estuaries conducted in 1993-1994 demonstrated that over 7,000 km of navigation channels have already been dredged (Orlando Jr. et al. 1994). Habitat effects of dredging include the loss of submerged habitats by disposal of excavated materials, turbidity and siltation effects, contaminant release, alteration of hydrodynamic regimes, and fragmentation of physical habitats (Gulf of Mexico Fishery Management Council 1998; Gulf of Mexico Fishery Management Council 2005; South Atlantic Fishery Management Council 1998). In the CHEU, dredging to maintain canals and channels constructed prior to the critical habitat designation, limits the amount of available shallow, euryhaline essential feature to the edges of waterways and these dredging activities can disturb juveniles that are using these areas. At the time of critical habitat designation, many previously dredged channels and canals existed within the boundaries of the critical habitat units; however, we are unsure which of those contained the shallow-water essential feature at that time. It is likely that many of these channels and canals were originally dredged deeper than 3 ft MLLW, but they have since shoaled in and now contain the essential feature of shallow, euryhaline habitat. Therefore, maintenance dredging impacts are counted as a loss to this essential feature, even though the areas may or may not have contained the essential feature at time of designation (see Figure 4, Diagrams A and B).

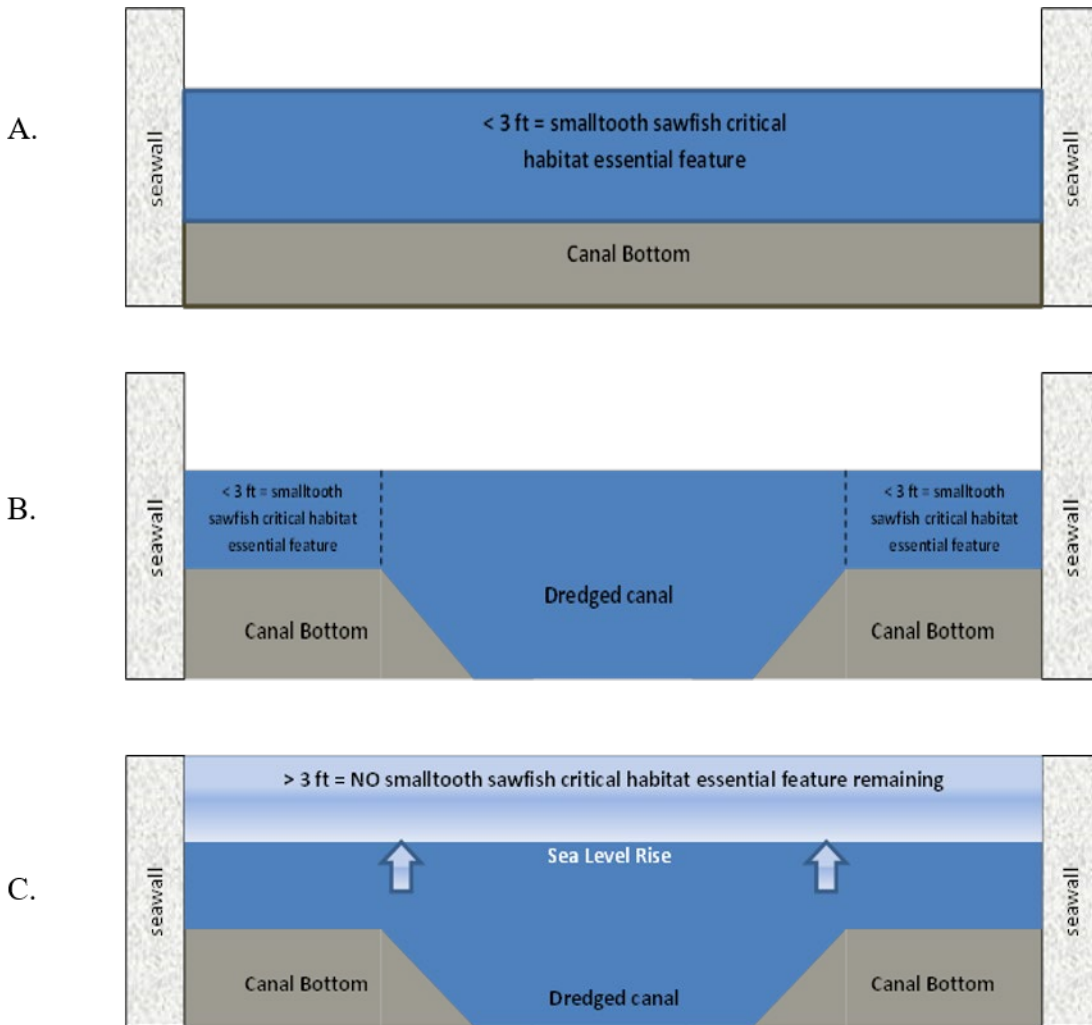


Figure 4. Diagram A depicts a cross section of a historically dredged channel/canal within the boundaries of the critical habitat units that has not been maintained. Diagram B depicts the typical cross section of a maintenance-dredged channel/canal. Diagram C depicts a cross section of a maintained dredged channel/canal after sea level rise of > 1 ft.

Construction, Operations and Maintenance of Impoundments and Other Water Level Controls

Federal agencies such as the USACE have historically been involved in large water control projects in Florida. Agencies sometimes propose impounding rivers and tributaries for such purposes as flood control, salt water intrusion prevention, or creation of industrial, municipal, and agricultural water supplies. Projects to repair or replace water control structures may affect smalltooth sawfish critical habitat by limiting sufficient freshwater discharge, which could alter the salinity of estuaries. The ability of an estuary to function as a nursery depends upon the quantity, timing, and input location of freshwater inflows (Garmestani and Percival 2005; Norton et al. 2012; USEPA 1994). Estuarine ecosystems are vulnerable to the following man-made disturbances: (1) decreases in seasonal inflow caused by the removal of freshwater upstream for agricultural, industrial, and domestic purposes; (2) contamination by industrial and sewage discharges; (3) agricultural runoff carrying pesticides, herbicides, and other toxic pollutants; and (4) eutrophication (e.g., influx of nutrients such as nitrates and phosphates most often from

fertilizer runoff and sewage) caused by excessive nutrient inputs from a variety of nonpoint and point sources. Additionally, rivers and their tributaries are susceptible to natural disturbances, such as floods and droughts, whose effects can be exacerbated by these man-made disturbances.

As stated above, smalltooth sawfish show an affinity for a particular salinity range, moving downriver during wetter months and upriver during drier months to remain within that range (Simpfendorfer et al. 2011). Therefore, water management decisions that affect salinity regimes may impact the functionality of critical habitat. This may result in smalltooth sawfish following specific salinity gradients into less advantageous habitats (e.g., areas with less shallow-water or red mangrove habitat). Furthermore, large changes in water flow over short durations would likely escalate movement patterns for smalltooth sawfish, thereby increasing predation risk and energy output. Researchers are currently looking into the effects of large-scale freshwater discharges on smalltooth sawfish and their designated critical habitat. The most vulnerable portion of the juvenile sawfish population to water-management outfall projects appears to be smalltooth sawfish in their first year of life. Newborn smalltooth sawfish remain in smaller areas irrespective of salinity, which potentially exposes them to greater osmotic stress (a sudden change in the solute concentration around a cell, causing a rapid change in the movement of water across its cell membrane), and impacts the nursery functions of sawfish critical habitat (Poulakis et al. 2013; Simpfendorfer et al. 2011).

Climate Change Threats

The IPCC has stated that global climate change is unequivocal and its impacts to coastal resources may be significant (Intergovernmental Panel on Climate Change 2007). There is a large and growing body of literature on past, present, and future impacts of global climate change induced by human activities (i.e., global warming mostly driven by the burning of fossil fuels). The latest report by the Intergovernmental Panel on Climate Change (2013) is more explicit, stating that, “science now shows with 95% certainty that human activity is the dominant cause of observed warming since the mid-twentieth century.” Some of the anticipated outcomes are sea level rise, increased frequency of severe weather events, and changes in air and water temperatures. NOAA’s climate change web portal provides information on the climate-related variability and changes that are exacerbated by human activities (<http://www.climate.gov/#understandingClimate>).

