	1.	GENERAL INFORMATION (originally approved	d Environmental Documen	t)
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- a. Project Phase: <u>Design Change and Construction Advertisement Reevaluation</u> (Design/Build)
- b. Document Type and Date of Approval: <u>Environmental Assessment (EA)/Finding of No Significant Impact (FONSI) approved by the USCG on February 3, 2009 (see attached EA/FONSI cover page Page A-34.)</u>
- c. Project Numbers: N/A Federal Aid FM ETDM
- d. Project Name, Location and Limits (from original document): Proposed Replacement Bridge across the Gulf Intracoastal Waterway, Mile 113.0, on SR 679 (Pinellas Bayway Structure E) at Tierra Verde, Pinellas County, Florida. (See the attached project location map from the EA/FONSI Page A-35.)
- e. Segments of Highway Being Advanced: <u>SR 679 (Pinellas Bayway Structure E)</u> from south of Madonna Boulevard to south of SR 682; (Work Program Item Segment [WPIS]: 410755-2, FAP: None).
- f. Prior Reevaluations: None
- g. Project Segment Planning Consistency: If more than one segment is being advanced additional tables should be added. Table does not need to include past/completed phases.

Plan Consistency for Project 410755-2

The project is in the Pinellas County Metropolitan Planning Organization (MPO) Pinellas 2040 Long Range Transportation Plan (LRTP), adopted December 10, 2014. The project is in the current FDOT work program. Project no. 410755-2 is associated with the right of way acquisition phase for the project because a temporary construction easement is needed to construct the project.

h. Name and title of FDOT District Preparer: Robin Rhinesmith, Environmental Administrator

2. EVALUATION OF CHANGES IN IMPACTS

		YES / NO	COMMENTS
A.	SOCIAL & ECONOMIC		
1.	Social	[] [X]	See Pages A-1 to A-4
2.	Economic	[] [X]	See Page A-4
3.	Land Use Changes	[] [X]	See Page A-5
4.	Mobility	[] [X]	See Page A-5
5.	Aesthetic Effects	[] [X]	See Pages A-5 to A-6
6.	Relocation Potential	[] [X]	See Page A-6
7.	Farmland	[] [X]	See Page A-6
В.	CULTURAL		
1.	Section 4(f)	[] [X]	See Pages A-6 to A-7
2.	Historic Sites/Districts	[] [X]	See Pages A-7 to A-8
3.	Archaeological Sites	[] [X]	See Pages A-8 to A-9
4.	Recreational Areas	[] [X]	See Pages A-9 to A-11
C.	NATURAL		
1.	Wetlands and Other		
	Surface Waters	[X] []	See Pages A-11 to A-14
2.	Aquatic Preserves and		
	Outstanding FL Waters	[] [X]	See Pages A-14 to A-15
3.	Water Quality and Quantity	[] [X]	See Page A-15
4.	Wild and Scenic Rivers	[] [X]	See Page A-16
5.	Floodplains	[] [X]	See Page A-16
6.	Coastal Zone Consistency	[] [X]	See Pages A-16 to A-17
7.	Coastal Barrier Resources	[] [X]	See Page A-17
8.	Protected Species and Habitat	[X] []	See Pages A-17 to A-22
9.	Essential Fish Habitat	[X] []	See Pages A-22 to A-24
D.	PHYSICAL		
1.	Highway Traffic Noise	[] [X]	See Pages A-25 to A-27
2.	Air Quality	[] [X]	See Page A-27
3.	Contamination	[] [X]	See Pages A-28 to A-29
4.	Utilities and Railroads	[] [X]	See Pages A-29 to A-30
5.	Construction	[X] []	See Pages A-30 to A-31
6.	Bicycles and Pedestrians	[] [X]	See Pages A-31 to A-32
7.	Navigation	[] [X]	See Pages A-32 to A-33

3. EVALUATION OF MAJOR DESIGN CHANGES AND REVISED DESIGN CRITERIA (e.g., Typical Section Changes, Alignment Shifts, Right of Way [ROW] Changes, Bridge to Box Culvert, Drainage Requirements, Revised Design Standards).

Project Limits: The EA/FONSI approved on February 3, 2009, consisted of one segment (see the attached reevaluation project location map, Page A-36). The design segment information is presented below:

• SR 679 (Pinellas Bayway Structure E) from south of Madonna Boulevard to south of SR 682 (WPIS: 410755-2). THIS IS THE SUBJECT OF THIS DESIGN CHANGE AND CONSTRUCTION ADVERTISEMENT REEVALUATION (DESIGN/BUILD).

The proposed improvements for WPIS 410755-2 SR 679 (Pinellas Bayway Structure E) from south of Madonna Boulevard to south of SR 682 will include replacing the existing two-lane low-level double-leaf bascule bridge on SR 679 (Pinellas Bayway Structure E) with a high-level fixed-bridge structure providing for the US Coast Guard (USCG) required 65-foot (ft) vertical navigational clearance over the existing channel (see project location map, Page A-35). A roundabout will be constructed at the intersection of SR 679 with 1st Street East/Village condominium complex driveway/Madonna Boulevard intersection. Based on the data provided by the bridge tender at Structure E and allowing for tidal fluctuations, this vertical navigational clearance height would allow over 99 percent of the waterway users that currently use the channel to safely navigate under the proposed structure. All construction is proposed within the existing ROW, except for a Temporary Construction Easement (TCE) at 1st Street East/The Village condominium complex driveway. The TCE commences on the date that FDOT issues Notice to Proceed (NTP) to the Design/Build contractor and the duration is three years, with FDOT reserving the right to receive up to three one year extensions.

The approved Project Development and Environment (PD&E) Study Preferred Alternative included a bridge replacement typical section with one 12-ft lane and a 10-ft shoulder in each direction. The shoulders can accommodate bicyclists and disabled vehicles. A 5-ft sidewalk was included on the west side, separated from the shoulder by a concrete barrier wall. An 11-ft sidewalk was provided on the east side to accommodate Pinellas County's planned multi-use path. A 4.5-ft high pedestrian/bicycle railing was provided on the outside of each sidewalk. Pedestrian hand railings are also required on the sidewalks since the grade exceeds 5 percent. The overall width of the fixed-span was to be 65 ft. All superstructure components would be located above the splash zone. Unlike the existing condition, the proposed bridge (north side only) could accommodate vehicular traffic under the bridge from one side of the causeway to the other. The design speed was 45 mph.

South of the bridge, the typical section was a four-lane divided urban roadway with 12-ft lanes and 4-ft bike lanes adjacent to the curb and gutter. A 12-ft sidewalk was provided on the east side to accommodate a planned multi-use path. The existing 5-ft sidewalk on the west side remained in place. The median width varies. In addition, turn lanes were included at the Madonna Boulevard intersection. The design speed was 45 mph.

North of the bridge, the at-grade roadway was to be a two-lane undivided rural roadway with one 12-ft lane and a 12-ft shoulder (5-ft paved) in each direction. A 5-ft sidewalk was provided on the west, while a 12-ft sidewalk was provided on the east side. Access from SR 679 to the causeway beaches north of the bridge could continue via the existing northern set of turnouts. Vehicles could then travel along the causeway on either side to reach the beach area at the southern end of the causeway. The design speed was 50 mph. The existing graded access roads for recreational beach access will be replaced to provide similar access to Boca Ciega Bay on both sides of SR 679, and crossing under the new bridge.

The northern and southern roadway approaches to the bridge structure would be placed on an earthen fill section with a retaining wall. The retaining wall will minimize the amount of fill needed to be placed on the causeway and into Boca Ciega Bay and prevent the type of erosion evident in the existing sloped embankment. The sidewalk on the east side was to be reduced to 11-ft in width when on fill with a retaining wall to match the bridge.

The proposed bridge structure will accommodate a stormwater management facility (SMF) under both the north and south ends of the bridge to meet treatment requirements for the proposed project. These proposed pond configurations will also accommodate a potential future SR 679 widening to four-lanes without modification, if warranted.

There are six primary differences between the approved PD&E study EA/FONSI concept and the current proposed concept (dated April 13, 2017). The first change affects the typical sections. The previously approved 11-foot sidewalk on the bridge has been changed to a 12-foot sidewalk to meet the standard width of a shared-use path. In addition, handrails have been added across the bridge along the inside barrier wall along the sidewalk. These changes added 2 feet to the overall bridge width, from 65-feet to 67-feet.

The second difference from the approved PD&E study concept is the change from a signalized intersection at the 1st Street East/Village condominium complex driveway/Madonna Boulevard intersection to a roundabout. The roundabout is within the existing right-of-way. Since roundabouts are an alternative to a conventional signalized intersection, a signal is no longer warranted.

The third difference from the approved PD&E study concept is at the 1st Street East/Village condominium complex driveway/Madonna Boulevard intersection. The approved PD&E study EA/FONSI concept included a realigned 1st Street East/Village condominium complex driveway to line up perpendicular to SR 679, aligned with the existing Madonna Boulevard. The impacts to The Village condominium complex included a 17,936 square foot (0.41 acre) TCE for construction of the realigned 1st Street East/Village Driveway, construction of a new guardhouse, modified internal circulation that required a separate egress gate, and loss of parking spaces. The TCE was to commence on the date that FDOT issues NTP to the Design/Build contractor and the duration was to be one year, with FDOT reserving the right to receive up to three one-year extensions. The design change minimizes impacts by avoiding the need to reconstruct the guard house by developing a slightly skewed connection to the roundabout at Madonna Boulevard. The internal circulation and

parking spaces within The Village condominium complex are no longer impacted. The TCE is now planned to be reduced from 17,936 square feet (0.41 acre) to 4,059 square feet (0.09 acre). The TCE still commences on the date that FDOT issues NTP to the Design/Build contractor but the duration is three years, with FDOT reserving the right to receive up to three one year extensions.

The fourth difference relates to the stormwater management pond sites. The PD&E Preferred Alternative included one pond on the south side (SMF A-1) and one pond on the north side (SMF B-1-B). Preliminary 2009 permit drawings added three small ponds within the existing right-of-way south of Madonna Boulevard, on the west side of SR 679 (between the 7-Eleven Driveways). The current concept design has removed these three small ponds, and will utilize the original PD&E pond site. On the north end of the bridge, the single PD&E pond site within the existing right-of-way will still be utilized. However, it is broken into two ponds to accommodate a graded access road which allows vehicles to cross between the two ponds under the bridge to access the beach areas on both sides of the causeway.

The fifth difference is the addition of two 30-foot wide temporary trestles to facilitate construction of the bridge end spans in shallow water where barge access is difficult. The south trestle is three 25-foot long spans, for a total length of 75 feet. The spans are 30 feet wide. The south trestle also has a single 30 foot by 30 foot lateral span coming off the west side, going under the proposed bridge. Access to the southern trestle is from the south end. The northern trestle is 25 25-foot spans for a total length of 625 feet. The northern trestle includes four additional 30-foot by 30-foot lateral spans, spaced apprioximately 120 feet apart, and one 30-foot by 75-foot lateral span to allow vehicular access to the trestle from the causeway to the west. The trestle deck surfaces are timber and they are are supported by 24-inch piles and cap girders. The trestles are being added and permitted as an option to top-down construction methods.

The sixth and final change is the closure of the northernmost existing driveway to the 7-Eleven, just south of Madonna Boulevard, on the west side of SR 679, that was shown open to traffic on the PD&E concept plans. The reason for the closure is that the driveway is too close to the roundabout, and it could contribute to an unsafe condition with vehicles entering and exiting SR 679 so close to the roundabout.

