

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
TYPE 2 CATEGORICAL EXCLUSION DETERMINATION FORM

1. GENERAL INFORMATION

County: Pinellas
Project Name: Beckett Bridge PD&E Study
Project Limits: Chesapeake Drive to Forest Avenue
Project Numbers: 2161 13040 424385-1-20-01 S129-343-R
County PID ETDM Financial Management Federal-Aid

2. PROJECT DESCRIPTION AND NEED

a. Project Description

The Beckett Bridge (Bridge No. 15400) carries Riverside Drive over Whitcomb Bayou in the City of Tarpon Springs, Pinellas County, Florida. The Bridge is owned and operated by Pinellas County. The Beckett Bridge is a two lane, single-leaf rolling-lift bascule bridge that was originally constructed in 1924 as a timber bridge with a steel movable span. The fixed timber approach spans were replaced with concrete approach spans in 1956. The bridge currently provides approximately six feet of vertical clearance at the fenders for boats navigating under the bridge, and 25 feet of horizontal clearance between the fenders. The existing typical section consists of one 10-foot wide travel lane in each direction, and 2-foot 2-inch-wide sidewalks separated by a curb on both sides of the bridge (see **Figure 1** – Existing Bridge Typical Section). The overall width of the existing bridge is 28 feet- ½ inch.

Boats moored at waterfront properties south of the bridge along Whitcomb Bayou need to pass under the bridge to reach the Anclote River and eventually the Gulf of Mexico. The bridge opens on demand with 2 hours' notice. County records indicate that the number of bridge openings varied from 10 -20 between 2009 and 2012.

The project consists of replacing the existing low-level movable two-lane bridge with a new two-lane low-level single-leaf, rolling lift bridge of similar design with approximately 7.8 feet of vertical clearance at the fenders. Proposed roadway improvements are limited to the approach roadways. The project limits extend along Riverside Drive from Chesapeake Drive across Whitcomb Bayou to Forest Avenue, a distance of approximately 0.3 miles. Alternatives considered included the No-Build Alternative, No-Build with Permanent Removal of the Bridge, Rehabilitation, Replacement with a mid-level Fixed Bridge (with 28 feet of vertical clearance), and Replacement with a low-level Movable Bridge.

b. Purpose and Need:

The purpose of the proposed project is to provide for the safe efficient movement of vehicles within the City of Tarpon Springs and between major arterials, including US 19, downtown Tarpon Springs and destinations to the west of Whitcomb Bayou in Pinellas County. The proposed project will also provide local and regional connectivity across Whitcomb Bayou and provide direct access to a designated county emergency evacuation route (Tarpon Avenue) for about 5,400 local residents and the coastal community.

According to recent (06/27/13) FDOT inspection reports, the existing bridge has an overall Structure Inventory and Appraisal Sufficiency Rating of 44.9 out of 100. The bridge is considered functionally obsolete, based primarily on the substandard clear roadway width of only 20 feet and substandard roadway safety features. The existing typical section consists of one, 10-foot wide travel lane in each direction and 2-foot 2-inch-wide sidewalks separated by a

curb on both sides of the bridge. There are no shoulders on the bridge. (See **Figure 1**, Existing Bridge Typical Section.)

Minimum required lane and shoulder widths prescribed by the American Association of State Highway and Transportation Officials (AASHTO) are not met. The sidewalks on the bridge are narrow and do not meet current accessibility requirements established by the Americans with Disabilities Act (ADA). The bridge railings do not meet current standards for pedestrian safety or geometric and crash testing safety standards for vehicles. Approach guardrail and transitions and end treatments also do not meet current safety standards.

The existing vertical clearance at the fenders is six feet. The tip of the bascule leaf overhangs the fender with the leaf fully raised and does not provide unlimited vertical clearance between the fenders. The existing horizontal clearance between the fenders is 25 feet.

Although the bridge is not considered Structurally Deficient, the bridge has a substandard load carrying capacity requiring weight restrictions. The bridge is currently posted for legal loads limited to 2-ton Single Unit Trucks and 15-ton Combination Trucks. Repairs in 1979 and 1988 included installation of crutch bents due to settlement and lateral stability concerns. Repairs in 2011 were performed to correct issues with the operating machinery and bascule leaf alignment.