Though the impacts on smalltooth sawfish cannot, for the most part, be predicted with any degree of certainty, we can project some effects to sawfish critical habitat. We know that both essential features (red mangroves and shallow, euryhaline waters less than 3 ft deep at MLLW) will be impacted by climate change. Sea level rise is expected to exceed 3.3 ft (1 m) globally by 2100, according to the most recent publications, exceeding the estimates of the Fourth Assessment of the IPCC (Meehl et al. 2007; Pfeffer et al. 2008; Rahmstorf et al. 2007). Mean sea level rise projections have increased since the Fourth Assessment because of the improved physical understanding of the components of sea level, the improved agreement of process-based models with observations, and the inclusion of ice-sheet dynamical changes (Intergovernmental Panel on Climate Change 2013). A 1-m sea level rise in the state of Florida is within the range of recent estimates by 2080 (Pfeffer et al. 2008; Rahmstorf et al. 2007).

Sea level increases would affect the shallow-water essential feature of smalltooth sawfish critical habitat within the CHEU. A 2010 climate change study by the Massachusetts Institute of Technology (MIT) forecasted sea level rise in a study area with significant overlap with the CHEU (Vargas-Moreno and Flaxman 2010). The study investigated possible trajectories of future transformation in Florida's Greater Everglades landscape relative to 4 main drivers: climate change, shifts in planning approaches and regulations, population change, and variations in financial resources. MIT used (Intergovernmental Panel on Climate Change 2007) sea level modeling data to forecast a range of sea level rise trajectories from low, to moderate, to high predictions (Figure 5). The effects of sea level rise on available shallow-water habitat for smalltooth sawfish would be exacerbated in areas where there is shoreline armoring (e.g., seawalls). This is especially true in canals where the centerlines are maintenance-dredged deeper than 3 ft (0.9 m) for boat accessibility. In these areas, the areas that currently contain the essential feature depth (less than 3 ft at MLLW) will be reduced along the edges of the canals as sea level rises (see previous Figure 4, Diagram C).

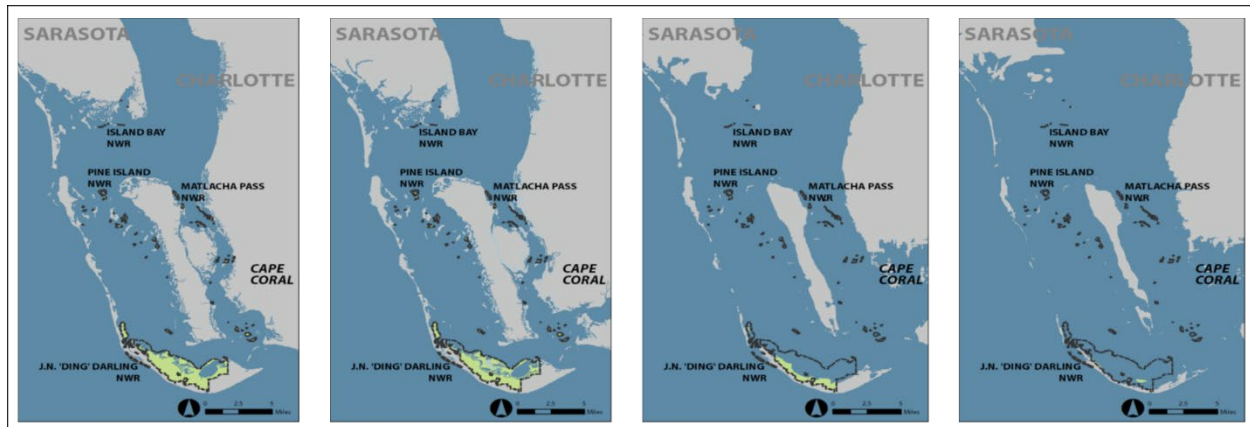


Figure 5. From left to right: current shoreline, + 3.5 in (+ 9 cm); + 18.5 in (+ 47 cm); and + 38.97 in (+ 99 cm) sea level rise by 2060. Adapted from Vargas-Moreno, J. C., and M. Flaxman. 2010. Addressing the challenges of climate change in the greater everglades landscape. Massachusetts Institute of Technology, Department of Urban Studies and Planning. Project Sheet November, 2010, Cambridge, MA.

Along the Gulf Coast of Florida, and south Florida in particular, rises in sea level will impact mangrove resources. As sea levels rise, mangroves will be forced landward in order to remain at a preferred water inundation level and sediment surface elevation, which is necessary for successful growth. This retreat landward will not keep pace with conservative projected rates of elevation in sea level (Gilman et al. 2008). This forced landward progression poses the greatest threat to mangroves in areas where there is limited or no room for landward or lateral migration (Semenuk 1994). Such is the case in areas of the CHEU where landward mangrove growth is restricted by shoreline armoring and coastal development. This man-made barrier will prohibit mangroves from moving landward and will result in the loss of the mangrove essential feature.

Other threats to mangroves result from climate change: fluctuations in precipitation amounts and distribution, seawater temperature, carbon dioxide (CO₂) levels, and damage to mangroves from increasingly severe storms and hurricanes (McLeod and Salm 2006). A 25% increase in precipitation globally is predicted by 2050 (McLeod and Salm 2006), but the specific geographic

distribution will vary, leading to increases and decreases in precipitation at the regional level. Changes in precipitation patterns caused by climate change may adversely affect the growth of mangroves and their distribution (Field 1995; Snedaker 1995). Decreases in precipitation will increase salinity and inhibit mangrove productivity, growth, seedling survival, and spatial coverage (Burchett et al. 1984). Decreases in precipitation may also change mangrove species composition, favoring more salt-tolerant types (Ellison 2010). Increases in precipitation may benefit some species of mangroves, increasing spatial coverage and allowing them to out-compete other salt marsh vegetation (Harty 2004). Even so, potential mangrove expansion requires suitable habitat for mangroves to increase their range, which depends to a great extent on patterns and intensity of coastal development (i.e., bulkhead and seawall construction).

Seawater temperature changes will have potential adverse effects on mangroves as well. Many species of mangroves show an optimal shoot density in sediment temperatures between 59-77 degrees Fahrenheit (°F) (15-25 °C) (Hutchings and Saenger 1987). Yet, at temperatures between 77-95°F (25-35°C), many species begin to show a decline in leaf structure and root and leaf formation rates (Saenger and Moverley 1985). Temperatures above 95°F lead to adverse effects on root structure and survivability of seedlings (UNESCO 1991) and temperatures above 100.4°F (38°C) lead to a cessation of photosynthesis and mangrove mortality (Andrews et al. 1984). Although impossible to forecast precisely, sea surface ocean temperatures are predicted to increase 1.8-3.6°F (1-2°C) by 2060 (Chapter 11 (Intergovernmental Panel on Climate Change 2013)), which will in turn impact underlying sediment temperatures along the coast. If mangroves shift pole-ward in response to temperature increases, they will at some point be limited by temperatures at the lower end of their optimal range and available recruitment area. This is especially true when considering already armored shorelines in residential communities such as those within and surrounding the CHEU of critical habitat for smalltooth sawfish.

As atmospheric CO₂ levels increase, mostly resulting from manmade causes (e.g., burning of fossil fuels), the world's oceans will absorb much of this CO₂, causing potential increases in photosynthesis and mangrove growth rates. This increase in growth rate, however, would be limited by lower salinities expected from CO₂ absorption in the oceans (Ball et al. 1997), and by the availability of undeveloped coastline for mangroves to expand their range. A secondary effect of increased CO₂ concentrations in the oceans is the deleterious effect on coral reefs' ability to absorb calcium carbonate (Hoegh-Guldberg et al. 2007), and subsequent reef erosion. Eroded reefs may not be able to buffer mangrove habitats from waves, especially during storm/hurricane events, causing additional physical effects.

Finally, the anticipated increase in the severity of storms and hurricanes may also impact mangroves. Tropical storms are expected to increase in intensity and/or frequency, which will directly impact existing mangroves that are already adversely impacted by increased seawater temperatures, CO₂, and changes in precipitation (Cahoon et al. 2003; Trenberth 2005). The combination of all of these factors may lead to reduced mangrove height (Ning et al. 2003). Further, intense storms could result in more severe storm surges and lead to potential changes in mangrove community composition, mortality, and recruitment (Gilman et al. 2006). Increased storm surges and flooding events could also affect mangroves' ability to photosynthesize (Gilman et al. 2006) and the oxygen concentrations in the mangrove lenticels (Ellison 2010).

5 ENVIRONMENTAL BASELINE

5.1 Overview

This section describes the effects of past and ongoing human and natural factors contributing to the current status of smalltooth sawfish, their habitats (including designated critical habitat), and ecosystem within the action area without the additional effects of the proposed action. In the case of ongoing actions, this section includes the effects that may contribute to the projected future status of the species, their habitats, and ecosystem. The environmental baseline describes the species' and critical habitat's health based on information available at the time of the consultation.