4. COMMITMENT STATUS

Mitigation Status

In accordance with Executive Order 11990, project impacts to wetlands were analyzed and it is estimated that 2.59 acres (ac) of wetlands will be impacted.

A full range of mitigation options were considered in developing this project to avoid long-term and short-term adverse involvement with wetland resources and to avoid new construction in wetlands wherever there is a practicable alternative. Mitigation policies have been established by the United States Army Corps of Engineers (USACE), the Florida Department of Environmental Protection (FDEP), and the water management districts. Options for mitigating the loss of wetlands include mitigation banking, upland and/or wetland preservation, and wetland restoration, enhancement, and creation.

Wetland involvement resulting from the construction of this project are anticipated to be mitigated pursuant to Section 373.4137 Florida Statutes (F.S.) to satisfy all mitigation requirements of Part IV Chapter 373, F.S. and 33 United States Code 1344. Under Section 373.4137 F.S., mitigation of FDOT wetland impacts will be implemented by the Southwest Florida Water Management District (SWFWMD). The project is currently listed on the FDOT's wetland mitigation inventory, which is provided to the SWFWMD on an annual basis. It is anticipated that FDOT will provide funding to the SWFWMD for implementation of wetland mitigation required for this project.

Based on the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. Wetland involvement is considered to be minimal.

Status: The FDOT verified the existing wetland boundaries and conducted a resurvey of on-site benthic habitat on August 22 and 26, 2013. This effort determined that the previously-delineated wetland boundaries were accurate, with no changes needed. This updated seagrass survey determined that the seagrass bed boundaries varied only minimally from the previously established seagrass boundary (additional 0.02 acre). The current proposed concept plans for the project have not changed since the 2008/2009 permitting efforts in a manner that would affect wetland or surface water impacts. The project will impact approximately 0.05 acre (ac) of wetlands (0.004 ac of mangroves, 0.043 ac of salt marsh), 0.07 ac of seagrass, and 0.19 ac of surface waters (pile placement in Boca Ciega Bay).

Mitigation will be provided through the SWFWMD FDOT Mitigation Plan [373.4137 (F.S.)]. The issued SWFWMD ERP approved use of mitigation at the Ft. Desoto Park Mitigation Site (SW 70) and this mitigation has already been completed. This mitigation will offset project impacts to wetlands, habitat for applicable listed species and Essential Fish Habitat. The National Marine Fisheries Service (NMFS) provided a letter to the

USCG on April 1, 2016 responding to the USCG request for consultation pursuant to Section 7 of the Endangered Species Act (ESA). NMFS documented that they received the Biological Assessment (BA) on July 29, 2015, they requested additional information from the applicant on July 31, 2015. NMFS received the USCG request for consultation on August 10, 2015 and they received additional information from the applicant on September 22, 2015 and initiated consultation that day. The April 1, 2016 letter concluded that because all potential project effects to listed species were found to be beneficial, discountable, or insignificant, NMFS concluded that the proposed action is not likely to adversely affect listed species under NMFS' purview. This concludes the USCG's consultation responsibilities under the ESA for species under NMFS's purview. The USACE issued a Nationwide Permit for this project on January 23, 2017.

Changes in design plans in April 2017 required permit modifications for wetlands (mangroves and salt marsh), seagrass and surface waters. There are now approximately 0.307 acres of wetland impacts (0.231 acres of mangroves and 0.076 acres of salt marsh), 0.077 acres of seagrass and 0.19 acres of surface water impacts. Additional seagrass impact mitigation is proposed at Ft DeSoto Mitigation Site and wetland (mangrove and salt marsh) impacts are proposed to be mitigated at Mangrove Point Mitigation Bank, which is anticipated to have the ability to release credits prior to the award of the contract to the Design-Build firm.

Permit pre-app meetings were held with both SWFWMD (June 8, 2017) and USCG/NMFS (June 20, 2017) to discuss the updates. NMFS and USCG indicated that the existing permit is sufficient to cover the changes discussed but that the information be submitted for their records. It was also agreed upon that a commitment requiring vibratory method of temporary trestle pile installation (and not the impact hammer driving method) be added to the RFP.

If applicable, any additional impacts resulting from changes brought about the Design/Build firm beyond those permitted will be coordinated with FDOT and the applicable regulatory agencies.

Commitment Compliance

In order to minimize the impacts from the construction of this project on the human and natural environment, the FDOT has made the following commitments for the proposed bridge project in the Environmental Determination (EA/FONSI, February 3, 2009):

1. During the design phase, FDOT will evaluate traffic signal warrants at the realigned Madonna Boulevard/Pinellas Bayway intersection to determine if a traffic signal is warranted.

Status: The Request for Proposal (RFP) to the Design/Build Contractor now includes a roundabout, therefore this commitment no longer applies. This commitment has been completed.

2. The replacement bridge and roadway improvements on the northern causeway will not preclude capacity improvements in the future, if needed.

Status: Provisions in the RFP to the Design/Build Contractor mention that the bridge replacement will not preclude capacity improvements in the future.

3. FDOT will implement the "Manatee and Sea Turtle Watch Program Guidelines", the "Sea Turtle and Smalltooth Sawfish Construction Conditions", and the "Construction Provisions Gulf Sturgeon Guidelines Note that no suitable sea turtle nesting beaches are found in the project area and protective measures are for turtles in open water only.

Status: As part of recent project coordination with the National Marine Fisheries Service and US Fish and Wildlife Service, the FDOT has determined that this project "may effect, but is not likely to adversely affect" these species. In the respective coordination letters to both agencies, dated November 21, 2014, the FDOT has committed to the use of updated species-specific agency guidelines. Consistent with commitment made in the original EA/FONSI, the FDOT will implement the NMFS' "Sea Turtle and Smalltooth Sawfish Construction Conditions" and the FWC's "Standard Manatee Conditions for In-Water Work'. Additionally, the Department's Design/Build contractor will develop a bridge demolition/project blasting plan that is consistent with the USFWS's "Guidelines for the Protection of Manatees and Sea Turtles During the Use of Explosives in the Waters of the State of Florida".

- 4. The FDOT will continue coordination of the potential impact mitigation measures associated with pile driving and blasting activities with the USCG and applicable federal and state resource/regulatory agencies.
 - The FDOT will commit to pile driving activities for a maximum of two locations at one time.
 - The Contractor will be restricted to working Monday through Saturday (no in-water work on Sunday).
 - The FDOT will commit to requiring the Contractor to start at a low pile driving force and gradually increase to full force (ramp up) during pile driving.
 - Pile driving will be restricted to the daylight hours between civil twilight (as defined by the Astronomical Applications Department of the US Naval Observatory for St. Petersburg, Florida). Civil twilight is defined at http:\\aa.usno.navy.mil\\data\\docs\\RS_OneYear.php.

Status: This is a new commitment made for the bridge project. It will be implemented by the FDOT during construction.

5. Commitment written for the trestle pile driving method as requested by NMFS on June 20, 2017.

Temporary trestle pile driving method will be limited to the vibratory method. If impact hammer driving method is used, a reconsultation with USCG and NMFS is required.

Status: This is a new commitment made for the bridge project. It will be implemented by the FDOT during construction.

VII. STATUS OF PERMITS

The following list provides the status of the environmental permits required by each regulatory agency for the bridge segment:

Agency	<u>Type</u>	Status
SWFWMD	Environmental Resource Permit (ERP) No. 43023803.003	Issued: 9/3/2014 Expires: 9/3/2019 Permit modification submitted June 15, 2017, Application No. 748686
US Army Corps of Engineers (USACE)	Nationwide Permit SAJ-2002-04286	Issued: January 23, 2017 Expires: March 17, 2017 Permit re-verification to be submitted June 2017
US Coast Guard	Bridge Permit 10-16-7	Issued: 12/12/2016 Expires: 12/12/2021 The USGC will be provided with an informational packet to update their files to cover design changes in 2017, but have indicated that they will not require a new permit or permit modification
Florida Department of Environmental Protection (FDEP)	Stormwater Discharge from Large and Small Construction (replaces National Pollution Discharge Elimination System [NPDES])	NOI submitted 48 hours prior to construction

6. CONCLUSION

If no changes affecting the original environmental determination have occurred check the following:

[X] The above Environmental Document has been reevaluated as required by 23 CFR § 771.129. It has been determined that there have been no changes to the project that affect the original environmental determination. Therefore, the Administrative Action remains valid.

It is recommended that the projects identified herein be advanced to the next phase.

7. REVIEWER SIGNATURE BLOCK

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

	Robin Rhinesmith Print Name	<u> </u>	
	Rushines		7 /11 /2017
	District approving authority or designe	ee	Date
8.	USCG CONCURRENCE		
	USCG signature required? [X] Yes	[] No (date of consultation)	7/12/2017
	Jennifer Zercher	.,	
	Print Name		8 /_ 17 /2017
	USCG approval authority		Date
9.	ATTACHMENTS		

ATTACHMENT A

A. SOCIAL & ECONOMIC

Social

Community Cohesion

Since the proposed project involves the improvement of an existing facility with no ROW acquisition, no splitting or isolation of neighborhoods will occur. The project is not anticipated to harm elderly persons, handicapped individuals, non-drivers and transit-dependent individuals, or minorities. It is anticipated that the project improvements will not affect community cohesiveness. Therefore, this project has been developed to comply with Executive Order 12898, Environmental Justice, issued on February 11, 1994.

<u>Status</u>: On August 19, 2013, a field review was conducted that included a review of the communities along the project limits. The field review verified that the planned projects will not affect community cohesion. Therefore, there is no change in status.

Community Services

There are no cemeteries, schools, medical and emergency treatments facilities, or public buildings and facilities located within the project study area. Community service facilities that are located along or near the project study area include one fire station, located in Tierra Verde at 1420 Pinellas Bayway South and one church, The Island Chapel located at 1271 Pinellas Bayway South. There will not be any effects to these facilities from the proposed improvements.

The Preferred Alternative will have beneficial results for the community by providing enhanced access for emergency services to and from the mainland and Tierra Verde and Mullet Key (Fort De Soto Park) since the traffic will not be stopped periodically for the bascule bridge to open. This will decrease response times for police and medical services (there is a fire station on Tierra Verde) and aid in emergency evacuation.

<u>Status</u>: On August 19, 2013, a field review was conducted that included a review of land use and community and emergency services along these projects limits.

The fire station has been relocated to 540 Sands Point Drive, which is approximately one mile south of the proposed bridge replacement construction. The Island Chapel is also located approximately one mile south of the proposed bridge replacement construction. The projects will not adversely affect the access or daily operations of these two properties.

A Maintenance of Traffic (MOT) plan has been added to the RFP. SR 679 is a designated hurricane evacuation route; therefore, access requirements will be maintained by

ATTACHMENT A

Contractor adherence to FDOT's Standard Specifications for Road and Bridge Construction.

Title IV Consideration

In February 1994, the President of the United States issued Executive Order 12898 (Environmental Justice) requiring federal agencies to analyze and address, as appropriate, disproportionately high adverse human health and environmental effects of federal actions on ethnic and cultural minority populations and low income populations, when such analysis is required by the National Environmental Policy Act (NEPA) of 1969. An adverse effect on minority and/or low-income populations occurs when: (1) The adverse effect occurs primarily to a minority and/or low income population; or, (2) The adverse effect suffered by the minority and/or low-income population is more severe or greater in magnitude than the adverse effect suffered by the non-minority and/or non-low-income populations.

An evaluation of environmental, public health and interrelated social and economic effects of the proposed projects on minority and/or low-income populations is required. All proposed projects should include measures to avoid, minimize, and/or mitigate disproportionately high and adverse impacts and provide offsetting benefits and opportunities to enhance communities, neighborhoods, and individuals affected by these activities.