The existing bridge has substandard sidewalks (2'2" wide) and no shoulders or bicycle lanes. No officially designated county or regional trails cross the Beckett Bridge. However, the Pinellas Trail, a 37 mile long regional trail, extending from St. Petersburg to Tarpon Springs is located just east of the project. The Pinellas County Trailways Plan, included in the Pinellas County MPO 2035 Long Range Transportation Plan, identifies the proposed Howard Park Trail which will provide access to Howard Park from the Pinellas Trail via Riverside Drive/North Spring Boulevard, crossing the Beckett Bridge.

Based on 2012 traffic counts, the Average Annual Daily Traffic (AADT) is currently 7,700 vehicles. Traffic models predict that AADT will increase to 8,200 in 2018 (opening year) and to 9,700 in 2038 (design year). Correction of structural deficiencies affecting the load capacity of the existing bridge could result in higher truck traffic in the future.

Six public schools are located within three miles of the Beckett Bridge. However, since Beckett Bridge is currently load posted for two tons, school busses, which weigh on average 10-15 tons, are not permitted to cross the bridge. Accordingly, an alternate, longer route for school busses is required.

b. Proposed Improvements:

The Recommended Alternative is replacement of the existing two-lane bascule Beckett Bridge with a new two-lane single-leaf, rolling lift bridge of similar design. The proposed bridge would provide 7.8 feet of vertical clearance over the navigation channel at the fenders in the closed position. The horizontal clearance between the fenders will be 25 feet. Unlimited vertical clearance will be provided in the open position for the width of the channel between the fenders. The new bridge would be constructed within existing right-of-way, on approximately the same alignment as the existing bridge. The proposed bridge will be approximately 19 feet wider than the existing bridge.

The proposed bridge is likely to qualify for a General Permit from SWFWMD and treatment of stormwater runoff from the bridge would not be required. However, if treatment of stormwater is required, it is anticipated that compensatory, offsite treatment will be acceptable.

Accordingly, acquisition of additional right-of-way is not anticipated to address water quality concerns.

The proposed bridge typical section for the low-level Movable Bridge Alternative has a total out-to-out width of 47.2 feet as shown in **Figure 2**. The typical section includes two, 11-foot wide travel lanes with 5.5-foot shoulders that can function as undesignated bicycle lanes. Sidewalks, 6 feet wide, are proposed on both sides of the bridge.

The maximum proposed grade is five percent, which meets ADA requirements. Roadway reconstruction is limited to the bridge approaches. The approach roadway will return to existing grade at Pampas Avenue on the east side of the bridge. On the west side of the bridge, the approach roadway will return to existing grade just east of Chesapeake Drive. The approach roadway will be close enough to the existing grades at the driveways to the Bayshore Mobile Home Park, the Tarpon Springs Yacht Club and Venetian Court to allow connection of these driveways with minimal re-grading.

Access to residential property driveways along Riverside Drive will still be accessible. Resurfacing (only) is proposed between Forest and Pampas Avenues. The proposed roadway profile would be approximately two feet higher than the existing roadway at the west end of the bridge, and approximately four feet higher at east end of the bridge.

The proposed roadway section west of the bridge consists of two 10-foot wide through lanes, one in each direction, and 5.5-foot wide outside shoulders that can function as undesignated bicycle lanes. Because of the limited right-of-way, a six-foot wide sidewalk is proposed only on the north side of the roadway. No sidewalks are proposed on the south side of the roadway, adjacent to the Bayshore Mobile Home Park.

East of the bridge, the roadway section consists of two 11-foot wide through lanes, one in each direction, and 5.5-foot wide outside shoulders that can function as undesignated bicycle lanes. Six-foot wide sidewalks are proposed on both sides of the roadway. **Figures 3 and 4** illustrate the proposed roadway sections for the west and east sides of the bridge, respectively.