By regulation, the environmental baseline for an Opinion refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (50 CFR 402.02).

Focusing on the impacts of the activities in the action area specifically, allows us to assess the prior experience and state (or condition) of the areas of critical habitat that occur in an action area, that will be exposed to effects from the action under consultation. This focus is important because, in some states or life history stages, or areas of their ranges, or critical habitat features will commonly exhibit, or be more susceptible to, adverse responses to stressors than they would be in other states, stages, or areas within their distributions. These localized stress responses or stressed baseline conditions may increase the severity of the adverse effects expected from the proposed action.

5.2 Baseline Status of Critical Habitat Considered for Further Analysis

As stated in Section 2.2 (Action Area), the proposed action is located within the boundaries of the CHEU of smalltooth sawfish designated critical habitat located at 26.9720167°N and 82.032762°W (NAD 83) in Port Charlotte, Charlotte County, Florida. The project site is an existing box culvert bridge that crosses an unnamed salt creek connected to the Peace River. Water depths at the project site are approximately 4 ft at MLLW. The action area is void of corals or SAV. The project is expected to have direct impacts to 62 lin ft of red mangrove shoreline that lies within the boundary of smalltooth sawfish designated critical habitat.

The status of this species' critical habitat in the action area is supported by the species' critical habitat account in Section 4.

5.3 Additional Factors Affecting the Baseline Status of Critical Habitat Considered for Further Analysis

5.3.1 Federal Actions

We have consulted on several USACE shoreline stabilization in and around the greater residential canal system adjacent to where the project is located since the effective date of critical habitat designation (i.e., October 2, 2009). However, other than the proposed action, only 2 other federal actions (SERO-2018-02209 and SERO-2019-00231) are known to have occurred or have had effects to smalltooth sawfish designated critical habitat within the action area, as per a review of our Protected Resources Division's completed consultation database by the consulting biologist on February 22, 2024.

5.3.2 State and Private Actions

Examples of nonfederal activities that may adversely affect designated critical habitat for smalltooth sawfish in the action area include residential in-water activities that do not require federal permits or otherwise have a federal nexus. The direct and indirect impacts from these activities are difficult to quantify but may include loss or degradation of red mangroves or shallow, euryhaline habitat from unauthorized mangrove trimming, shoreline stabilization, or in-water construction. NMFS does not have any knowledge of state or private actions occurring in the action area that would not also require a federal permit; the likelihood of a project occurring in the action area that does not require a federal permit for in-water construction work is very small. Where possible, conservation actions in ESA Section 10 permits, ESA Section 6 cooperative agreements, and state permitting programs are being implemented or investigated to monitor or study impacts from these sources.

5.3.3 Habitat Modification and Degradation

Smalltooth sawfish habitat, in general, and designated critical habitat, specifically, have been degraded or modified throughout the southeastern U.S. from agriculture, urban development, commercial activities, channel dredging, boating activities, and the diversion of freshwater runoff. The habitat within the CHEU will likely continue to experience the same types of actions described in Section 4 (Status of Critical Habitat Considered for Further Analysis).

5.3.4 Stochastic Events

Seasonal stochastic events, such as hurricanes, are common throughout the range of smalltooth sawfish, especially in the current core of its range (i.e., south and southwest Florida). These events are by nature unpredictable and their effect on the survival and recovery of the species and on critical habitat are unknown; however, they have the potential to impede the survival and recovery directly if animals die as a result of them, or indirectly if habitat, especially critical habitat, is damaged as a result of these disturbances. Hurricane Ian likely damaged habitat, including mangroves, in and around the action area in 2022.

5.3.5 Climate Change

Many threats to smalltooth sawfish critical habitat are expected to be exacerbated by the effects of global climate change. Potential increases in sea level may impact the availability of nursery habitat, particularly shallow, euryhaline habitat and red mangrove lined, low-lying coastal shorelines (Intergovernmental Panel on Climate Change 2014; Wanless et al. 2005). For example, nursery habitat could be negatively affected by increased temperatures, salinities, and acidification of coastal waters (Snedaker 1995), (Wanless et al. 2005), (Scavia et al. 2002), as well as increased runoff and erosion due to the expected increase in extreme storm events (Intergovernmental Panel on Climate Change 2014; Wanless et al. 2005). These alterations of the marine environment due to global climate change could affect the distribution of shallow, euryhaline habitat, which would ultimately affect the distribution, physiology, and growth rates of red mangroves. These alterations could potentially eliminate red mangroves from particular areas. The magnitude of the effects of global climate change on smalltooth sawfish critical habitat are difficult to predict, yet, when combined with the cyclical loss of habitat from extreme storm events, a decrease in the red mangrove essential feature of smalltooth sawfish critical habitat is likely (Norton et al. 2012; Scavia et al. 2002). However, the proposed action is of such a small scale, scope, and limited period that it is not very likely to contribute to, or be affected cumulatively by, climate change.

5.3.6 Conservation and Recovery Actions Shaping the Environmental Baseline

Federal EFH consultation requirements pursuant to the MSA can minimize and mitigate for losses of wetland and preserve valuable foraging and developmental habitat that is used by juvenile smalltooth sawfish, including areas that have been designated as smalltooth sawfish critical habitat. NMFS has designated mangrove and estuarine habitats as EFH as recommended by the Gulf of Mexico Fishery Management Council. Both essential features are critical components of areas designated as EFH and receive a basic level of protection under the MSA to the extent that the MSA requires minimization of impacts to EFH resources.

6 EFFECTS OF THE ACTION

6.1 Overview

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if the effect would not occur but for the proposed action and the effect is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR 402.02).

In this section of our Opinion, we assess the effects of the action on critical habitat that are likely to be adversely affected. The analysis in this section forms the foundation for our destruction or adverse modification analysis in Section 8. The quantitative and qualitative analyses in this section are based upon the best available commercial and scientific data on species biology and the effects of the action. Data are limited, so we are often forced to make assumptions to

overcome the limits in our knowledge. Sometimes, the best available information may include a range of values for a particular aspect under consideration, or different analytical approaches may be applied to the same data set. In those cases, the uncertainty is resolved in favor of the species. NMFS generally selects the value that would lead to conclusions of higher, rather than lower risk to endangered or threatened species.

6.2 Effects of the Proposed Action on Critical Habitat Considered for Further Analysis

The proposed action area is within the boundary of the CHEU of critical habitat for smalltooth sawfish. The following essential features are present in the CHEU: (1) red mangroves, and (2) shallow, euryhaline habitats characterized by water depths between the MHW line and 3 ft (0.9 m) measured at MLLW (Final Rule, 74 FR 45353).

We believe the proposed action may affect the red mangrove essential feature of smalltooth sawfish critical habitat as outlined below. Some of those pathways are not likely to adversely affect the critical habitat and some are likely to result in adverse effects. We describe these routes of effect and the consequences to the red mangrove essential feature of smalltooth sawfish critical habitat in the following sections.

We believe that the project will have no effect on the shallow, euryhaline habitats essential feature (characterized by water depths between MHW line and 3 ft (0.9 m) measured at MLLW). None of the project effects will alter water depths or change the salinity regime within the project area. At present, water depths reported at the culvert replacement location are 4 ft at MLLW, which exceeds the 3 ft limit of the shallow, euryhaline essential feature.

6.2.1 Routes of Effect that Are Likely to Adversely Affect Critical Habitat

We believe the proposed action is likely to adversely affect smalltooth sawfish designated critical habitat due to the permanent removal of 62 lin ft of the red mangrove essential feature, which provides forage, shelter, or other nursery habitat functions for juvenile smalltooth sawfish. Typically, USACE reports project effects to red mangroves in both linear feet (denoting the amount of shoreline) and square feet (denoting the magnitude of the area). We use linear feet when calculating and tracking losses to the red mangrove essential feature of critical habitat. During the development of the smalltooth sawfish recovery plan (NMFS 2009), we estimated the amount of red mangrove shoreline in linear feet because we assumed that juvenile smalltooth sawfish were typically only able to access the waterward edges of red mangrove stands. Therefore, in the analyses below, losses to red mangroves will be reported in linear feet only. Using remote sensing data acquired from the FWC FWRI, we were able to compile information relating to the total area of this essential feature within smalltooth sawfish critical habitat. Based on that information, we estimated that the total amount of red mangrove shoreline in the CHEU at the effective date of species listing (May 1, 2003) was approximately 5,512,320 lin ft. While the available red mangrove essential feature in the CHEU will be diminished, the proposed action is not severing or preventing juvenile smalltooth sawfish access to alternate habitat with this essential feature in the surrounding area. Still, some ecological function provided to juvenile smalltooth sawfish in terms of the red mangrove essential feature will be lost; therefore, we believe the project is likely to adversely affect critical habitat in the CHEU.