The 17 environmental justice criteria identified in Executive Order 12898 are: (1) air pollution; (2) noise; (3) water pollution; (4) soil contamination; (5) destruction of manmade resources; (6) destruction of natural resources; (7) diminution of aesthetic values; (8) detriment to community cohesion; (9) diminution of economic viability; (10) detriment to facilities access - public and private; (11) detriment to services access - public and private; (12) vibration; (13) diminution of employment opportunities; (14) displacement; (15) traffic congestion and impairment to mobility; (16) exclusion, isolation, or separation; and (17) diminution of Department of Transportation (DOT) benefits.

In addition to compliance with Executive Order 12898, any proposed federal project must comply with the provisions of Title VI of the Civil Rights Act of 1964, as amended by Title VIII of the Civil Rights Act of 1968. Title VI of the 1964 Civil Rights Act provides that no person will, on the grounds of race, color, religion, sex, national origin, marital status, disability, or family composition be excluded from participation in, be denied the benefits of, or be otherwise subject to discrimination under any program of the federal, State, or local government. Title VIII of the 1968 Civil Rights Act guarantees each person equal opportunity in housing.

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This project has been developed in accordance with the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1968, and in accordance with Executive Order 12898. The proposed project will not result in any disproportionate adverse effects to any distinct minority, ethnic, elderly or handicapped groups and/or low-income households. Title VI information was made available at the Public Hearing.

<u>Status</u>: Based on statistics from the US Census Bureau, these projects are not located within an area where household incomes are less than \$25,000 or have minority populations greater than 40 percent. No minority or low-income populations have been identified that would be adversely impacted by the proposed projects, as determined above. Therefore, in accordance with the provisions of Executive Order 12898, no further Environmental Justice analysis is required.

Controversy Potential

In coordination with the USCG, FDOT held an Alternatives Public Workshop on April 6, 2006. The purpose of the meeting was to solicit input from the public regarding the location, design, social, economic, and environmental effects of the proposed alternatives. Various roadway improvement options were also evaluated for the reconfiguration of The Madonna Boulevard/Pinellas Bayway intersection. The options included: relocating The Village driveway to line up with Madonna Boulevard (Option A); relocating Madonna Boulevard to line up with The Village driveway (Option B); and slightly relocating both to "meet in the middle" (Option C). No capacity enhancements are proposed at this time. Approximately 96 citizens participated in the Alternatives Public Workshop. Approximately 37 individuals submitted written comments at the workshop; 28 individuals mailed comments after the workshop; and four individuals' submitted comments by e-mail. The majority of the public was in favor of Preferred Alternative 6 (High Level Fixed Bridge Replacement over Relocated Channel), and Intersection Option B (Relocating Madonna Boulevard to line up with the Village Driveway).

In coordination with the USCG, the FDOT held a Public Hearing on March 28, 2007. The purpose of the meeting was to solicit input from the public regarding the location, design, social, economic, and environmental effects of the Preferred Alternative.

The initial Preferred Alternative included the reconfiguration of the Madonna Boulevard/Pinellas Bayway intersection. The recommended intersection option would relocate Madonna Boulevard to line up with The Village driveway (Option B). No capacity enhancements were proposed at this time.

Approximately 164 individuals participated in the Public Hearing, along with 21 project team members. A total of 52 comments were received during the Public Hearing comment

ATTACHMENT A

period. At the hearing, two individuals provided verbal comments during the formal portion, 22 individuals spoke their opinions to the court reporter during the informal portion, and 21 individuals submitted written comments in the comment boxes. The court reporter recorded all verbal comments and prepared a verbatim public hearing transcript. All written comments postmarked by April 9, 2007 were included in the transcript, as well. A majority of the public confirmed their preference to the high level fixed bridge.

Other methods of public outreach included small group meetings, newsletters, a fact sheet and updates in local publications.

Status: There is no known controversy associated with the proposed bridge replacement being advanced by this reevaluation. On April 27, 2017, an Open House was held for the project at St. Petersburg College in the Allstate Center Florida Room from 4-7 P.M. Since the meeting was an Open House format, no formal presentation was given, however, FDOT provided display boards encompassing the project and staff were prepared to answer the public's questions. 249 people signed in at the meeting and many comments included "get the project done". Others had comments with regard to pedestrian and bicycle safety, the roundabout and when construction would start.

A Public Involvement campaign will be conducted for the project in accordance with a project Community Awareness Plan (CAP) that is prepared by the Design/Build Firm and reviewed and approved by FDOT. A complete section of Public Involvement requirements for this project are listed in the RFP. Coordination and consultation will continue throughout the life of the project to ensure that all appropriate parties understand the current status of the project and are provided opportunities to submit comments.

Economic

The approved EA/FONSI did not provide an Economic summary.

Status: A review of the existing land use data on the Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST) on January 4, 2017 shows that the existing land use in the area adjacent to and surrounding the projects are mostly residential and commercial. These uses are consistent with the uses described in the EA/FONSI.

This project will enhance the access and economic development by bringing residents to the area, increase tax revenue, and provide connectivity.

ATTACHMENT A

Land Use Changes

The designated land uses on the Updated Countywide Plan for Pinellas County Future Land Use Map (FLUM) indicates that future land uses conform to the existing land uses. Future land use designations include residential low, residential medium, residential, suburban, and commercial general. Future recreational uses include Fort De Soto Park located south of the project area and Bunces Pass and the proposed Bayway Trail South, a recreational trail that would be located adjacent to SR 679 and link the mainland to Fort De Soto Park.

Status: The Pinellas Planning Council Countywide Future Land Use Plan, Pinellas County, Florida, Future Land Use Map (FLUM) (adopted January 31, 1989, amended February 2014), indicates low and medium residential, general commercial preservation lands, and recreation and open space within projects that are being advanced with this reevaluation. These land uses are consistent with the existing land uses within the segments; therefore, these projects will not impact future land uses within the project limits.

Mobility

The approved EA/FONSI did not provide Mobility or Scenic Highways summaries. A map of scenic highways located in the state of Florida is available on the Florida Scenic Highways website at www.floridascenichighways.com.

<u>Status:</u> A mobility review was conducted using the social layers in the Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST) on January 4, 2017. There are no airport facilities or railroad facilities in these limits.

The current proposed bridge concept (dated August 2013) shows a 5-ft sidewalk on the west side of the bridge and a 12-ft shared-use path on the east side of the bridge. These two modes of transportation for bicyclists and pedestrians are continued both north and south of the bridge.

Beneath the bridge and adjacent to its approaches are the navigable waters and beaches of Tierra Verde.

A review of the Florida Scenic Highway website verified that these segments are not designated as part of the Florida Scenic Highway system.

Aesthetic Effects

Aesthetics are an important consideration in any transportation project. The Preferred Alternative can be designed with longer spans on a single pier instead of a group of piles.

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The result would provide more open, spacious views for both water and nearby land uses. The Preferred Alternative, a high-level fixed-bridge, would result in improved aesthetics, as compared to the bascule bridge replacement or rehabilitation alternatives, since span lengths can be longer and no crutch bents are required. There are no provisions or commitments made regarding special aesthetic features, such as landscaping or hardscaping for this section of SR. 679.

<u>Status</u>: The approved EA/FONSI did not include any aesthetic/landscaping commitments. To date, no landscape proposals have been requested by the local government. The proposed design is generally consistent with the approved PD&E concept plans. Aesthetic elements of the proposed bridge will be coordinated with the public and local agencies as appropriate during the project's construction phase as noted in the RFP.

Relocation Potential

The construction of the Preferred Alternative, with the relocation of The Village Driveway and new roundabout at Madonna Boulevard is not expected to cause relocations.

Status: A small portion of work will be required within ROW not owned by the FDOT. This will involve a minor (4,059 square feet /0.09 acre) Temporary Construction Easement at The Villages condominium complex and will not require any relocations. The TCE is to commence on the date that FDOT issues NTP to the design/build contractor and the duration is three years, with FDOT reserving the right to receive up to three one year extensions. The proposed projects, as presently conceived, will not displace any residences or businesses within the community. Therefore, there is no change in status.

Farmland

Through coordination with the Natural Resources Conservation Service it has been determined that the provisions of the Farmland Protection Policy Act of 1984 do not apply to this project.

Status: There is no change in status.

B. CULTURAL

Section 4(f)

Section 4(f) lands were not evaluated in the EA/FONSI. The EA/FONSI stated that the USCG is no longer part of the United States Department of Transportation (USDOT) since

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2003; therefore, Section 4(f) of the Department of Transportation Act of 1966 does not apply to USCG projects.

<u>Status</u>: Due to USCG involvement in these projects, the provisions of Section 4(f) are not applicable.

Historic Sites/Districts

In accordance with procedures contained in Chapter 36 Code of Federal Regulations (CFR) Part 800 (revised May 1999), a Final Cultural Resource Assessment Survey (CRAS), including literature review and field survey, was performed for the proposed project. The survey was completed in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (Public Law 89-665); Executive Order 11593; and the implementing regulations, as well as the provisions contained within the revised Chapter 267, F.S. All work was carried out in conformity with Part 2, Chapter 12 ("Archaeological and Historical Resources") of FDOT's Project Development and Environment Manual, and the standards contained in the Cultural Resource Management Standards and Operational Manual.

The purpose of the CRAS was to locate and identify any historic resources within the project Area of Potential Effect (APE) and to assess the significance of these resources in terms of eligibility for listing in the National Register of Historic Places (NRHP) according to the criteria set forth in 36 CFR 60.4. The historical/architectural survey was conducted in September 2005. Background research, including a review of the Florida Master Site File (FMSF) and the NRHP, indicated an absence of previously recorded historic resources. As a result of field survey, no new historic resources were identified within the project APE; Thus, no significant historic resources that are listed, determined eligible, or considered potentially eligible for listing in the NRHP will be affected by this project.

The CRAS was submitted to the State Historic Preservation Officer (SHPO) on behalf of the USCG. The SHPO concurred on March 17, 2006.

<u>Status</u>: Since the previous CRAS was only coordinated with the SHPO (no Federal Highway Administration (FHWA) involvement at the time) and since it was conducted approximately eight years ago, a CRAS Update was prepared in August 2013 to evaluate historic resources that may have become 50 years old after the previous CRAS was completed.

This evaluation consisted of a review of the previous CRAS, related source materials and historic resources field assessment. The latest concept plan (August 2013) shows five SMF sites (A-1, A-1A, A-1B, A-2 and B-1); all are located within existing FDOT ROW.

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As a result of background research and a historic resources field survey, four historic resources were located and evaluated during the course of this assessment. These resources include one previously-recorded bridge (Structure E; 8PI11994), two newly recorded buildings (8PI12094 and 12095), and one newly-recorded resource group (8PI12096) consisting of two buildings. The bridge was previously evaluated by the SHPO in 2011 and determined not NRHP-eligible. Based on the results, the newly-recorded resources, which are 1960s commercial buildings, also do not appear to be NRHP-eligible.

The CRAS Update was submitted to FHWA and SHPO for review. This CRAS was coordinated with FHWA and SHPO, since it had not yet been determined that there would be no FHWA involvement. FHWA determined on October 18, 2013, that this bridge project will have no effect on significant historic resources and coordinated with SHPO. SHPO concurred with these findings on November 5, 2013.

Design changes including the roundabout at Madonna Boulevard and the trestle construction option, all located within existing ROW, were reviewed through a desktop review in April 2017. The desktop review confirmed that there are no additional pre-1970 parcels within the project APE and there is no need for additional archaeological fieldwork. No additional cultural resources fieldwork or coordination is required.