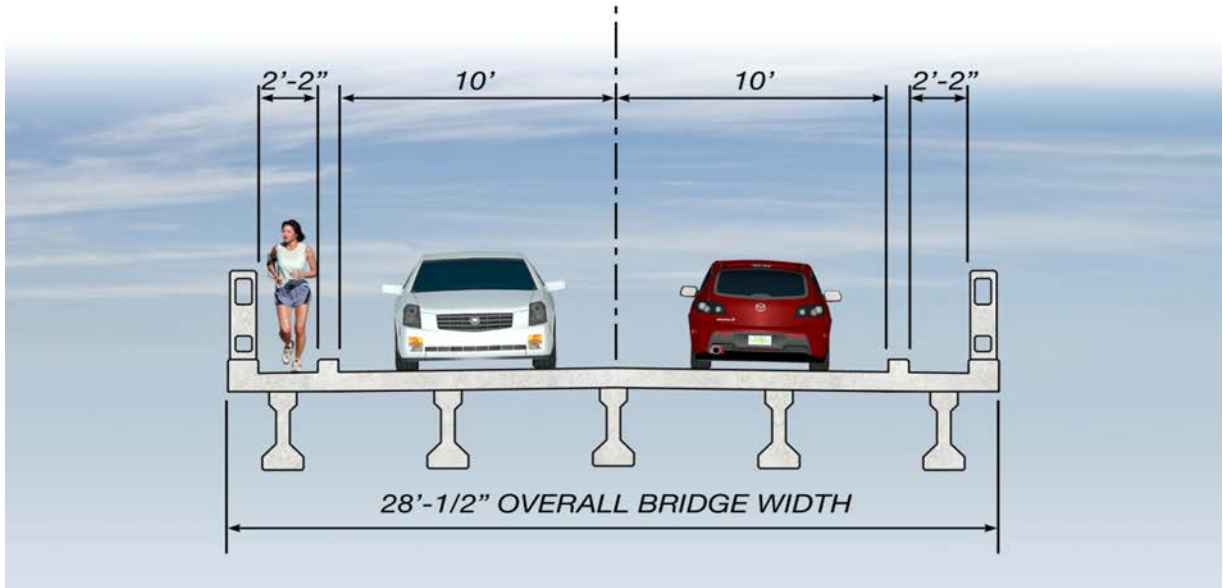


Figure 1. Existing Bridge Typical Section

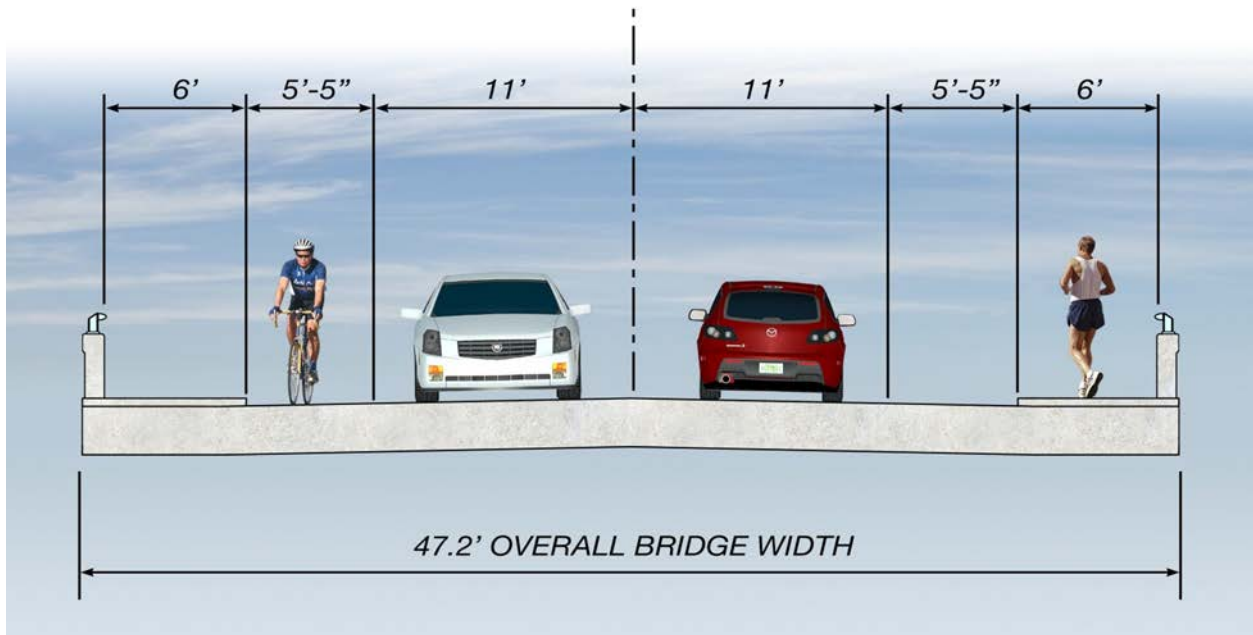


Figure 2. Proposed Movable Bridge Typical Section

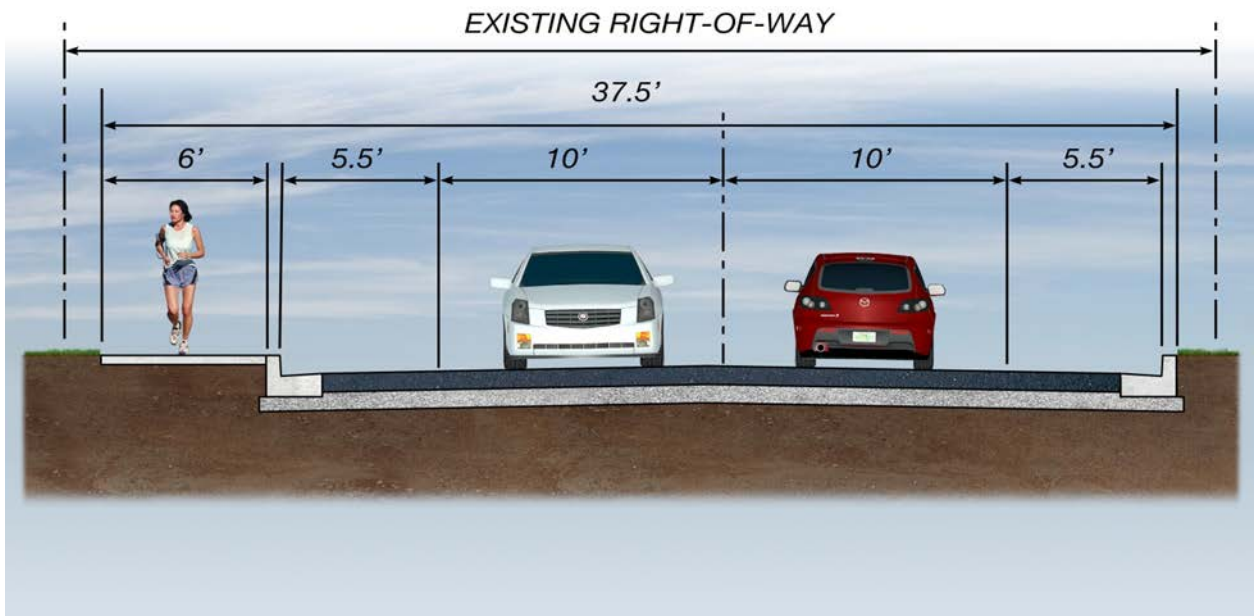


Figure 3. Proposed Roadway Section West of Proposed Movable Bridge

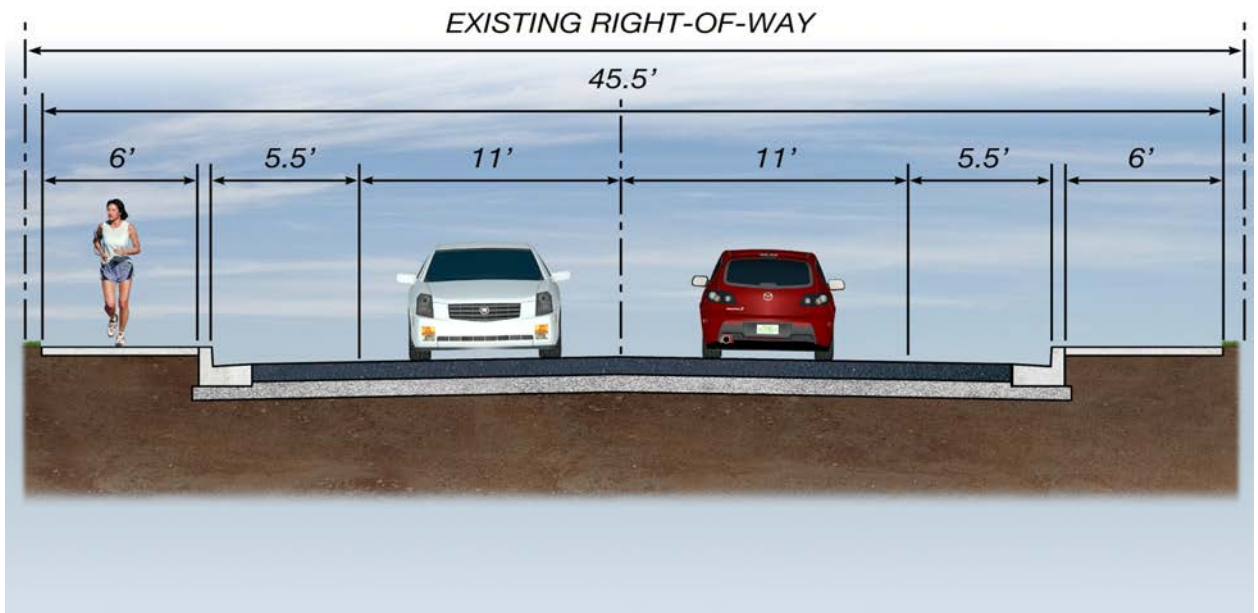


Figure 4. Proposed Roadway Section East of Proposed Movable Bridge

c. Project Planning Consistency:

Currently Adopted CFP-LRTP	Based on the Pinellas County 2035 Long Range Transportation Plan (LRTP) and Transportation Element of the 2008 Comprehensive Plan, the current lane configuration for the project corridor is expected to remain two-lanes through 2035. Accordingly, replacement of the existing two-lane bridge with a new two-lane bridge is consistent with both plans. Rehabilitation, repair or replacement of the existing bridge is consistent with the goals and policies of Objective 1.10 of the Pinellas County 2035 LRTP which is to “Ensure the safe accommodation of motorized and non-motorized traffic while reducing the incidence of vehicular conflicts with the county’s major transportation corridors.”				