7 CUMULATIVE EFFECTS

ESA Section 7 regulations require NMFS to consider cumulative effects in formulating its Opinions (50 CFR 402.14). Cumulative effects include the effects of future state or private actions, not involving federal activities, that are reasonably certain to occur within the action area considered in this Opinion (50 CFR 402.02). NMFS is not aware of any future projects that may contribute to cumulative effects. Within the action area, the ongoing activities and processes described in the environmental baseline are expected to continue and NMFS did not identify any additional sources of potential cumulative effect. Although the present human uses of the action area are expected to continue, some may occur at increased levels, frequency, or intensity in the near future as described in the environmental baseline.

8 DESTRUCTION OR ADVERSE MODIFICATION ANALYSIS

NMFS's regulations define *destruction or adverse modification* to mean "a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species" (50 CFR 402.02). Alterations that may destroy or adversely modify critical habitat may include impacts to the area itself, such as those that would impede access to or use of the essential features. NMFS will generally conclude that a federal action is likely to "destroy or adversely modify" critical habitat if the action results in an alteration of the quantity or quality of the essential physical or biological features of critical habitat and if the effect of the alteration is to appreciably diminish the value of critical habitat as a whole for the conservation of the species.

This analysis takes into account the geographic and temporal scope of the proposed action, recognizing that "functionality" of critical habitat necessarily means that the critical habitat must now and must continue in the future to support the conservation of the species and progress toward recovery. The analysis takes into account any changes in amount, distribution, or characteristics of the critical habitat that will be required over time to support the successful recovery of the species. Destruction or adverse modification does not depend strictly on the size or proportion of the area adversely affected, but rather on the role the action area and the affected critical habitat serves with regard to the function of the overall critical habitat designation, and how that role is affected by the action.

8.1 Protect and Restore Smalltooth Sawfish Habitat (Recovery Objective #2)

In establishing Recovery Objective #2, we recognized that recovery and conservation of smalltooth sawfish depends on the availability and quality of nursery habitats. Historically, juvenile sawfish were documented in mangrove and non-mangrove habitat in the southeastern United States. Due to the protections provided by the Ten Thousand Islands National Wildlife Refuge, Everglades National Park, and the Florida Keys National Marine Sanctuary, much of the historic juvenile smalltooth sawfish habitat in southwest Florida has remained high-quality juvenile habitat. Recovery Regions G, H, and I in southwest Florida extend from the Manatee River on the west coast of Florida, south through Everglades National Park and the Florida Keys to Caesar Creek on the southeast coast of Florida. The CHEU is in Recovery Region G. While

much of the CHEU is protected by the CHPSP system and the Estero Bay Aquatic Preserve, it is also highly anthropomorphically influenced.

The recovery plan states that for the 3 recovery regions with remaining high-quality habitats (i.e., Recovery Regions G, H, and I), juvenile habitats “must be maintained over the long term at or above 95% of the acreage available at the time of listing” (NMFS, 2009). To ensure that a proposed action will not impede Recovery Objective #2, we determine whether the critical habitat unit will be able to maintain 95% of the areas containing each essential feature after taking into account project impacts in the context of the status of the critical habitat, the environmental baseline, and cumulative effects. While the CHEU is only a part of the larger Recovery Region G, and the 95% protection threshold applies across not just Recovery Region G, but also Recovery Regions H and I, the threshold is still useful for evaluating the impacts at the individual recovery region level and for sub-units of the recovery regions. The CHEU contains the only known nursery areas within Recovery Region G; thus, we believe it is appropriate to evaluate impacts at the level of the unit. In addition, functioning critical habitat contains either one or both of the essential features, and the essential features were selected based on their role in facilitating recruitment of juvenile animals into the adult population, which the recovery plan likewise seeks to conserve and protect. Consequently, we also believe it is appropriate to consider whether 95% of each of the essential features of critical habitat in the CHEU is maintained. Therefore, below we estimate the percent impact the proposed action will have on the red mangrove habitat essential feature in the CHEU. As stated above, the proposed action will not affect the shallow, euryhaline essential feature of smalltooth sawfish critical habitat.

8.1.1 Red Mangrove Essential Feature Impacts

Remote sensing data from FWC FWRI indicated that approximately 5,512,320 lin feet of red mangrove shoreline (abbreviated RM throughout this section) was available in the CHEU at the effective date of species listing (i.e., May 1, 2003) (**Table 4**, Line 1). As described above, we must determine whether project impacts will interfere with long-term maintenance of this essential feature at or above 95% of the linear feet of habitat available at the time of listing; however, loss of critical habitat was not formally monitored until the effective date of critical habitat designation (i.e., October 2, 2009). Therefore, we must estimate habitat loss that occurred during the period between the effective date of species listing and the effective date of critical habitat designation (i.e., May 1, 2003 – October 2, 2009).

To do this, we use an 84-month dataset of our completed Section 7 consultations (October 3, 2009 – September 30, 2016), including yearly losses due to programmatic consultations, to generate a rate of loss that can then be used to back-calculate the loss of RM between the effective date of species listing and the effective date of critical habitat designation. We rely on this dataset because using approximately 7 years of information helps avoid over- or under-estimating the rate of habitat loss due to any potential inter-annual variability associated with economic growth and contraction that may have occurred in that time. Our consultations completed during this time indicate that 9,142.50 lin ft of RM in CHEU was lost due to federal agency actions.

Based on these losses, we estimate a monthly loss rate of RM using the following equation:

$$\begin{aligned} & \textit{Monthly loss rate of RM (CHEU)} \\ & = \textit{RM lost through federal agency actions} \div 84 \textit{ months} \\ & = 9,142.50 \textit{ lin ft} \div 84 \textit{ months} \\ & = 108.84 \textit{ lin ft per month} \end{aligned}$$

Assuming the same monthly loss rates, we back-calculate the loss of RM in the 77 months between the effective date of species listing and the effective date of critical habitat designation (i.e., May 1, 2003 – October 2, 2009) in the CHEU using the following equation:

$$\begin{aligned} & \textit{RM loss prior to critical habitat designation (CHEU)} \\ & = 108.84 \textit{ lin ft per month} \times 77 \textit{ months} \\ & = 8,380.68 \textit{ lin ft} \end{aligned}$$

Next, we determine the loss of RM since the effective date of critical habitat designation. Due to the high frequency of relatively small projects affecting smalltooth sawfish critical habitat, we update the losses to the red mangrove essential feature from federal actions every 12 months (i.e., July 1). From the effective date of critical habitat designation through June 30, 2023, 28,650.17 lin ft of RM in the CHEU has been lost due to federal agency actions (**Table 4**, Line 3). While this amount of loss only takes into account projects with a federal nexus requiring ESA Section 7 consultation, there are very few projects without a federal nexus that could affect red mangrove shoreline in the CHEU, as most in-water construction projects require federal authorization.

Using this information, we calculate the RM currently available in the CHEU using the following equation:

$$\begin{aligned} & \textit{RM currently available (CHEU)} \\ & = \textit{RM at time of species listing} - (\textit{RM loss prior to critical habitat designation} \\ & \quad + \textit{RM loss since critical habitat designation}) \\ & = 5,512,320 \textit{ lin ft} - (8,380.68 \textit{ lin ft} + 28,650.17 \textit{ lin ft}) \\ & = 5,475,289.15 \textit{ lin ft} \end{aligned}$$

We calculate the amount of RM that must be maintained in the CHEU using the following equation:

$$\begin{aligned} & \textit{RM that must be maintained (CHEU)} \\ & = \textit{RM at time of species listing} \times 95\% \\ & \quad = 5,512,320 \textit{ lin ft} \times 0.95 \\ & = 5,236,704 \textit{ lin ft} \end{aligned}$$

The proposed action would result in the loss of 62 lin ft of RM (**Table 4**, Line 6). Using the above results, we estimate the total amount of RM lost in the CHEU since species listing, including losses from the proposed action using the following equation:

$$\begin{aligned}
& \% \text{ RM lost in CHEU since species listing} \\
& = [(RM \text{ loss due to this project} + RM \text{ lost prior to critical habitat designation} \\
& \quad + RM \text{ lost since critical habitat designation}) \\
& \quad \div \text{Total RM in CHEU at time of species listing}] \times 100 \\
& = [62 \text{ lin ft} + 8,380.68 \text{ lin ft} + 28,650.17 \text{ lin ft}] \div 5,512,320 \text{ lin ft} \times 100 \\
& \quad = (37,092.85 \text{ lin ft} \div 5,512,320 \text{ lin ft}) \times 100 \\
& \quad = 0.6729\%
\end{aligned}$$