Archaeological Sites

In accordance with procedures contained in 36 CFR 800 (revised May 1999), a *Final CRAS*, including literature review and field survey, was performed for the proposed project. The survey was completed in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (Public Law 89-665); Executive Order 11593; and the implementing regulations, as well as the provisions contained within the revised Chapter 267, F.S. All work was carried out in conformity with Part 2, Chapter 12 ("Archaeological and Historical Resources") of FDOT's *Project Development and Environment Manual*, and the standards contained in the *Cultural Resource Management Standards and Operational Manual*.

The purpose of the CRAS was to locate and identify any prehistoric and historic period archaeological sites within the project APE and to assess the significance of these resources in terms of eligibility for listing in the NRHP according to the criteria set forth in 36 CFR 60.4. The archaeological survey was conducted in September 2005. Background research, including a review of the FMSF and the NRHP, indicated an absence of previously recorded archaeological sites. As a result of field survey, no new archaeological sites were identified within the project APE. Thus, no significant archaeological sites that are listed, determined eligible, or considered potentially eligible for listing in the NRHP, will be

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affected by this project. The CRAS was submitted to the SHPO on behalf of the USCG. The SHPO concurred on March 17, 2006.

Status: Since the previous CRAS was only coordinated with the SHPO (no FHWA involvement at the time) and since FHWA requested a desktop review to determine underwater archaeological potential, a CRAS Update was prepared in August 2013. The CRAS Update did not include subsurface testing within the project ROW since that had already been conducted as part of the previous CRAS. The latest concept plan (August 2013) shows five SMF sites (A-1, A-1A, A-1B, A-2 and B-1); all are located within existing FDOT ROW that was surveyed during the previous CRAS.

The underwater archaeological desktop assessment for this bridge project was designed to determine if submerged historic properties may be located with the project's APE. An examination of a variety of information including physiographic characteristics of the area, charts, aerial photographs, and information in the FMSF and Automated Wreck and Obstructions Information System (AWOIS), coupled with the amount of dredge and fill activities associated with development in the area including construction of the roadway and maintenance of the main channel suggests that the probability of encountering such resources is low. Submerged Paleoindian sites are unlikely due to the absence of old river channels or sink features. The AWOIS information and recent nautical charts do not show any wrecks within or near the bridge project area. If wrecks are present, they would likely represent small, local non-historic vessels.

The CRAS Update was submitted to FHWA and SHPO for review. This CRAS was coordinated with FHWA and SHPO, since it had not yet been determined that there would be no FHWA involvement. FHWA determined on October 18, 2013, that this bridge project will have no effect on significant archaeological resources and coordinated with SHPO. SHPO concurred with these findings on November 5, 2013.

Design changes including the roundabout at Madonna Boulevard and the trestle construction option, all located within existing ROW, were reviewed through a desktop review in April 2017. The desktop review confirmed that there are no additional pre-1970 parcels within the project APE and there is no need for additional archaeological fieldwork. No additional cultural resources fieldwork or coordination is required.

Recreational Areas

There are no parks within or adjacent to the projects; however, recreational activities along SR 679 and the surrounding waters include fishing and boating. The closest park is Fort De Soto Park, located approximately 5 miles (mi) south of the project area and Bunces Pass. Fort De Soto Park is a Pinellas County park which offers many amenities including

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camping, canoeing, swimming, fishing, boating, Fort De Soto Park Trail, a paw playground (dog park), and a historic fort. Fort De Soto Park is the largest and most active park in the county, hosting more than 2.7 million visitors each year, most of which access the park via automobile.

A proposed recreational trail, the Bayway Trail South, is planned for this portion of the Pinellas Bayway that would be located adjacent to SR 679 and link the mainland to Fort De Soto Park. The proposed trail would also connect the Fort De Soto Trail with the South Beaches Trail and the proposed Bayway Trail North that connects with the Pinellas Trail to the north and the Sunshine Skyway Trail to the south. Bayway Trail South is included in the Pinellas County Metropolitan Planning Organization Planned Cost Feasible Projects for 2015-2035.

The proposed Bayway Trail South was considered in the evaluation and development of bridge alternatives. The Preferred Alternative has been developed to include a multi- use path that will accommodate the planned trail. The Preferred Alternative will also provide enhanced vehicular and pedestrian/bicycle access to Fort De Soto Park since the traffic will not be stopped periodically for the bascule bridge to open.

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays throughout the project. Signs will be used to provide notice of road closures and other pertinent information to the traveling public. The local news media will be notified in advance of construction-related activities so that motorists, residents, and business persons can make accommodations. All provisions of the FDOT's *Standard Specifications for Road and Bridge Construction* will be followed.

Status: A desktop review of the Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST) on March 9, 2015 identified several recreational areas in the vicinity of the projects. The bridge project is located within the Boca Ciega Bay Aquatic Preserve/Outstanding Florida Waters (AP/OFW), which are held in trust by the State for a variety of uses including public recreation. While the roadway approaches south of the bridge would be constructed entirely within the existing 200-ft FDOT ROW, the bridge itself is within a permanent easement owned by the State and leased from the Florida Department of Environmental Protection (FDEP) for the transportation facility.

Pinellas County owns and manages the Cabbage Kay Management Area and Fort DeSoto Park, both of which occur south (outside) of the projects limits. However, project construction will be required to maintain vehicle access to Tierra Verde and these recreational areas. The proposed Bayway Trail South is planned to be located adjacent to the east side of SR 679, within FDOT transportation right-of-way (ROW). The proposed Bayway Trail South was considered in the evaluation and development of bridge alternatives during the original PD&E Study. The Preferred Alternative has been

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developed to include a 12-foot sidewalk on the east side that will accommodate the planned multi-use path.

The EDTM EST also shows the Segment 9 (Tampa Bay/Longboat Key) portion of the Florida Circumnavigational Paddling Trail crossing under the bridge just north of Tierra Verde. The continuity and safety of paddling opportunities under the bridge during construction will be maintained, including paddling opportunities outside the main channel. Access to navigational activities within the Boca Ciega Bay will be maintained during the bridge project's construction.

During various field reviews (latest April 29, 2014), various public recreational uses have been noted within the SR 679 ROW throughout the project. There is pedestrian fishing access allowed on portions of the bridge. Various portions of the project ROW on Bird Key are used for vehicle pull-off and informal/undesignated fishing/netting, kayak and watercraft (jet ski) access. There are no signs within the ROW explicitly prohibiting this use/access.

C. NATURAL

Wetlands and Other Surface Waters

In accordance with Executive Order 11990 "Protection of Wetlands" (May 1977), the proposed project was evaluated for potential impacts to wetlands. Wetland and surface water systems receive federal protection through provisions in the Clean Water Act (CWA) (1972) and the Section 10 of the Rivers and Harbors Act (1899). The State of Florida also provides protection to wetlands (Chapter 373 F.S.). Detailed information about the biotic communities as well as the analysis conducted for each alternative concept is contained in the Final Wetland Evaluation and Biological Assessment Report (WEBAR) prepared separately.

In order to determine the areal extent of wetland area affected by the proposed project, extensive evaluations of existing data and field reviews were performed by a qualified biologist in the winter of 2005/2006 and the spring of 2006.

In order to determine the approximate locations and boundaries of existing wetland communities within the project study area, available site-specific data were collected, reviewed and analyzed using the US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Maps, U.S. Geological Survey (USGS) Topographic Quadrangle maps, SWFWMD Land Use Maps based on the FDOT Florida Land Use Cover and Forms Classification System (FLUCCS), Natural Resource Service County Soil

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Survey, USFWS Classification of Wetlands and Deep water Habitats of the United States, aerial photography and ground-truthing.

Using the above information, the approximate boundaries of wetland communities were mapped on black and white aerials. Since both the SWFWMD and NWI mapping are conducted at a relatively coarse level of spatial accuracy (1:24,000 scale), more accurate wetland maps were created based on field reviews and aerial photointerpretation using 1:100 scale photography. Each wetland community was then labeled using the FLUCCS and NWI classification systems. Ground-truthing of wetland boundaries was accomplished by implementing the State of Florida wetland delineation methodology (Florida Administrative Code (F.A.C.) 62-340) and the USACE methodology (Corps of Engineers Wetlands Delineation Manual).

A list of land use types was developed using the FLUCCS codes. Five wetland and surface water system types were identified in the project area. These areas were mapped onto the Concept Plans and evaluated for ecological quality. As this is a bridge project, the majority of impacts were to surface waters identified as Bays/Estuary (FLUCCS 540). Mangrove swamps (FLUCCS 612); shoreline (FLUCCS 652), salt marsh (FLUCCS 642), and seagrass (FLUCCS 911) are the wetland or submerged aquatic vegetation (SAV) communities identified in the project area. A total of 6.9 ac of wetland exist within the project area. Seagrass beds are located within the project corridor, but their total acreage is not included in this estimate. Detailed seagrass surveys are recommended during design to more accurately locate and quantify the amount of seagrass in the area.

The majority of the wetland systems are located on the northern causeway of the bridge. Due to the presence of wetlands and submerged aquatic vegetation (SAV) immediately adjacent to the bridge approaches, particularly at the north end of the project, impacts to wetlands and SAV will be unavoidable. However, the alignment of the proposed widening of the bridge to the east side of the existing bridge will minimize impacts, particularly to SAV.

Wetland functionality (i.e., quality) was evaluated using the Uniform Mitigation Assessment Method (UMAM). The assessment areas included all wetland area within the Study Area. UMAM provides a measurement of wetland functionality through identifying wetland impacts as units of functional loss caused by the proposed project. Therefore, UMAM values represented in this study represent impacts to wetlands only (i.e., functional loss). UMAMs were performed on representative seagrass beds and on representative mangrove swamps within the project area. Wetland functional values were 0.8 for the seagrass beds and 0.5 for the mangrove fringe.

The anticipated involvement from the Preferred Alternative with wetlands and surface waters is 2.59 ac, with 0.06 ac attributable to wetlands (FLUCCS 612, 642, 652), 0.15 ac

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attributable to SAV (FLUCCS 911), and 2.38 ac attributable to surface waters (FLUCCS540). It should be noted that the involvement with surface waters (FLUCCS540) includes the entire area of the bay/estuary under the proposed bridge deck although all of that area may not be directly impacted.

For the Preferred Alternative, it has been determined that there are no practicable alternatives to construction in wetlands. All practicable measures will be used to reduce harm to wetlands during subsequent project phases. Short-term construction-related impacts will be minimized. Mitigation will be required for wetland involvement that results from the construction. To further minimize wetland involvement and affects to local water quality, specific measures will be implemented during construction.

A full range of mitigation options was considered in developing this project to avoid long-term and short-term adverse involvement with wetland resources and to avoid new construction in wetlands wherever there is a practicable alternative. Mitigation policies have been established by the USACE, the FDEP, and the water management districts. Options for mitigating the loss of wetlands include mitigation banking, upland and/or wetland preservation, and wetland restoration, enhancement, and creation.

Wetland involvement resulting from the construction of this project are anticipated to be mitigated pursuant to Section 373.4137 F.S. to satisfy all mitigation requirements of Part IV Chapter 373, F.S. and 33 United States Code 1344. Under Section 373.4137 FS, mitigation of FDOT wetland impacts will be implemented by the SWFWMD. The project is currently listed on the FDOT's wetland mitigation inventory, which is provided to the SWFWMD on an annual basis. It is anticipated that FDOT will provide funding to the SWFWMD for implementation of wetland mitigation required for this project. Based on the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures the minimize harm to wetlands which may result from such use. Wetland involvement is considered to be minimal.