	The MPO approved the modification to the 2035 LRTP on June 11, 2014 to add language regarding the replacement of major County bridge structures, including the Beckett, Dunedin Causeway and San Martin Bridges. These projects are non-capacity bridge replacement projects. The 2035 LRTP Cost Feasible Plan identifies the Beckett Bridge as a bridge in Pinellas County which will “soon be in need of replacement and federal funding will be sought to assist with the construction of new facilities.” The specific modification and MPO meeting notes are attached in Appendix A.				
Yes					
PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP \$	TIP/STIP FY	COMMENTS
PE (Final Design	Y/N	Y/N	N/A	N/A	Non-Capacity, In-kind, Bridge Replacement Project
R/W	Y/N	Y/N	N/A	N/A	No right-of-way required
Construction	Y/N	Y/N	N/A	N/A	Non-Capacity, In-kind, Bridge Replacement Project

**Include pages from TIP/STIP/LRTP*

3. CLASS OF ACTION

- a. Class of Action:
☒ Type 2 Categorical Exclusion
- b. Other Actions:
☒ Section 4(f) Evaluation
☒ Section 106 Consultation
☐ Endangered Species Biological Assessment
- c. Public Involvement:
1. ☐ A public hearing is not required, therefore, approval of this Type 2 Categorical Exclusion constitutes acceptance of the location and design concepts for this project.
 2. ☒ A public hearing was held on February 26, 2014, and a transcript has been provided as a separate document. Approval of this determination constitutes location and design concept acceptance for this project.
☐ An opportunity for a public hearing was afforded and a certification of opportunity is included. Approval of this determination constitutes acceptance of the location and design concepts for this project.
 3. ☐ A public hearing will be held and the public hearing transcript will be provided at a later date. Approval of this determination DOES NOT constitute acceptance of the project's location and design concepts.
☐ An opportunity for a public hearing will be afforded and a certification of opportunity will be provided at a later date. Approval of this determination DOES NOT constitute acceptance of the project's location and design concepts.
- d. Cooperating Agency: ☐ COE ☒ USCG ☐ FWS ☐ EPA ☐ NMFS ☐ NONE