Thus, we estimate the percent of RM remaining within the CHEU as:

$$\begin{aligned}
& \% \text{ RM remaining (CHEU)} \\
& = 100\% - \% \text{ RM lost since species listing (CHEU)} \\
& \quad = 100\% - 0.6729\% \\
& = 99.3271\%
\end{aligned}$$

Table 4. Summary of Impacts to the Red Mangrove Essential Feature

Red Mangrove Shoreline in the CHEU	Linear Feet
1. Available at the time of species listing	5,512,320
2. Losses prior to critical habitat designation	8,380.68
3. Losses since critical habitat designation	28,650.17
4. Available as of July 1, 2023	5,475,289.15
5. Linear feet that must be maintained per Recovery Plan	5,236,704 (95% of 5,512,320)
6. Affected by the proposed action	62
7. Affected since species listing (including the proposed action)	37,092.85 (0.6729% of 5,512,320)
8. Remaining	5,475,227.2 (99.3271% of 5,512,320)

1.1.1 Summary of Impacts to the Essential Features

Very small percentages of the essential features of smalltooth sawfish designated critical habitat have been affected by federal agency actions since the effective date of species listing. Including losses from the proposed action, 99.3271% of the RM essential feature available at the time of species listing remain in the CHEU. Thus, the loss of the RM essential feature associated with the proposed action, in combination with losses since we listed the species, does not provide any impediment to effectively protecting 95% of juvenile habitat in the CHEU available at the effective date of species listing, and therefore will not be an impediment to Recovery Objective #2.

8.1.2 Ensure Smalltooth Sawfish Abundance Increases (Recovery Objective #3)

In establishing Recovery Objective #3, we recognized that it was important that sufficient numbers of juvenile sawfish inhabit several nursery areas across a diverse geographic area to ensure survivorship and growth and to protect against the negative effects of stochastic events

within parts of their range. To meet this objective, Recovery Region G (i.e., CHEU) must support sufficiently large numbers of juvenile sawfish to ensure that the species is viable in the long-term and can maintain genetic diversity. Recovery Objective #3 requires that the relative abundance of small juvenile sawfish (< 200 cm) either increases at an average annual rate of at least 5% over a 27-year period, or juvenile abundance is at greater than 80% of the carrying capacity of the recovery region.

Assessing the effect of the proposed action on small juvenile abundance is made difficult by the state of available data. Since the designation of critical habitat and the release of the recovery plan in 2009, ongoing studies have been in place to monitor the U.S. DPS of smalltooth sawfish. FWC FWRI is conducting a study in the CHEU that is supported primarily with funding provided by NMFS through the ESA Section 6 Species Recovery Grants Program, while Florida State University and the NOAA NMFS Southeast Fisheries Science Center Panama City Laboratory have focused studies in the TTIEU. The intent of these studies is to determine the abundance, distribution, habitat use, and movement of smalltooth sawfish. Early indications are that juvenile sawfish are at least stable and likely increasing in the CHEU, due in large part to ESA-listing of the species and designation of critical habitat. While it may be too early to state definitively that juveniles within CHEU are surviving to adulthood, researchers consistently capture newborn smalltooth sawfish, particularly within “hotspots,” indicating adult smalltooth sawfish are pupping within Recovery Region G. Available data from the adjacent Recovery Region H (i.e., TTIEU) indicate that adult smalltooth sawfish are also reproducing within this recovery region and that the juvenile population trend is at least stable and possibly increasing – though variability is high (Carlson and Osborne 2012; Carlson et al. 2007). With no other data to consider, the abundance trend in the TTIEU represents the best data available for assessing the population trends in the CHEU. Therefore, we do not believe the loss of habitat associated with the proposed action, in combination with the losses to date, will impede the 5% annual growth objective for the juvenile population within Recovery Region G.

9 CONCLUSION

We reviewed the Status of the Species, the Status of the Critical Habitat, the Environmental Baseline, the Effects of the Action, and the Cumulative Effects using the best available data.

We conclude that the permanent loss of 62 lin ft due to the proposed action will not interfere with achieving the relevant habitat-based recovery objectives for smalltooth sawfish and will not impede the critical habitat’s ability as a whole to support the conservation of smalltooth sawfish, despite permanent adverse effects. Therefore, given the nature of the proposed action and the information provided above, we conclude that the action, as proposed, is not likely to destroy or adversely modify the critical habitat of smalltooth sawfish.

10 INCIDENTAL TAKE STATEMENT

10.1 Overview

NMFS does not anticipate that the proposed action will incidentally take any ESA-listed species under our purview and no take is authorized in this Opinion. Nonetheless, as soon as the Florida

Department of Transportation becomes aware of any take of an ESA-listed species under NMFS's purview that occurs during the proposed action, the Florida Department of Transportation shall report the take to NMFS SERO PRD via the [NMFS SERO Endangered Species Take Report Form](https://forms.gle/85fP2da4Ds9jEL829) (<https://forms.gle/85fP2da4Ds9jEL829>). This form shall be completed for each individual known reported capture, entanglement, stranding, or other take incident. Information provided via this form shall include the title, Harborview Road widening, the issuance date, and ECO tracking number, SERO-2024-00355, for this Opinion; the species name; the date and time of the incident; the general location and activity resulting in capture; condition of the species (i.e., alive, dead, sent to rehabilitation); size of the individual, behavior, identifying features (i.e., presence of tags, scars, or distinguishing marks), and any photos that may have been taken. At that time, consultation may need to be reinitiated.

Section 7(b)(4)(c) of the ESA specifies that to provide an Incidental Take Statement for an endangered or threatened species of marine mammal, the taking must be authorized under Section 101(a)(5) of the MMPA. Since no incidental take of listed marine mammals is anticipated as a result of the proposed action, no statement on incidental take of protected marine mammals is provided and no take is authorized. Nevertheless, the FDOT must immediately notify (within 24 hours, if communication is possible) our Office of Protected Resources if a take of a listed marine mammal occurs.

11 CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the ESA directs federal agencies to utilize their authority to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation Recommendations identified in Opinions can assist action agencies in implementing their responsibilities under Section 7(a)(1). Conservation recommendations are discretionary activities designed to minimize or avoid adverse effects of a proposed action on ESA-listed species or critical habitat, to help implement recovery plans, or to develop information. The following conservation recommendations are discretionary measures that NMFS believes are consistent with this obligation and therefore should be carried out by the federal action agency:

1. Continue public outreach and education on smalltooth sawfish and smalltooth sawfish critical habitat in an effort to minimize interactions, injury, and mortality.
2. Provide funding to conduct directed research on smalltooth sawfish that will help further our understanding about the species (e.g., implement a relative abundance monitoring program which will help define how spatial and temporal variability in the physical and biological environment influence smalltooth sawfish) in an effort to predict long-term changes in smalltooth sawfish distribution, abundance, extent, and timing of movements.
3. Fund surveys of detailed bathymetry and mangrove coverage within smalltooth sawfish critical habitat. Lee County and the USACE recently funded such surveys within the Cape Coral municipality. Data is needed from other municipalities within the CHEU to establish a

more accurate baseline assessment of both critical habitat features (red mangroves and shallow-water areas).

4. Fund and support restoration efforts that rehabilitate and create shallow, euryhaline and mangrove fringe habitats within the range of smalltooth sawfish.

To stay abreast of actions that minimize or avoiding adverse effects or benefit listed species or their habitat, we request notification of the implementation of any conservation recommendations.

12 REINITIATION OF CONSULTATION

This concludes formal consultation on the proposed action. As provided in 50 CFR 402.16, reinitiation of formal consultation is required and shall be requested by Florida Department of Transportation or by the Service, where discretionary federal action agency involvement or control over the action has been retained, or is authorized by law, and if: (a) the amount or extent of incidental take specified in the Incidental Take Statement is exceeded, (b) new information reveals effects of the action on listed species or critical habitat in a manner or to an extent not considered in this Opinion, (c) the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this Opinion, or (d) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, the FDOT must immediately request reinitiation of formal consultation and project activities may only resume if the FDOT establishes that such continuation will not violate Sections 7(a)(2) and 7(d) of the ESA.