<u>Status</u>: The FDOT verified the existing wetland boundaries and conducted a resurvey of on-site benthic habitat on August 22 and 26, 2013. This effort determined that the previously-delineated wetland boundaries were accurate, with no changes needed. This updated seagrass survey determined that the seagrass bed boundaries varied only minimally from the previously established seagrass boundary (additional 0.02 acre). The current proposed concept plans for the project have not changed since the 2008/2009 permitting efforts in a manner that would affect wetland or surface water impacts. The project will impact approximately 0.05 acre (ac) of wetlands (0.004 ac of mangroves, 0.043 ac of salt marsh), 0.07 ac of seagrass, and 0.19 ac of surface waters (pile placement in Boca Ciega Bay).

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Mitigation will be provided through the SWFWMD FDOT Mitigation Plan [373.4137] (F.S.)]. The issued SWFWMD ERP approved use of mitigation at the Ft. Desoto Park Mitigation Site (SW 70) and this mitigation has already been completed. This mitigation will offset project impacts to wetlands, habitat for applicable listed species and Essential Fish Habitat. The National Marine Fisheries Service (NMFS) provided a letter to the USCG on April 1, 2016 responding to the USCG request for consultation pursuant to Section 7 of the Endangered Species Act (ESA). NMFS documented that they received the Biological Assessment (BA) on July 29, 2015, they requested additional information from the applicant on July 31, 2015. NMFS received the USCG request for consultation on August 10, 2015 and they received additional information from the applicant on September 22, 2015 and initiated consultation that day. The April 1, 2016 letter concluded that because all potential project effects to listed species were found to be beneficial, discountable, or insignificant, NMFS concluded that the proposed action is not likely to adversely affect listed species under NMFS' purview. This concludes the USCG's consultation responsibilities under the ESA for species under NMFS's purview. The USACE issued a Nationwide Permit for this project on January 23, 2017.

In April 2017, the design changed to include the contractor option of using a trestle as well as the option of top-down construction, located on the east side of the new bridge. This option would add 0.182 acres of temporary seagrass impact for trestle pilings and shade associated with the trestle deck. It would also add 0.004 acres of temporary impact to surface waters for the trestle pilings only. This construction option was included to allow more contractors to have the qualifications necessary to bid on the project.

Changes in design plans in April 2017 required permit modifications for wetlands (mangroves and salt marsh), seagrass and surface waters. There are now approximately 0.307 acres of wetland impacts (0.231 acres of mangroves and 0.076 acres of salt marsh), 0.077 acres of seagrass and 0.19 acres of surface water impacts. Additional seagrass impact mitigation is proposed at Fort DeSoto Mitigation Site and wetland (mangrove and salt marsh) impacts are proposed to be mitigated at Mangrove Point Mitigation Bank, which is anticipated to have the ability to release credits prior to the award of the contract to the Design-Build firm.

If applicable, any additional impacts resulting from changes brought about by the Design/Build firm beyond those permitted will be coordinated with FDOT and the applicable regulatory agencies.

Aquatic Preserves and Outstanding FL Waters

The project is located within the Boca Ciega Bay Aquatic Preserve and is classified as an Outstanding Florida Waters (OFW). Aquatic Preserves are designated as such, in order to maintain an area in an essentially natural or existing condition so that their aesthetic,

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biological and scientific values may endure for the enjoyment of future generations (Section 258.36, F.S.). Every effort will be made to maximize the treatment of stormwater runoff from the proposed structure. Coordination with the FDEP and the SWFWMD was initiated during the ETDM process.

To minimize impacts and effects to local water quality, specific measures will be implemented during construction. Short term construction related impacts will be minimized by adherence to FDOT's *Standard Specifications for Road and Bridge Construction*. These specifications include measures known as Best Management Practices (BMP) which include the use of siltation barriers, dewatering structures, and containment devices that will be implemented for controlling turbid water discharges outside of construction limits. Through these efforts there will be minimal effect to the Boca Ciega Bay Aquatic Preserve.

Involvement with wetlands and surface waters due to the construction of the Preferred Alternative are estimated at 2.59 ac. Of those, 0.21 ac is attributable to wetlands and SAV, the remainder being to surface waters. The SWFWMD/FDEP requires an Environmental Resource Permit (ERP) when construction of any project results in the creation of a water management system or impacts to Waters of the State. The ERP required for this project may be elevated to an Individual level by SWFWMD as the project is located within an Aquatic Preserve and an Outstanding Florida Water (OFW) and/or has seagrass impacts.

<u>Status</u>: Enhanced water quality treatment criteria pertinent to this Aquatic Preserve and OFW have been included in the current projects design and the provisions of SWFWMD Environmental Resource Permit (ERP) 43023803.002, which was renewed/extended on 9/3/2014 and will expire on 9/3/2019. The ERP permit modification package was submitted to SWFWMD on June 15, 2017, Application No. 748686.

Water Quality and Quantity

The proposed storm water facility design will include, at a minimum, the water quality requirements for water quality impacts as required by the SWFWMD in Chapter 40D-4, F.A.C. and the Environmental Protection Agency (EPA). Therefore, no further water quality mitigation measures will be needed.

<u>Status</u>: In addition to the previous response, water quality impacts resulting from erosion and sedimentation during construction will be controlled in accordance with the Contractor's development of a Stormwater Pollution Prevention Plan (SWPPP) and adherence to FDOT's Standard Specifications for Road and Bridge Construction and through the use of BMPs.

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Wild and Scenic Rivers

There are no rivers within the project area listed in the National Park Service Southeastern Rivers Inventory; therefore, the coordination requirement for the Wild and Scenic Rivers Act does not apply to this project.

Status: There is no change in status.

Floodplains

In accordance with Executive Order 11988, "Floodplain Management," United States USDOT Order 5650.2, "Floodplain Management and Protection," and 23 CFR 650A, encroachment to floodplains from the construction of the proposed project were considered. A section of the Final Alternative Stormwater Management Facility Report served as the PD&E Location Hydraulic Report requirements that comply with 23 CFR 650 and 23 CFR 771. The flood risk associated with encroachment to floodplains was analyzed and was identified as minimal encroachment. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel numbers 12103C 0278G and 12103C 0279G dated September 3, 2003 shows the Pinellas Bayway Structure E location. FEMA FIRM maps are included in the Final Alternative Stormwater Management Facility Report, published separately.

The Preferred Alternative falls within Zone AE, an area of 100-year flood where the base flood elevation has been determined (ranges from 9 ft to 12 ft) and flood hazard factors have been determined. These were determined based on tidal influences. The entire project is located within the 100-year storm surge floodplain; however, since it is tidally influenced, no floodplain mitigation is required. As a result, this project will not affect flood heights or floodplain limits. In addition, this project will not have any impacts on human life, transportation facilities, and natural and beneficial floodplains. Therefore, it has been determined that this encroachment is not significant.

Status: There is no change in status.

Coastal Zone Consistency

The Department of Community Affairs (DCA) has determined that this project is consistent with the Florida Coastal Zone Management Plan (FCZMP) in a letter dated September 21, 2005. The state's continued concurrence with the project will be based, in part, on the adequate resolution of any issues identified during this and subsequent reviews. Final concurrence with the project will be determined during the environmental permitting stage.

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<u>Status</u>: Final concurrence has been granted with the issuance of SWFWMD Environmental Resource Permit (ERP) 43023803.002, which was renewed/extended on 9/3/2014 and will expire on 9/3/2019. The ERP permit modification package was submitted to SWFWMD on June 15, 2017, Application No. 748686.

Coastal Barrier Resources

This project is not located in the vicinity of or within a coastal barrier resource unit as defined by the Governor's Executive Order 8 1-105 and the Federal Coastal Barrier Resources Reauthorization Act of 1999.

Status: There is no change in status.

Protected Species and Habitat

This project has been evaluated for potential affects to threatened and endangered species in accordance with Section 7(c) of the Endangered Species Act of 1973 as amended by Rules 39-25.002, 39-27.002, and 39-27.011 of the Wildlife Code of the State of Florida (Chapter 39, F.A.C.). Literature reviews and habitat evaluations were conducted to identify protected species that may inhabit the study area. Coordination and consultation has been initiated with all regulatory and governing agencies, including the USFWS, Florida Fish and Wildlife Conservation Commission (FFWCC), and the National Marine Fisheries Service (NMFS).

Several data sources were reviewed to determine occurrence and potential occurrence of state and federally protected plant and animal species within the study area: USFWS NWI Maps, USGS Topographic Quadrangle maps, Natural Resource Service County Soil Survey, and aerial photography.

To determine the occurrence of protected species, the study area was evaluated for suitable habitat for federally protected species by qualified FDOT environmental scientists. Surveys were then conducted in each habitat type for species known to occur or utilize those habitats. The surveys were performed in the winter of 2005/2006 and the spring of 2006. In addition, random surveys were performed along the corridor for the duration of the study to obtain data on resident and transient species. During these surveys, any evidence of protected species found or direct observations of protected species were recorded. The protected animal species identified to potentially occur in the project area along with their status designation are listed in Table 4-4 of the USCG EA/FONSI. However, no federally protected plant species were observed or are known to occur within the project corridor.

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Twenty-two animal species and no plant species protected by the USFWS, FFWCC, or the Florida Department of Agriculture and Community Services (state protected plants) were determined to potentially occur. The following federally protected species were identified as potentially occurring within the project area: Gulf sturgeon, smalltooth sawfish, loggerhead sea turtle, green sea turtle, leatherback sea turtle, hawksbill sea turtle, Kemp's Ridley sea turtle, piping plover, bald eagle, wood stork and the West Indian manatee. In addition to the federally protected species, state-only protected species were also identified. These included state-protected wading birds, such as the roseate spoonbill, little blue heron, reddish egret, snowy egret, tricolored heron, and white ibis. The state protected brown pelican, least tern, American oystercatcher, snowy plover, and black skimmer were also identified as potentially occurring in the project area.

The project is anticipated to have "no effect" on the bald eagle and the gulf sturgeon. Bald eagle nests were not identified in the database for the project area or observed in the field. The gulf sturgeon rarely occurs in the area and spawning activities, the primary concern for its recovery, are within coastal rivers, not bays and estuaries. Due to the minimal and temporary effect to the foraging areas and the lack of suitable nesting areas for the least tern, black skimmer, brown pelican, and American oystercatcher, the project is also anticipated to have no effect on these species.

The project was determined to have a "may affect, not likely to adversely affect" on the following federally protected species: smalltooth sawfish, Atlantic loggerhead sea turtle, Atlantic green sea turtle, Atlantic hawksbill sea turtle, leatherback sea turtle, Kemp's Ridley sea turtle, piping plover, wood stork, and the West Indian manatee.

The Department will implement the "Manatee and Sea Turtle Watch Program Guidelines" and the "Marine Wildlife Safety Plan" and "Sea Turtle Construction Conditions" for protection of the five species of marine turtles (green sea turtle, leatherback sea turtle, hawksbill sea turtle, Kemp's Ridley sea turtle, loggerhead sea turtle) and the West Indian manatee potentially occurring in the area (see Appendix C of the USCG EA/FONSI). Note that no suitable nesting beaches are found in the project area and protective measures are for turtles in open water only. Through implementation of the protection measures affects to these species will be avoided.

The NMFS (National Oceanic and Atmospheric Administration (NOAA) Fisheries) listed the smalltooth sawfish as an endangered species in 2003. The smalltooth sawfish inhabit shallow coastal waters of tropical seas and estuaries throughout the world. They are typically found in shallow waters close to shore over muddy or sandy bottoms. Historically, the population was common throughout the Gulf of Mexico from Texas to Florida. However, currently, they are found mostly in the Everglades region of south Florida. Although the smalltooth sawfish was not observed in the area and the data as to its occurrence in the area are inconclusive, specific construction guidelines will be followed

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during the project for this species. With these guidelines in place, the project "may affect, not likely to adversely affect" the smalltooth sawfish.