4. REVIEWERS' SIGNATURES

Tony Horrnik, P.E., S.I, Pinellas County Project Manager

____/____/____
Date

Robin Rhinesmith, FDOT Environmental Administrator

____/____/____
Date

5. FHWA CONCURRENCE

(For) Division Administrator or Designee

____/____/____
Date

6. IMPACT EVALUATION

Impact Determination*

Topical Categories	S g	i t S i g	N o n e 	O n l v		Basis for Decision*
A. SOCIAL & ECONOMIC						
1 Land Use Changes	[]	[]	[X]	[]		<u>See Section A.1 (page 11)</u>
2 Community Cohesion	[]	[]	[X]	[]		<u>See Section A.2 (page 11)</u>
3 Relocation Potential	[]	[]	[X]	[]		<u>See Section A.3 (page 11)</u>
4 Community Services	[]	[X]	[]	[]		<u>See Section A.4 (page 11)</u>
5 Nondiscrimination Considerations	[]	[]	[X]	[]		<u>See Section A.5 (page 12)</u>
6 Controversy Potential	[]	[X]	[]	[]		<u>See Section A.6 (page 12)</u>
7 Scenic Highways	[]	[]	[]	[X]		<u> </u>
8 Farmlands	[]	[]	[]	[X]		<u> </u>
B. CULTURAL						
1 Section 4(f)	[]	[X]	[]	[]		<u>See Section B.1 (page 12)</u>
2 Historic Sites/Districts	[]	[X]	[]	[]		<u>See Section B.2 (page 13)</u>
3 Archaeological Sites	[]	[]	[X]	[]		<u>See Section B.3 (page 16)</u>
4 Recreation Areas	[]	[]	[X]	[]		<u>See Section B.4 (page 16)</u>
C. NATURAL						
1 Wetlands	[]	[X]	[]	[]		<u>See Section C.1 (page 17)</u>
2 Aquatic Preserves	[]	[X]	[]	[]		<u>See Section C.2 (page 19)</u>
3 Water Quality	[]	[X]	[]	[]		<u>See Section C.3 (page 19)</u>
4 Outstanding FL Waters	[]	[X]	[]	[]		<u>See Section C.4 (page 20)</u>
5 Wild and Scenic Rivers	[]	[]	[]	[X]		<u> </u>
6 Floodplains	[]	[X]	[]	[]		<u>See Section C.6 (page 21)</u>
7 Coastal Zone Consistency	[]	[]	[X]	[]		<u>See Section C.7 (page 21)</u>
8 Coastal Barrier Resources	[]	[]	[]	[X]		<u> </u>
9 Wildlife and Habitat	[]	[X]	[]	[]		<u>See Section C.9 (page 21)</u>
10 Essential Fish Habitat	[]	[X]	[]	[]		<u>See Section C.10 (page 23)</u>
D. PHYSICAL						
1 Noise	[]	[X]	[]	[]		<u>See Section D.1 (page 24)</u>
2 Air Quality	[]	[]	[X]	[]		<u>See Section D.2 (page 24)</u>
3 Construction	[]	[X]	[]	[]		<u>See Section D.3 (page 25)</u>
4 Contamination	[]	[X]	[]	[]		<u>See Section D.4 (page 26)</u>
5 Aesthetic Effects	[]	[X]	[]	[]		<u>See Section D.5 (page 26)</u>
6 Bicycles and Pedestrians	[]	[]	[X]	[]		<u>See Section D.6 (page 27)</u>
7 Utilities and Railroads	[]	[]	[X]	[]		<u>See Section D.7 (page 28)</u>
8 Navigation	[]	[X]	[]	[]		<u>See Section D.8 (page 29)</u>
a.	[]	FHWA has determined that a USCG Permit IS NOT required in accordance with 23 CFR 650, Subpart H.				
b.	[X]	FHWA has determined that a USCG Permit IS required in accordance with 23 CFR 650, Subpart H.				

* **Impact Determination:** Sig = Significant; NotSig = Not significant; None = Issue present, no impact; Nolnv = Issue absent, no involvement. Basis of decision is documented in the referenced attachment(s).

E. PERMITS REQUIRED

US Coast Guard – A Bridge Permit will be required.

Southwest Florida Water Management District (SWFWMD) – Based on meetings with SWFWMD staff, it is anticipated that the project will qualify for the 62.330-443 General Permit to the Florida Department of Transportation, Counties, and Municipalities for Minor Bridge Alteration, Placement, Replacement, Removal, Maintenance, and Operation (previously Noticed General Permit 40D-400.443). If the project qualifies for this general permit, water quality treatment of stormwater runoff is not anticipated to be required.

US Army Corps of Engineers – It is anticipated that the project will qualify for a Nationwide Permit, or a combination of Nationwide Permits (Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act).

Chapter 253 Florida Statute states that authorization is required from the Board of Trustees of the Internal Improvement Trust Fund (Board) for any activities in, on, or over state-owned, sovereign submerged lands (state lands). The FDEP, Division of State Lands has been delegated by the Board to manage the use of State Lands for the good of the public; to maintain traditional uses, such as navigation and fishing; to provide maximum protection of all state lands; and to ensure that all private uses of state lands will generate revenue as just compensation for that privilege. The existing bridge is located within a Sovereign Submerged Lands Easement granted by the Board to the Pinellas County Board of County Commissioners on February 1, 1996. This easement authorized repairs of the existing bridge. It is likely that construction of a new bridge will require modification of this easement. This authorization will be obtained during the ERP permitting process.