13 LITERATURE CITED

- Andrews, T. J., B. F. Clough, and G. J. Muller. 1984. Photosynthetic gas exchange properties and carbon isotope ratios of some mangroves in North Queensland. Pages 15-23 in H. J. Teas, editor. *Physiology and Management of Mangroves*. Tasks for Vegetation Science, volume 9. Springer, Dordrecht, Netherlands.
- Ball, M. C., M. J. Cochrane, and H. M. Rawson. 1997. Growth and water use of the mangroves *Rhizophora apiculata* and *R. stylosa* in response to salinity and humidity under ambient and elevated concentrations of atmospheric CO₂. *Plant, Cell & Environment* 20(9):1158-1166.
- Burchett, M. D., S. Meredith, A. Pulkownik, and S. Pulkownik. 1984. Short term influences affecting growth and distribution of mangrove communities in the Sydney region. *Wetlands Australia* 4(2):63-72.
- Cahoon, D. R., and coauthors. 2003. Mass tree mortality leads to mangrove peat collapse at Bay Islands, Honduras after Hurricane Mitch. *Journal of Ecology* 91(6):1093-1105.
- Carlson, J. K., and J. Osborne. 2012. Relative abundance of smalltooth sawfish (*Pristis pectinata*) based on the Everglades National Park Creel Survey. U.S. Department of

Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Fisheries Science Center, NOAA Technical Memorandum NMFS-SEFSC-626, Panama City, FL.

Carlson, J. K., J. Osborne, and T. W. Schmidt. 2007. Monitoring the recovery of smalltooth sawfish, *Pristis pectinata*, using standardized relative indices of abundance. *Biological Conservation* 136(2):195-202.

Dahl, T. E., and C. E. Johnson. 1991. Status and trends of wetlands in the conterminous United States, mid-1970s to mid-1980s. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

Ellison, J. C. 2010. Vulnerability of Fiji's mangroves and associated coral reefs to climate change. A review. WWF South Pacific Programme, Suva, Fiji.

Field, C. 1995. Impact of expected climate change on mangroves. *Hydrobiologia* 295:75-81.

Florida Department of Environmental Protection. 2017. Charlotte Harbor Aquatic Preserves management plan. Florida Department of Environmental Protection, Florida Coastal Office, NOAA Award Nos. NA11NOS4190073 (CM227) and NA14NOS4190053 (CM504), Tallahassee, FL.

Garmestani, A. S., and H. F. Percival. 2005. Raccoon removal reduces sea turtle nest depredation in the Ten Thousand Islands of Florida. *Southeastern Naturalist* 4(3):469-472.

Gilman, E. L., J. Ellison, N. C. Duke, and C. Field. 2008. Threats to mangroves from climate change and adaptation options: A review. *Aquatic Botany* 89(2):237-250.

Gilman, E. L., and coauthors. 2006. Adapting to Pacific Island mangrove responses to sea level rise and other climate change effects. *Climate Research* 32:161-176.

Gilmore, R. G. 1995. Environmental and biogeographic factors influencing ichthyofaunal diversity: Indian River Lagoon. *Bulletin of Marine Science* 57(1):153-170.

Gulf of Mexico Fishery Management Council. 1998. Generic amendment for addressing essential fish habitat requirements in the following fishery management plans of the Gulf of Mexico: shrimp, red drum fishery, reef fish, coastal migratory pelagic resources (mackerels) in the Gulf of Mexico and south Atlantic, stone crab, spiny lobster, coral and coral reefs. Gulf of Mexico Fishery Management Council, NOAA Award No. NA87FC0003, Tampa, FL.

Gulf of Mexico Fishery Management Council. 2005. Generic amendment number 3 for addressing essential fish habitat requirements, habitat areas of particular concern, and adverse effects of fishing in the following fishery management plans of the Gulf of Mexico: shrimp, red drum, reef fish, coastal migratory pelagic resources (mackerels) in the Gulf of Mexico and south Atlantic, stone crab, spiny lobster, and coral and coral

- reefs. Gulf of Mexico Fishery Management Council, NOAA Award No. NA03NMF4410028, Tampa, FL.
- Harty, C. 2004. Planning strategies for mangrove and saltmarsh changes in southeast Australia. *Coastal Management* 32:405-415.
- Hoegh-Guldberg, O., and coauthors. 2007. Coral reefs under rapid climate change and ocean acidification. *Science* 318(5857):1737-1742.
- Hutchings, P., and P. Saenger. 1987. *Ecology of Mangroves*. University of Queensland Press, Queensland, Australia.
- Intergovernmental Panel on Climate Change. 2007. *Climate Change 2007: Synthesis report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Intergovernmental Panel on Climate Change, Geneva, Switzerland
- Intergovernmental Panel on Climate Change. 2013. *Climate Change 2013: The physical science basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Intergovernmental Panel on Climate Change, Cambridge, United Kingdom and New York, NY.
- Intergovernmental Panel on Climate Change. 2014. Summary for policymakers. Pages 32 *in* C. B. Field, and coeditors, editors. *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge, United Kingdom and New York, NY.
- McLeod, E., and R. V. Salm. 2006. Managing mangroves for resilience to climate change. The World Conservation Union (IUCN), IUCN Resilience Science Group Working Paper Series - No 2, Gland, Switzerland.
- Meehl, G. A., and coauthors. 2007. Global climate projections. Pages 747-846 *in* S. Solomon, and coeditors, editors. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, U.K.
- Ning, Z. H., R. E. Turner, T. K. Doyle, and K. Abdollahi. 2003. Integrated assessment of the climate change impacts on the Gulf Coast region: Findings of the Gulf Coast Regional Assessment. Gulf Coast Regional Conservation Committee (GCRCC) and LSU Graphic Services, 1-930129-01-7, Baton Rouge, LA.
- NMFS. 2000. Status review of smalltooth sawfish (*Pristis pectinata*). U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Regional Office, Saint Petersburg, FL.

- NMFS. 2009. Smalltooth sawfish recovery plan (*Pristis pectinata*). U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Silver Spring, MD.
- Norton, S. L., and coauthors. 2012. Designating critical habitat for juvenile endangered smalltooth sawfish in the United States. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* 4(1):473-480.
- Orlando Jr., S. P., and coauthors. 1994. Salinity characteristics of South Atlantic estuaries. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, Office of Ocean Resources Conservation and Assessment, Strategic Environmental Assessments Division, Silver Spring, MD.
- Pfeffer, W. T., J. Harper, and S. O'Neel. 2008. Kinematic constraints on glacier contributions to 21st-century sea-level rise. *Science* 321:1340-1343.
- Poulakis, G. R. 2012. Distribution, habitat use, and movements of juvenile smalltooth sawfish, *Pristis pectinata*, in the Charlotte Harbor Estuarine System, Florida. Dissertation. Florida Institute of Technology, Melbourne, FL.
- Poulakis, G. R., and J. C. Seitz. 2004. Recent occurrence of the smalltooth sawfish, *Pristis pectinata* (Elasmobranchiomorphi: Pristidae), in Florida Bay and the Florida Keys, with comments on sawfish ecology. *Florida Scientist* 67(1):27-35.
- Poulakis, G. R., P. W. Stevens, A. A. Timmers, C. J. Stafford, and C. A. Simpfendorfer. 2013. Movements of juvenile endangered smalltooth sawfish, *Pristis pectinata*, in an estuarine river system: use of non-main-stem river habitats and lagged responses to freshwater inflow-related changes. *Environmental Biology of Fishes* 96(6):763-778.
- Poulakis, G. R., P. W. Stevens, A. A. Timmers, T. R. Wiley, and C. A. Simpfendorfer. 2011. Abiotic affinities and spatiotemporal distribution of the endangered smalltooth sawfish, *Pristis pectinata*, in a south-western Florida nursery. *Marine and Freshwater Research* 62(10):1165-1177.
- Quigley, D. T. G., and K. Flannery. 2002. Leucoptic harbour porpoise *Phocoena phocoena* (L.). *Irish Naturalists' Journal* 27(4):164-172.
- Rahmstorf, S., and coauthors. 2007. Recent climate observations compared to projections. *Science* 316(5825):709.
- Reddering, J. S. V. 1988. Prediction of the effects of reduced river discharge on estuaries of the south-eastern Cape Province, South Africa. *South African Journal of Science* 84(9):726-730.
- Saenger, P., and J. Moverley. 1985. Vegetative phenology of mangroves along the Queensland coastline. *Proceedings of the Ecological Society of Australia* 13:257-265.