Potential foraging habitat for the piping plover exists in the project vicinity along the shoreline of the causeway associated with the northern portion of the bridge. Critical Habitat for winter migration has been designated by the USFWS for this species. However, the project is not within a Critical Habitat area for this species. No nesting or roosting habitat will be affected and impacts to potential foraging areas are minimal.

Mitigation will be provided for unavoidable habitat losses resulting from the proposed project. Therefore, this project "may affect, not likely to adversely affect" the piping plover.

No colonies or wood stork roosts were identified within the study area during the field evaluations. The FFWCC maintains a colony location database, which identifies two active wood stork colonies within 18.6 mi of the project corridor. The colony identification numbers are 615113 (17.82 mi away) and 615336 (18.5 mi away). Wetlands supporting the proper hydrologic regime for foraging purposes may be affected throughout the study area. It is also noted that impacts to foraging areas are estimated at less than 0.2 ac. If it is concluded that suitable wetlands are impacted, the FDOT will coordinate with the USFWS to propose mitigation to offset effects to the wood stork colonies. It is anticipated that with this effort, the proposed project "may affect, not likely to adversely affect" the wood stork or its habitat.

The FFWCC database was reviewed for potential bald eagle nests in the area. The closest nest was more than four miles away from the project site. No nests were observed in the project area during field reviews. Since nest locations can change over time, the FDOT will resurvey the project corridor and review existing databases during all design/permitting phases of this project. These surveys will identify any changes to current nest information, which will then result in modification of construction activities, as necessary, to reduce or eliminate any effects to this species. However, since no eagle nests currently occur within 660 ft. of the study area, the bald eagle will receive "no effect" from the proposed project.

State protected wading birds (i.e., snowy egret, little blue heron, roseate spoonbill, reddish egret, tricolored heron and white ibis) will not be adversely affected. Forage areas may be lost due to construction of the bridge approaches. Mitigation will be provided for unavoidable habitat losses resulting from the proposed project.

Additionally, the FFWCC maintains a statewide database of known wading bird colonies. This database was reviewed to determine the proximity and potential effects the project may have on colonies. Several colonies occur within Pinellas County; however, the closest is more than one half mile from the study area. Due to its distance, wading bird colonies will not be affected by the proposed project.

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<u>Status:</u> The USFWS provided a letter dated February 12, 2007 providing their concurrence that the proposed bridge project is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended. The NMFS previously provided project input (dated August 30, 2005) during the Advanced Notification process. The Florida Fish and Wildlife Conservation Commission also provided project input (dated September 9, 2005) during the Advanced Notification process, and is understood to have coordinated with the SWFWMD during their Environmental Resource Permitting process (issued March 31, 2009 and extended/renewed on September 3, 2014).

Due to the length of time since the prior coordination occurred with the NMFS and USFWS, the Department re-initiated coordination with both agencies via updated letters dated November 21, 2014.

In the November 21, 2014 NMFS coordination letter, the FDOT determined that the proposed project "may affect, but is not likely to adversely affect" the following federally protected species: gulf sturgeon, green sea turtle, leatherback sea turtle, hawksbill sea turtle, Kemp's Ridley sea turtle, loggerhead sea turtle, and smalltooth sawfish. There are no impacts to federally-designated critical habitat for any listed marine species, as none is present within or adjacent to the project limits. As consistent with commitments made in the original EA/FONSI, the FDOT will implement the NMFS' "Sea Turtle and Smalltooth Sawfish Construction Conditions" for protection of the five species of marine turtles and the smalltooth sawfish. Additionally, the FDOT will implement the USFWS and NMFS' "Gulf Sturgeon Standard Protection Measures" and, if necessary as part of the Contractor's construction means and methods, develop a bridge demolition/blasting plan consistent with the USFWS's "Guidelines for the Protection of Manatees and Sea Turtles During the Use of Explosives in the Waters of the State of Florida". Mitigation to offset habitat impacts to listed species impacts was described previously in Section VI (A) of this document. The FDOT and the selected Design/Build firm will continue to coordinate with the NMFS and other applicable agencies as project design, environmental permitting and the development of specific construction means and methods progress.

In the November 21, 2014 USFWS coordination letter, the FDOT provided determinations that the proposed project "may affect, but is not likely to adversely affect" the following federally protected species: gulf sturgeon, green sea turtle, leatherback sea turtle, hawksbill sea turtle, Kemp's Ridley sea turtle, loggerhead sea turtle, smalltooth sawfish, West Indian manatee, wood stork, piping plover and red knot. There is no suitable habitat for the federal candidate gopher tortoise (Gopherus polyphemus), federally-endangered Florida golden aster (Chrysopsis floridana) or federally-endangered Florida perforate cladonia lichen (Cladonia perforata) within the project limits. Therefore, the project will have "no effect" on these species. There are no impacts to federally-designated critical habitat for any listed species, as none is present within or adjacent to the project limits.

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As consistent with commitments made in the original EA/FONSI, the FDOT will implement the FWC "Standard Manatee Conditions for In-Water Work" and the NMFS' "Sea Turtle and Smalltooth Sawfish Construction Conditions" for protection of the five species of marine turtles and the smalltooth sawfish. Additionally, the FDOT will implement the USFWS and NMFS' "Gulf Sturgeon Standard Protection Measures", the USACE and USFWS' April 2013 Manatee Key and, if necessary as part of the Contractor's construction means and methods, develop a bridge demolition/blasting plan consistent with the USFWS's "Guidelines for the Protection of Manatees and Sea Turtles During the Use of Explosives in the Waters of the State of Florida". Mitigation to offset habitat impacts to listed species impacts was described previously in Section VI (A) of this document. The FDOT and the selected Design/Build firm will continue to coordinate with the USFWS and other applicable agencies as project design, environmental permitting and the development of specific construction means and methods progress.

The NMFS provided a letter to the USCG on April 1, 2016 responding to the USCG request for consultation pursuant to Section 7 of the ESA for this action. NMFS documented that they received the BA on July 29, 2015, they requested additional information from the applicant on July 31, 2015. NMFS received the USCG request for consultation on August 10, 2015 and they received additional information from the applicant on September 22, 2015 and initiated consultation that day. The April 1, 2016 letter concluded that because all potential project effects to listed species were found to be beneficial, discountable, or insignificant, NMFS concluded that the proposed action is not likely to adversely affect listed species under NMFS' purview. This concludes the USCG's consultation responsibilities under the ESA for species under NMFS's purview.

There have been minor changes to regulations regarding some of the other species evaluated as presented below.

The bald eagle was evaluated in the PD&E study EA/FONSI as a threatened species by both the USFWS and the FWC. However, effective on August 8, 2007, the bald eagle was removed from both the list of Endangered and Threatened Species by the USFWS and from Florida's list of Imperiled Species by the FWC; however, this species remains protected at the federal level by the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act (MBTA), and in Florida by the Bald Eagle rule (68A-16.002, F.A.C). No bald eagle nests are mapped by FWC within 660 feet of the project area, and none were observed during field reviews conducted in 2005/2006 and in 2013. It is anticipated that the project will have no effect on the bald eagle. However, visual observation will be conducted prior to construction activities during the bald eagle nesting season (October 1 to May 15) to confirm the absence of active eagle nests within 660 feet of construction activities, and implement protective measures in accordance with the FWC Bald Eagle Management Plan (FWC, 2008) in the event that active nests are observed.

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The wood stork was listed as federally-endangered in the PD&E study EA/FONSI. As of June 26, 2014, the species was down-listed to federally-threatened. The species was evaluated and an effect determination of "may affect, not likely to adversely affect" is proposed based on having CFA within 18.6 miles of the project and having SFH within the project limits indicated in the PD&E study EA/FONSI. However, the "Corps of Engineers, Jacksonville District, USFWS, Jacksonville Ecological Reviews Field Office, and State of Florida Effect Determination Key for the Wood Stork in Central and West Peninsular Florida" dated September 2008 have since re-defined the Core Foraging Area (CFA) for wood storks in Central Florida (including Pinellas County) to be 15.0 miles. Following this criteria, the project is not within the CFA of either of the identified colonies nor were wood storks observed foraging in the area during field reviews. However, the species may still occur and forage infrequently within the project area. Impacts to the SFH are anticipated to be minimal (approximately 0.05 ac) and will be mitigated as required by permit. Utilizing the Key, the project remains "may affect, not likely to adversely affect" because the project has less than 0.5 ac of SFH although it is no longer within the CFA of a wood stork colony. As stated in the PD&E study EA/FONSI, the minimal impact to SFH will be mitigated in accordance with permitting requirements.

It is noted that details for demolition activities involving pile driving and blasting were not approved through the permits or PD&E study EA/FONSI. Such activities will require additional coordination with the applicable federal and state wildlife resource agencies for the protection of manatees, marine sea turtles, Gulf sturgeon and smalltooth sawfish.

The FDOT biologist completed a field review on July 13, 2015 to verify existing conditions. The field review identified snowy egret, osprey, and brown pelicans within the projects. No other listed or protected species were observed.

Commitments were updated in April 2017 to include details for endangered species including "Manatee and Sea Turtle Watch Program Guidelines", "Sea Turtle and Smalltoth Sawfish Construction Conditions", and "Construction Priovisions Gulf Sturgeon Guidelines". No suitable sea turtle nesting beaches are found in the project area and protective measures are for turtles in open water only.

Essential Fish Habitat

An Essential Fish Habitat (EFH) Assessment was conducted under the provisions of the Magnuson Fishery Conservation and Management Act of 1976, as amended through 1998 and currently regarded as the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). EFH is defined as the water and substrate necessary for fish spawning, breeding, feeding, and growth to maturity. The MSFCMA established standards for fishery conservation and management and created eight regional Fishery Management Councils (FMC) to apply those national standards in fishery management plans (FMP). The NMFS,

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a service of the United Stated Department of Commerce, NOAA, is responsible for implementing this mandate. Consultation with the NMFS is required as part of this process. A discussion of effects on EFH within the project study has been provided in the WEBAR. The potential affects must be evaluated individually and cumulatively. The NMFS provide comments and recommendations to the responsible federal permitting agency.

Interagency coordination between the FDOT and the NMFS resulted in a list of Major EFH categories for managed species in the Gulf of Mexico. Table 4-3 in the USCG EA/FONSI contains a list of the species considered to potentially utilize the project area.

With the construction of the Preferred Alternative, impacts to the unconsolidated bottom portions of the bay are considered to be temporary in nature and not anticipated to have a significant impact to EFH for most of the alternatives. Further consultation will be necessary to determine the most effective mitigation measures for the proposed impacts during the design and permitting phase of the project when more detailed information is available. The proposed project will potentially impact sparse beds of SAV, tidal marshes, mangroves communities and shoreline. With the Preferred Alternative, involvement with the wetland and SAV communities (FLUCCS codes 612, 642, 652 and 911) will be approximately 0.21 ac, with 0.15 attributed to seagrass impacts (FLUCCS code 911). The potential for shellfish harvesting was also evaluated. The project is within a prohibited zone for shellfish harvesting; therefore, there will be no involvement with the shellfish fishery. Seagrass involvement is looked at carefully by the NMFS, and mitigation will have to fully compensate for the loss of the seagrass areas in the project area. During the development of the mitigation plan to be provided through SWFWMD, in accordance with Section 373.4137 F.S., the NMFS will be a part of the interagency team that reviews any plans proposed by SWFWMD as mitigation. With appropriate mitigation provided, this project is not anticipated to adversely affect EFH.