- Scavia, D., and coauthors. 2002. Climate change impacts on U.S. coastal and marine ecosystems. *Estuaries* 25(2):149-164.
- Semeniuk, V. 1994. Predicting the effect of sea-level rise on mangroves in northwestern Australia. *Journal of Coastal Research* 10(4):1050-1076.
- Simpfendorfer, C. A. 2001. Essential habitat of the smalltooth sawfish, *Pristis pectinata*. Mote Marine Laboratory, Center for Shark Research, Technical Report 786, Sarasota, FL.
- Simpfendorfer, C. A. 2003. Abundance, movement and habitat use of the smalltooth sawfish: Final report. Mote Marine Laboratory, Center for Shark Research, Technical Report No. 929 and NMFS contract number: WC133F-02-SE-0247, Sarasota, FL.
- Simpfendorfer, C. A. 2006. Movement and habitat use of smalltooth sawfish: Final report. Mote Marine Laboratory, Center for Shark Research, Technical Report 1070 and NOAA P.O. No. WC133F-04-SE-1543, Sarasota, FL.
- Simpfendorfer, C. A., G. R. Poulakis, P. M. O'Donnell, and T. R. Wiley. 2008. Growth rates of juvenile smalltooth sawfish *Pristis pectinata* Latham in the Western Atlantic. *Journal of Fish Biology* 72(3):711-723.
- Simpfendorfer, C. A., T. R. Wiley, and B. G. Yeiser III. 2010. Improving conservation planning for an endangered sawfish using data from acoustic telemetry. *Biological Conservation* 143(6):1460-1469.
- Simpfendorfer, C. A., and coauthors. 2011. Environmental influences on the spatial ecology of juvenile smalltooth sawfish (*Pristis pectinata*): results from acoustic monitoring. *PLOS ONE* 6(2):e16918.
- Snedaker, S. C. 1995. Mangroves and climate change in the Florida and Caribbean region: Scenarios and hypotheses. *Hydrobiologia* 295(1-3):43-49.
- South Atlantic Fishery Management Council. 1998. Final plan for the South Atlantic Region: Essential fish habitat requirements for the fishery management plan of the South Atlantic Fishery Management Council. South Atlantic Fishery Management Council, Charleston, SC.
- Stedman, S.-M., and T. E. Dahl. 2008. Status and trends of wetlands in the coastal watersheds of the Eastern United States 1998-2004. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service and U.S. Department of the Interior, Fish and Wildlife Service.
- Trenberth, K. 2005. Uncertainty in hurricanes and global warming. *Science* 308(5729):1753-1754.

- UNESCO. 1991. Coastal systems studies and sustainable development: Abstracts. United Nations Educational, Scientific, and Cultural Organization (UNESCO), MARINF/85, COMAR Interregional Scientific Conference, Paris, 1991.
- USEPA. 1994. Freshwater inflow action agenda for the Gulf of Mexico; First generation-Management Committee report. U.S. Environmental Protection Agency, Office of Water, Gulf of Mexico Program, EPA 800-B-94-006, Stennis Space Center, MS.
- USFWS. 1999. South Florida multi-species recovery plan. U.S. Department of the Interior, Fish and Wildlife Service, Southeast Region, Atlanta, GA.
- Vargas-Moreno, J. C., and M. Flaxman. 2010. Addressing the challenges of climate change in the greater everglades landscape. Massachusetts Institute of Technology, Department of Urban Studies and Planning. Project Sheet November, 2010, Cambridge, MA.
- Wanless, H. R., B. M. Vlaswinkel, and K. L. Jackson. 2005. Coastal landscape and channel evolution affecting critical habitats at Cape Sable, Everglades National Park, Florida: Final report. University of Miami, Miami, FL.
- Whitfield, A. K., and M. N. Bruton. 1989. Some biological implications of reduced freshwater inflow into eastern Cape estuaries: A preliminary assessment. *South African Journal of Science* 85:691-694.
- Wiley, T. R., and C. A. Simpfendorfer. 2007. The ecology of elasmobranchs occurring in the Everglades National Park, Florida: Implications for conservation and management. *Bulletin of Marine Science* 80(1):171-189.

Project Commitments Record

FM: 434965-2 **FAP#:** D119-073-B
Project Name: HARBORVIEW ROAD FROM MELBOURNE ST TO I-75
Environmental Document Type: Type 2 Categorical Exclusion **Environmental Document Approval Date:** 10/14/2019

Commitment Title: Florida bonneted bat BMP #1

Commitment Made To: USFWS - Jose Rivera **Environmental Commitment:** Yes
Status: Commitment Added **Affects Any Other Environmental Commitment:** Yes
Implementation Discipline: Construction **Commitment Approval Date:** 1/8/2024
Transmittal Date: 1/8/2024

Commitment Description: In accordance with the Florida bonneted bat consultation key, FDOT will implement Best Management Practice #1: If potential roost trees or structures need to be removed, check cavities for bats within 30 days prior to removal of trees, snags, or structures. When possible, remove structure outside of breeding season (e.g., January 1 – April 15). If evidence of use by any bat species is observed, discontinue removal efforts in that area and coordinate with the Service on how to proceed.

Comments/Notes:
(Most Recent Comment Shown)

Projects Linked to the Commitment

There are no other projects linked to this commitment.

Project Commitments Record

Commitment Title: Florida bonneted bat BMP #5

Commitment Made To: USFWS - Jose Rivera **Environmental Commitment:** Yes

Status: Commitment Added **Affects Any Other Environmental Commitment:** Yes

Implementation Discipline: Construction **Commitment Approval Date:** 1/8/2024

Transmittal Date: 1/8/2024

Commitment Description: In accordance with the Florida bonneted bat consultation key, FDOT will implement Best Management Practice #5: Conserve open freshwater and wetland habitats to promote foraging opportunities and avoid impacting water quality. Created/restored habitat should be designed to replace the function of native habitat.

Comments/Notes:
(Most Recent Comment Shown)

Projects Linked to the Commitment

There are no other projects linked to this commitment.

Project Commitments Record

Commitment Title:	Florida bonneted bat BMP #7		
Commitment Made To:	USFWS - Jose Rivera	Environmental Commitment:	Yes
Status:	Commitment Added	Affects Any Other Environmental Commitment:	Yes
Implementation Discipline:	Operations And Maintenance	Commitment Approval Date:	1/8/2024
Transmittal Date:	1/8/2024		
Commitment Description:	In accordance with the Florida bonneted bat consultation key, FDOT will implement Best Management Practice #7: Avoid or limit widespread application of insecticides (e.g., mosquito control, agricultural pest control) in areas where Florida bonneted bats are known or expected to forage or roost.		
Comments/Notes: <i>(Most Recent Comment Shown)</i>			

Projects Linked to the Commitment

There are no other projects linked to this commitment.

Project Commitments Record

Commitment Title:	Florida bonneted bat BMP #11		
Commitment Made To:	USFWS - Jose Rivera	Environmental Commitment:	Yes
Status:	Commitment Added	Affects Any Other Environmental Commitment:	Yes
Implementation Discipline:	Construction	Commitment Approval Date:	1/8/2024
Transmittal Date:	1/8/2024		
Commitment Description:	In accordance with the Florida bonneted bat consultation key, FDOT will implement Best Management Practice #11: Avoid and minimize the use of artificial lighting, retain natural light conditions, and install wildlife friendly lighting (i.e., downlight facing and lowest lumens possible avoid permanent night-time lighting to the greatest extent practicable).		
Comments/Notes: <i>(Most Recent Comment Shown)</i>			

Projects Linked to the Commitment

There are no other projects linked to this commitment.

Project Commitments Record

Commitment Title: No blasting

Commitment Made To: NOAA-NMFS- David Rydene **Environmental Commitment:** Yes

Status: Commitment Added **Affects Any Other Environmental Commitment:** Yes

Implementation Discipline: Construction **Commitment Approval Date:** 1/8/2024

Transmittal Date: 1/8/2024

Commitment Description: No blasting will occur during the construction of the proposed culverts.

Comments/Notes:
(Most Recent Comment Shown)

Projects Linked to the Commitment

There are no other projects linked to this commitment.

Project Commitments Record

Commitment Title: In-water work during daytime hours

Commitment Made To: USFWS - Jose Rivera **Environmental Commitment:** Yes

Status: Commitment Added **Affects Any Other Environmental Commitment:** Yes

Implementation Discipline: Construction **Commitment Approval Date:** 1/8/2024

Transmittal Date: 1/8/2024

Commitment Description: The FDOT will only conduct in-water work during daytime hours.

Comments/Notes:
(Most Recent Comment Shown)

Projects Linked to the Commitment

There are no other projects linked to this commitment.