<u>Status</u>: As part of recent project coordination with the National Marine Fisheries Service (letter dated November 21, 2014), the FDOT has updated the bridge project's EFH Assessment. The applicable management plans and component species are as follows: Shrimp Fishery Management Plan (FMP)(brown, pink and white shrimp); Red Drum FMP; Reef FMP (black grouper, gag grouper, gray snapper and gray triggerfish); and Spiny Lobster FMP.

With the construction of the Structure E bridge, impacts to the unconsolidated bottom portions of the bay are considered to be temporary in nature and not anticipated to have a significant impact to EFH. As the bridge piles are encrusted with barnacles and oysters, the potential for shellfish harvesting was also evaluated. The project is within a prohibited zone for shellfish harvesting; therefore, there will be no involvement with the shellfish fishery.

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The FDOT conducted a resurvey of on-site benthic habitat on August 22 and 26, 2013. This resurvey was conducted in order to reevaluate previously identified EFH types and extents. The northern abutment is comprised of the causeway with a fringe of mangroves (FLUCFCS 612) interspersed with tidal shoreline (FLUCFCS 651) and salt marsh (FLUCFCS 642). Unavoidable project impacts to wetlands are estimated at 0.004 ac. to mangroves and 0.043 ac. of impact to salt marsh based on the current conceptual design. Surface water impacts to Boca Ciega Bay are estimated at 0.19 ac. from the assumed placement of piles. Therefore, the total EFH impacts for this project are approximately 0.05 ac. to wetlands, 0.07 ac. to seagrass, and 0.19 ac. to surface waters (bay bottom). All EFH impacts resulting from the construction of this project are offset through mitigation provided at (i.e., previously completed) the SWFWMD's Fort DeSoto Park mitigation project (#SW 70) pursuant to Section 373.4137, F.S. The proposed mitigation plan assumed 0.2 ac. of surface waters (FLUCFCS 510), 0.1 ac. mangrove (FLUCFCS 612), and 0.1 ac. of seagrass (FLUCFCS 911) would result from the project.

Mitigation will be provided through the SWFWMD FDOT Mitigation Plan [373.4137 (F.S.)]. The issued SWFWMD ERP approved use of mitigation at the Ft. Desoto Park Mitigation Site (SW 70) and this mitigation has already been completed. USACE and NMFS concurrence with the use of this mitigation for the project are being coordinated during the on-going environmental permitting effort. This mitigation will offset project impacts to wetlands, habitat for applicable listed species and Essential Fish Habitat. The National Marine Fisheries Service (NMFS) provided a letter to the USCG on April 1, 2016 responding to the USCG request for consultation pursuant to Section 7 of the Endangered Species Act (ESA). NMFS documented that they received the Biological Assessment (BA) on July 29, 2015, they requested additional information from the applicant on July 31, 2015. NMFS received the USCG request for consultation on August 10, 2015 and they received additional information from the applicant on September 22, 2015 and initiated consultation that day. The April 1, 2016 letter concluded that because all potential project effects to listed species were found to be beneficial, discountable, or insignificant, NMFS concluded that the proposed action is not likely to adversely affect listed species under NMFS' purview. This concludes the USCG's consultation responsibilities under the ESA for species under NMFS's purview. The USACE issued a Nationwide Permit for this project on January 23, 2017.

Commitments were updated in 2017 to include details for pile driving. Updates include pile driving for a maximium of two locations at one time, to start at a low force and gradually increase to full force (ramp up), pile driving only during daylight hours between published civil twilight, and no in-water work on Sunday.

If applicable, any additional impacts resulting from changes brought about the Design/Build firm beyond those permitted will be coordinated with FDOT and the applicable regulatory agencies.

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D. PHYSICAL

Highway Traffic Noise

A traffic noise study was performed using methodology established by the FDOT in the PD&E Manual, Part 2, Chapter 17 (October 2003). Predicted noise levels were produced using the FHWA traffic noise model (TNM), version 2.5, and are expressed in decibels (dB) using an "A"-scale (dBA) weighting.

A Final Noise Study Report was prepared for this project to identify noise sensitive sites adjacent to the project corridor, to evaluate the significance of existing and future traffic noise levels at the sites with the improvements, and to evaluate the need for and effectiveness of noise abatement measures. Additional objectives include the evaluation of construction noise and vibration impacts and the identification of noise level "contours" adjacent to the corridor. Contours are the distances from the roadway that traffic noise levels are predicted to approach or exceed the FDOT's Noise Abatement Criteria (NAC).

A noise sensitive site is any property (owner occupied, rented or leased) where frequent exterior human use occurs and where a lowered noise level would be of benefit. Noise sensitive areas along S.R. 679 within the project limits include residential and recreational land uses. Noise sensitive sites will be considered for abatement when predicted noise levels approach or exceed the NAC or when a substantial increase in traffic noise will occur as a direct result of the transportation project. The FDOT defines a substantial increase as 15 or more decibels above existing conditions.

The NAC, summarized in Table 4-1 of the USCG EA/FONSI, vary by activity category with primary consideration given to exterior areas. All of the noise sensitive sites within the project limits are in Activity Category B. FDOT defines approaching the NAC as meaning within one dB (1 dBA). Therefore, noise sensitive sites will be considered for abatement when predicted noise levels are 66.0 dBA or greater.

The existing predicted noise levels were established for a two-lane, undivided roadway using traffic volumes reflecting year 2005 site conditions. Similarly, the future predicted noise levels were established for the Preferred Alternative (two-lane, high-level fixed-bridge) using traffic volumes reflecting year 2030 conditions. Traffic data used to establish the existing and future noise levels is documented in a NSR prepared separately for this project.

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Noise Sensitive Sites

Twenty noise sensitive sites (including 2 single family homes, 3 tennis courts, and 15 condominiums) were evaluated (Activity Category "B"). None of the sites approached or exceeded the NAC with the proposed project.

Future Traffic Noise Levels

For the Preferred Alternative, a two-lane high level fixed-bridge over the existing channel, the modeling analysis indicates that traffic noise levels would range from 48.0 to 65.4 dBA. Noise levels are not predicted to approach or exceed the NAC. In addition, noise levels for the 20 sites modeled are predicted to change between 0.0 and 1.2 dBA with the project.

To reduce the potential for additional noise sensitive sites to be located within an area with incompatible traffic noise, noise level contours were developed for the future improved roadway. The results of the analysis indicate that a level of 66 dBA (approaching the FDOT's NAC) would extend approximately 85 ft. from the closest travel lane of the 2-lane roadway.

Based on the results of the analysis, it is not necessary for the FDOT to consider abatement measures because noise levels are not predicted to approach or exceed the FDOT's NAC, nor are any noise sensitive sites predicted to experience a substantial increase in traffic noise compared to existing conditions.

<u>Status</u>: The proposed design change at the SR 679/Madonna Boulevard intersection was compared to the PD&E conceptual design documented in the Final Preliminary Engineering Report (PER) (June 2008). The design change is a minor modification that is within the footprint of the approved PD&E conceptual design. No other design changes were noted for the project within this Design Change and Construction Advertisement Reevaluation.

A land use review was performed to identify new noise sensitive sites that meet Date of Public Knowledge requirements, but were not accounted for in the PD&E noise analysis. The established Date of Public Knowledge for the project is February 3, 2009 (i.e. date the EA/FONSI was approved by USCG). The only new construction identified is at the Tierra Verde Unit 1 tract (Tierra Verde Marina Resort LLC). Permit data provided on the Pinellas County Property Appraiser website shows special use, site demolition and commercial addition permits issued from June 25, 2010 to June 14, 2013. The permit issue dates are after the Date of Public Knowledge with no permits issued for construction of noise sensitive sites (e.g., condominium buildings) prior to the Date of Public Knowledge.

The Final Noise Study Report (revised June 2008) addresses all noise sensitive sites that meet Date of Public Knowledge requirements within the bridge project advanced with this Construction Advertisement Reevaluation. The noise analysis results documented in the

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Final Noise Study Report (revised June 2008) remain valid with noise levels not predicted to approach or exceed the NAC at any noise sensitive site and no substantial increase in traffic noise attributable to the project predicted to occur at any noise sensitive site. There is no change in status.

On February 28, 2017, a review of the contractor option for a temporary work trestle east of the new bridge at both the south and north approaches has been conducted. This activity has been determined to have no impact on noise sensitive sites. Therefore, there is no change in status.

Air Quality

In accordance with the Clean Air Act Amendments of 1990 and Part 2, Chapter 16 of the FDOT's Project Development and Environment Manual, an Air Quality Screening Test was conducted for this project utilizing the FDOT carbon monoxide (CO) screening model, CO Florida 2004 (released September 7, 2004). This computer program makes a number of conservative worst-case assumptions about the project (site conditions, meteorology and traffic) and indicates whether the project needs a more detailed computer analysis. The roadway intersection forecasted to have the highest total volume was S.R. 679 at Madonna Boulevard. The Build and No-Build scenarios for both the opening year (2010) and the design year (2030) were modeled.

Estimates of CO were predicted for the default receptors which are located 10 ft. to 150 ft. from the edge of the roadway. Based on the results of the screening model, the highest project-related CO levels are not predicted to meet or exceed the National Ambient Air Quality Standard (NAAQS) for the pollutant with either the No-Build or Build alternatives. As such, the project "passes" the screening model. The project is located in an area that has been designated as Attainment for the 8-hour NAAQS for ozone under the criteria provided in the Clean Air Act (CAA) and therefore, the Clean Air Act (CAA) conformity requirements do not apply to the project.

Construction activities may cause minor short-term air quality effects. These effects will be minimized by adherence to the latest edition of the FDOT *Standard Specifications for Road and Bridge Construction*.

<u>Status</u>: The entire state of Florida has been designated as an attainment area for all the air quality standards under the criteria provided in the Clean Air Act Amendments of 1990 (CAAA). Therefore, the CAAA requirements concerning conformity do not apply to these projects and there is no change in status.

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Contamination

In accordance with the FDOT requirements, a contamination screening evaluation has been performed to evaluate potential involvement with contaminated sites to the project. A *Final Contamination Screening Evaluation Report (CSER)* has been prepared pursuant to the FDOT *Project Development and Environment Manual* Part 2, Chapter 22. A Level I assessment was conducted to identify and evaluate sites containing hazardous materials, petroleum products, or other sources of potential environmental contamination along the SR 679 project area. Risk rankings were assigned after reviewing data obtained from onsite reviews of the parcels, a review of historical land use, review of aerial photos, hazardous petroleum regulatory site lists, and other pertinent information.

A total of five sites were identified through the database search and field review, three sites were given a ranking of medium risk and two sites were given a ranking of high risk. These sites have the potential to involve petroleum contamination or hazardous materials. These rankings may be adjusted depending upon the final alignment of roadway expansion and ROW requirements. As the process moves forward, a more complete investigation of these sites as well as a revisiting of the regulatory files may be warranted.

The 7-Eleven Food Store #29301 and the Tierra Verde Bridge (Structure E, Bridge Number 150049) located within the project corridor were assigned a high risk. The 7-Eleven Food Store #29301 has documented petroleum contamination and the Tierra Verde Bridge has potential lead paint, polychlorinated biphenyl (PCBs) and asbestos contamination that need to be further addressed if disposal and/or improvements are considered. The sites receiving a medium risk ranking are located on the project corridor and had historical petroleum underground storage tanks on-site. The Deltona Corporation Site was assigned a medium risk because no tank closure report was available for review to indicate whether or not petroleum impacted soil and/or groundwater was encountered during removal of the tanks. The Texaco-Tierra Verde Marina/BP Station site had documented petroleum discharges, for which a No Further Action Order was issued. However, due to the ongoing presence of petroleum use on the site a medium risk ranking was assigned. Similarly, due to the ongoing use of petroleum at the Tierra Verde Resort and Marina and recent Underground Storage Tank (UST) compliance violations, a medium risk ranking was assigned.