Project Commitments Record

Commitment Title:	Vibratory hammer sheet pile installation		
--------------------------	--	--	--

Commitment Made To:	NOAA-NMFS- David Rydene	Environmental Commitment:	Yes
----------------------------	-------------------------	----------------------------------	-----

Status:	Commitment Added	Affects Any Other Environmental Commitment:	Yes
----------------	------------------	--	-----

Implementation Discipline:	Construction	Commitment Approval Date:	1/8/2024
-----------------------------------	--------------	----------------------------------	----------

Transmittal Date:	1/8/2024		
--------------------------	----------	--	--

Commitment Description:	The FDOT will require contractors to install sheet pile walls using vibratory hammers and not impact hammers.		
--------------------------------	---	--	--

Comments/Notes:
(Most Recent Comment Shown)

Projects Linked to the Commitment

There are no other projects linked to this commitment.

Project Commitments Record

Commitment Title:	FWC coordination prior to culvert closure		
Commitment Made To:	NOAA-NMFS- David Rydene	Environmental Commitment:	Yes
Status:	Commitment Added	Affects Any Other Environmental Commitment:	No
Implementation Discipline:	Construction	Commitment Approval Date:	1/8/2024
Transmittal Date:	1/8/2024		
Commitment Description:	The FDOT will contact the FWC prior to the temporary culvert closure (CD-4) should the agency wish to sweep the creek upstream of the culvert with nets to capture sawfish prior to the temporary culvert closure. Culvert closure will avoid the smalltooth sawfish pupping season which is March 1 – July 31.		
Comments/Notes: <i>(Most Recent Comment Shown)</i>			

Projects Linked to the Commitment

There are no other projects linked to this commitment.

Project Commitments Record

Commitment Title: Wood stork suitable foraging habitat mitigation

Commitment Made To: USFWS - Jose Rivera **Environmental Commitment:** Yes

Status: Commitment Added **Affects Any Other Environmental Commitment:** No

Implementation Discipline: Design **Commitment Approval Date:** 1/8/2024

Transmittal Date: 1/8/2024

Commitment Description: Impacts to suitable foraging habitat for the federally-protected wood stork will be mitigated through the purchase of credits from a U.S. Fish and Wildlife Service-approved mitigation bank pursuant to Section 373.4137, F.S. or as otherwise agreed to by the FDOT and the appropriate regulatory agencies.

Comments/Notes:
(Most Recent Comment Shown)

Projects Linked to the Commitment

There are no other projects linked to this commitment.

Project Commitments Record

Commitments Linked from Other Projects

FM #: 434965-1 Commitment Title: Eastern Indigo Snake

Commitment Made To:	USFWS	Environmental Commitment:	Yes
Status:	Commitment In Progress	Affects Any Other Environmental Commitment:	No
Implementation Discipline:	Construction	Commitment Approval Date:	10/14/2019
Transmittal Date:	11/21/2023		
Commitment Description:	The USFWS Standard Protection Measures for the Eastern Indigo Snake will be implemented to ensure that the Eastern Indigo Snake will not be adversely impacted by the project.		
Comments/Notes: <i>(Most Recent Comment Shown)</i>	2/13/2024 12:22:28 PM - There is no change in the status of this commitment. The most recent USFWS Standard Protection Measures for the Eastern Indigo Snake will be implemented during construction.		

FM #: 434965-1 Commitment Title: Florida Bonneted Bat

Commitment Made To:	USFWS	Environmental Commitment:	Yes
Status:	Commitment Fulfilled	Affects Any Other Environmental Commitment:	No
Implementation Discipline:	Design	Commitment Approval Date:	10/14/2019
Transmittal Date:	1/8/2024		
Commitment Description:	ESA Section 7 consultation for the Florida Bonneted Bat will be initiated with the USFWS during the design phase of the project.		
Comments/Notes: <i>(Most Recent Comment Shown)</i>	1/8/2024 4:44:53 PM - The USFWS released updated consultation guidelines for the Florida Bonneted Bat in October 2019 which included a consultation key. In order to determine if the project will impact the Florida Bonneted Bat a visual roost survey was conducted. No evidence of use was documented by the Florida Bonneted Bat; therefore, an acoustic survey was conducted in April 2023 accordance with the consultation key. The acoustic survey did not result in positive indicators of Florida Bonneted Bat usage. In accordance with the 2019 consultation key, programmatic concurrence that the project "may affect, not likely to adversely affect-programmatic (MANLAA-P)" was determined using couplet 4b. In accordance with the 2019 consultation key, Section 7 consultation is complete.		

FM #: 434965-1 Commitment Title: Sea Turtles

Project Commitments Record

Commitment Made To: NMFS **Environmental Commitment:** Yes
Status: Commitment Fulfilled **Affects Any Other Environmental Commitment:** No
Implementation Discipline: Design **Commitment Approval Date:** 10/14/2019
Transmittal Date: 12/19/2023
Commitment Description: ESA Section 7 consultation for sea turtles will be initiated with NMFS during the design phase of the project.

Comments/Notes: 5/16/2024 4:30:29 PM - Consultation with the National Marine Fisheries Service (NMFS) was completed and they issued a Biological Opinion on March 29, 2024. ESA Section 7 Consultation is complete and no further action is required.
(Most Recent Comment Shown)

FM #: 434965-1 **Commitment Title:** Noise

Commitment Made To: Public **Environmental Commitment:** Yes
Status: Commitment Fulfilled **Affects Any Other Environmental Commitment:** No
Implementation Discipline: Design **Commitment Approval Date:** 10/14/2019
Transmittal Date:

Commitment Description: A land use review will also be implemented during the design phase to identify noise sensitive sites that may have received a building permit subsequent to the noise evaluations but prior to the date of public knowledge (i.e., date that the environmental document has been approved by the FDOT Office of Environmental Management). If the review identifies noise sensitive sites that have been permitted prior to the date of public knowledge, those sites will be evaluated for traffic noise and potential abatement considerations.

Comments/Notes: 2/13/2024 12:38:26 PM - A land use review was conducted in 2023 to evaluate noise sensitive sites during design. The review and analysis was included in a Noise Study Report dated November 2023. No new noise sensitive sites were identified in the NSRA.
(Most Recent Comment Shown)

FM #: 434965-1 **Commitment Title:** Smalltooth Sawfish

Commitment Made To: NMFS **Environmental Commitment:** Yes
Status: Commitment Fulfilled **Affects Any Other Environmental Commitment:** No
Implementation Discipline: Design **Commitment Approval Date:** 10/14/2019
Transmittal Date: 12/19/2023

Commitment Description: ESA Section 7 formal consultation for the smalltooth sawfish will be initiated with NMFS during the design phase of the project.

Project Commitments Record

Comments/Notes: 5/16/2024 4:30:44 PM - Consultation with the National Marine Fisheries Service (NMFS) was completed and they issued a Biological Opinion on March 29, 2024. ESA Section 7 Consultation is complete and no further action is required.
(Most Recent Comment Shown)

FM #: 434965-1 **Commitment Title:** Manatee In-Water Protection

Commitment Made To:	USFWS	Environmental Commitment:	Yes
Status:	Commitment In Progress	Affects Any Other Environmental Commitment:	No
Implementation Discipline:	Construction	Commitment Approval Date:	10/14/2019
Transmittal Date:	12/19/2023		

Commitment Description: The most current version of the FWC Standard Manatee Conditions for In-Water Work will be implemented to ensure that manatees will not be adversely impacted by the project. This commitment was made during the PD&E Study but considered an implementation measure at that time.

Comments/Notes: 1/8/2024 5:11:59 PM - This protection measure was referenced as an implementation measure at the time of the PD&E Study but is now considered a project commitment.
(Most Recent Comment Shown)

FM #: 434965-1 **Commitment Title:** Sea Turtle and Sawfish In-Water Protection

Commitment Made To:	NOAA Fisheries Service	Environmental Commitment:	Yes
Status:	Commitment In Progress	Affects Any Other Environmental Commitment:	No
Implementation Discipline:	Construction	Commitment Approval Date:	10/14/2019
Transmittal Date:	12/19/2023		

Commitment Description: The Protected Species Construction Conditions (NOAA Fisheries Southeast Regional Office) will be implemented to ensure that sea turtles and smalltooth sawfish will not be adversely impacted by the project. This commitment was made during the PD&E Study but considered an implementation measure at that time.

Comments/Notes: 1/8/2024 5:13:17 PM - This protection measure was referenced as an implementation measure during the PD&E Study but is now considered a project commitment.
(Most Recent Comment Shown)