At the three sites ranked medium and the two sites ranked high, additional contamination assessment activities (Level 2) may be warranted. Investigative work may include visual inspection, monitoring of ongoing cleanups and possible subsurface investigations. For the Tierra Verde Bridge (Structure E, Bridge Number 150049) an asbestos and lead paint survey, along with the standard Level 2 contamination impact assessment will be conducted by FDOT during design. At known contamination sites, estimated areas of contamination will be marked on design drawings. Prior to construction, any necessary cleanup plans will be developed. Actual cleanup will take place prior to or during construction.

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<u>Status</u>: A Level I Contamination Update for mainline roadway and the bridge was conducted for this segment on August 19, 2009. The investigation identified 2 sites (7-11 Food Store and the Tierra Verde BP) had the potential for groundwater contamination.

A Level II Contamination Assessment was conducted on December, 2009 to update the previous findings. Results of the assessment indicated that only the Tierra Verde BP tested positive for groundwater contamination. An Updated Level II Contamination Assessment report was submitted on July 29, 2014. Soils and groundwater samples were obtained and analyzed from the previously identified sites. Results verified that contaminants found were not above regulatory limits; therefore, contamination remediation will not be necessary.

A Paint Coating Sampling Report was published in April 2010 to document the possible use of lead based paints on the bridge. Testing verified that there was a low amount of dangerous metals in the paint samplings. As a result of the findings, the paint waste is not required to be handled as a hazardous material.

An asbestos survey was conducted on the Structure E Bridge in February 2009. Asbestos is assumed to be present in the brake shoe padding of the bascule bridge. The hazardous materials team will safely remove and dispose of the units during bridge demolition.

The FDOT will oversee any remediation activities necessary. The selected Design/Build firm will adhere to the provisions of the latest version of the Standard Specifications for Road and Bridge Construction and Best Management Practices.

Utilities and Railroads

In order to evaluate potential aerial, surface, and subsurface utility conflicts associated with the project, information was requested from utility companies pertaining to the type, location, and ownership of the existing utilities within the project area. All information received from the various utility companies is in the project file. The utilities within the project limits include:

- Knology Broadband of Florida
- Bright House Networks
- City of St. Petersburg
- Progress Energy Distribution
- Tierra Verde Utilities
- Pinellas County Utilities

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Since the project will require the relocation of some utilities, the project is expected to have minimal involvement with utilities. There are not active railroad crossings within the project limits. Therefore, no involvement with railroads is anticipated. Coordination with all affected utilities will be completed during final design.

<u>Status</u>: Utility coordination is underway and relocations will be completed before the Design/Build letting date. No railroad crossings are located within this segment. There is no change in status.

Construction

Construction activities for the project may have short-term air, noise, vibration, water quality, traffic flow, and visual effects for those residents and travelers within the immediate vicinity of the project.

The air quality effect will be temporary and will primarily be in the form of emissions from diesel-powered construction equipment and dust from construction activities. Air pollution associated with the creation of airborne particles will be effectively controlled through the use of watering or the application of other controlled materials in accordance with FDOT's *Standard Specifications for Road and Bridge Construction*.

Noise and vibration effects will be from the heavy equipment movement and construction activities, such as pile driving and vibratory compaction of embankments. Noise control measures will include those contained in FDOT's *Standard Specifications for Road and Bridge Construction*. Specific noise level problems that may arise during construction of the project will be addressed by the Construction Engineer.

Water quality effects resulting from erosion and sedimentation during construction will be controlled in accordance with FDOT's *Standard Specifications for Road and Bridge Construction* and through the use of BMPs.

Short term construction related wetland impacts will be minimized by adherence to FDOT's *Standard Specifications for Road and Bridge Construction*. These specifications include measures known as BMPs, which include the use of siltation barriers, dewatering structures, and containment devices that will be implemented for controlling turbid water discharges outside of construction limits.

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays throughout the project. Signs will be used to provide notice of road closures and other pertinent information to the traveling public. The local news media will be notified in advance of construction-related activities so that motorists, residents, and

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business persons can make accommodations. All provisions of the FDOT's *Standard Specifications for Road and Bridge Construction* will be followed.

Construction of the roadway and bridge may require excavation of unsuitable material (muck), placement of embankments, and use of materials, such as limerock, asphaltic concrete, and portland cement concrete. Demucking will be controlled by Section 120 of the FDOT's *Standard Specifications for Road and Bridge Construction*. The removal of structures and debris will be in accordance with state regulatory agencies permitting this operation. The contractor is responsible for his methods of controlling pollution on haul roads and in areas used for disposal of waste materials from the project. Temporary erosion control features, as specified in the FDOT's *Standard Specifications for Road and Bridge Construction*, could consist of temporary grassing, sodding, mulching, sandbagging, slope drains, sediment basins, sediment checks, artificial coverings, and berms.

Blasting may be required for the demolition of the existing structure. If blasting is necessary, the Marine Wildlife Safety Plan (MWP) or an update to the Plan provided in Appendix C will be implemented to assure the protection of protected marine wildlife species, including the West Indian manatee and the five marine turtles potentially occurring in the project area.

<u>Status</u>: The project will be built using the latest edition of FDOT's <u>Standard Specifications</u> for Road and Bridge Construction, along with the latest FDOT <u>Design Standards</u>. Construction impacts associated with this project, which are unavoidable and temporary, will be minimized through adherence with these specifications and by the use of Best Management Practices.

To minimize the potential impact to marine wildlife during demolition activities that may be required for the existing SR 679 (Pinellas Bayway Structure E), the former Marine Wildlife Watch Program has been superseded by more recent/extensive guidelines for various species. These updates guidelines will be used during construction. Therefore, there is no change in status.

In April 2017, the design changed to include the contractor option of using a trestle as well as the option of top-down construction. This construction option was included to allow more contractors to have the qualifications necessary to bid on the project.

Bicycles and Pedestrians

The existing conditions include sidewalks in both directions on Tierra Verde south of Structure E and across the bridge. No sidewalks are provided north of the bridge. However, pedestrians commonly utilize the causeway for recreational purposes. The sidewalks on the bridge are also used for fishing. Designated bicycle lanes, 4 ft. in width, are provided

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south of Madonna Boulevard and are also designated north of the bridge on 5-ft wide shoulders. However, there are no bicycle lanes on the bridge itself.

The Preferred Alternative typical section includes a 10-ft shoulder in each direction on the bridge which can accommodate bicyclists. A 5-ft sidewalk is included on the west side, separated from the shoulder by a concrete barrier wall. An 11-ft sidewalk is provided on the east side to accommodate Pinellas County's planned multi-use path, the Bayway Trail South. South of the bridge, the typical section shoulder and sidewalk widths will be consistent with the proposed bridge. The proposed roadway typical section approaching the north end of the bridge includes a 5-ft sidewalk on the west side, separated from the shoulder by a concrete barrier wall. An 11-ft sidewalk is provided on the east side to accommodate the planned multi-use path. A 4.5-ft high pedestrian/bicycle railing will be provided on the outside. Pedestrian hand railings are required on the sidewalks when the grades exceed 5 percent. The proposed roadway at grade is also consistent with the bridge typical section except that the eastern sidewalk is increased in width to 12 ft.

<u>Status</u>: The current concept plans are generally consistent with the one proposed in the PD&E study EA/FONSI. There are two differences between the approved PD&E study EA/FONSI concept and the current proposed concept (dated August 2013). The first change affects the typical sections. The previously proposed 11-ft sidewalk on the bridge has been changed to a 12-ft sidewalk to meet the standard width of a shared-use path.

In addition, handrails have been added across the bridge along the inside barrier wall along the sidewalk. Therefore there is no change in status.

In April 2017, a roundabout was added to the design at Madonna Boulevard. The trail was realigned to accommodate this change and its widths remain the same. There is no change in status.

Navigation

The existing Tierra Verde Bridge (Structure E, Bridge Number 150049) is a low-level bascule structure that spans over the Intracoastal Waterway, a marked federal navigational channel. A USCG Bridge Permit will be required for the Preferred Alternative (Alternative 5A: High-Level Fixed-Bridge over Existing Channel) which proposes to replace the existing Structure E with a new high-level fixed structure providing 65-ft vertical navigational clearance over the existing channel.

The USCG guide clearances have been established for the Intracoastal Waterway. They are 21-ft vertical clearance at mean high water (MHW) for drawbridges and 65-ft vertical clearance at MHW for fixed bridges. The horizontal guide clearance is 100 ft. between fenders. In comments received during the ETDM process, effects to navigation resources,

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the USCG has established that these clearances will apply to this reach of waterway. The existing horizontal clearance between fenders is 90 ft. and the existing vertical clearance when the bridge is closed is 21.5 ft.

Status: US Coast Guard Bridge Permit 10-16-7 was issued on December 12, 2016 and expires on 12/12/2021.

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U.S. COAST GUARD

FINDING OF NO SIGNIFICANT IMPACT

FOR

PROPOSED REPLACEMENT BRIDGE ACROSS THE GULF INTRACOSTAL WATERWAY, MILE 113.0, ON S.R. 679, (PINELLAS BAYWAY STRUCTURE E) AT TIERRA VERDE, PINELLAS COUNTY, FLORIDA

This project has been thoroughly reviewed by the Coast Guard, and it has been determined, by the undersigned, that this project will have no significant effect on the human environment.

This Finding of No Significant Impact is based on the attached applicant prepared Environmental Assessment, which has been independently evaluated by the Coast Guard and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project and provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. The Coast Guard takes full responsibility for the accuracy, scope and content of the attached Environmental Assessment.

I have considered the information contained in the EA, which is the basis for this FONSI. Based on the information in the EA and this FONSI document, I agree that the proposed action as described above, and in the EA, will have no significant impact on the environment.

2/3/2009 Date

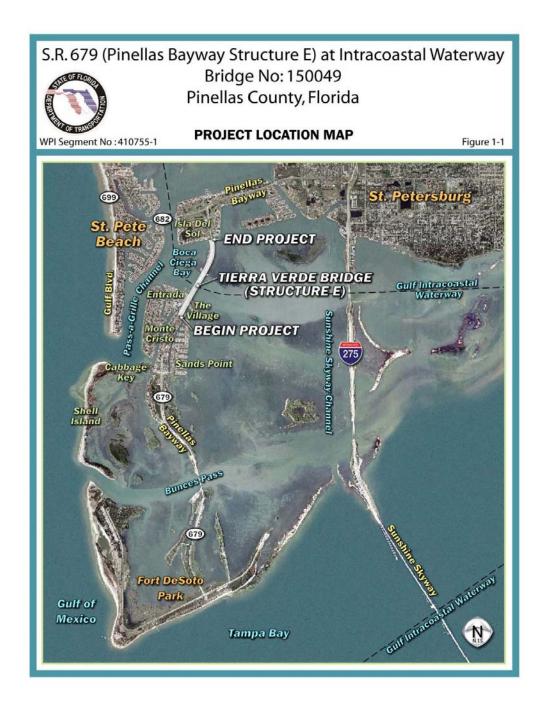
Jennifor A Ketchum

Responsible Official

Chief, Bridge Branch

Title/Position

ATTACHMENT A



S.R. 679 (Pinellas Bayway Structure E) at Intracoastal Waterway
Final Environmental Assessment

ATTACHMENT A