40 CFR Part 122 prohibits point source discharges of stormwater to waters of the United States without an NPDES permit. Under the State of Florida's delegated authority to administer the NPDES program, construction sites that will result in greater than one acre of disturbance must file for and obtain either coverage under an appropriate generic permit contained in Chapter 62-621, FAC, or an individual permit issued pursuant to Chapter 62-620, FAC. A major component of the NPDES permit is the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP identifies potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the site and discusses good engineering practices (i.e. best management practices) that will be used to reduce the potential for pollutant discharges during construction. The need for this permit will be determined during the Design Phase of the project.

7. COMMITMENTS AND RECOMMENDATIONS

To minimize impacts to navigation and to comply with USCG requirements, the contractor will be required to coordinate any full or partial closures of the channel to marine traffic during construction with the USCG in Miami FL (telephone 305.415.6744) at least 60 days prior to the planned closing.

Pinellas County is committed to working with local government officials and community representatives to solicit input for design of bridge aesthetic elements and landscaping. An advisory committee will be established during design which will include community and local government representatives. This committee is also required by the Section 106 Memorandum of Agreement (MOA) for this project.

NMFS requested continued coordination at the conclusion of the PD&E Study and during the Design phase when more detailed compensatory mitigation proposals are developed. Accordingly, Pinellas County will coordinate potential wetland and essential fish habitat impacts and proposed mitigation with the NMFS during the design phase of the project.

Pinellas County will comply with the US Fish and Wildlife Service (USFWS) and Florida Fish and Wildlife Conservation Commission (FWC) approved "Standard Manatee Construction Conditions" during all in-water construction phases of the project. In addition, the County will coordinate with both agencies concerning site specific manatee protection measures to be implemented during construction.

Pinellas County will submit a blasting plan to USFWS and FWC for review and approval prior to construction if blasting is proposed for demolition. The plan will include the use of qualified observers and an aerial survey.

As requested by the Florida Wildlife Conservation Commission, Pinellas County will coordinate wetland impacts with the appropriate resource agencies and propose mitigation to offset any adverse impacts to listed species habitat, if determined to be warranted.

If an active bald eagle nest is identified within the 660-foot buffer zone around the construction area, mitigation measures will be implemented to avoid disturbing the species, which may include control of the timing and location of construction activities and establishment of a buffer zone around active nesting sites.

Pinellas County will coordinate with FWC for the removal of the osprey nests on a utility pole within the construction area during the design and permitting phase of the project.

A.1 LAND USE CHANGES

Existing land use was determined by a field review of the project corridor and review of Existing Land Use maps (July 2007) published in the City of Tarpon Springs Comprehensive Plan. Land use in the area is predominantly residential. Bayshore Mobile Home & RV Park is located on the southwest corner of the bridge immediately adjacent to Riverside Drive. The Tarpon Springs Yacht Club is located on the northeast side of the bridge. Two assisted living facilities, Serenity on the Bayou and Tarpon Bayou Center are located on Chesapeake Drive, just north of Riverside Drive. Stamas Yacht Repair and Restoration is located on Pampas Drive, north of Spring Boulevard.

No notable changes in future land use in the vicinity of the project are shown on the 2025 Future Land Use Map (Tarpon Springs Comprehensive Plan). The predominant land use in the vicinity will remain low to medium density residential. The area surrounding the Beckett Bridge is largely built out; accordingly, land for potential new development is limited.

The Impact Determination is “**None**” for this category.

A.2 COMMUNITY COHESION

The proposed replacement bridge will be constructed on approximately the same alignment as the existing bridge. No additional right-of-way will be required. The proposed bridge will provide approximately 7.8 feet of vertical clearance at the fenders, compared to six feet provided by the existing bridge. Accordingly, the vertical profile of the bridge will vary slightly from the existing; however, the bridge approaches will touch down without impacting driveways or roadway intersections. Accordingly, the proposed project will not adversely impact the cohesion of the communities in the vicinity of the bridge. Accordingly, the Impact Determination is “**None**” for this category.

A.3 RELOCATION POTENTIAL

The proposed bridge replacement will be constructed within the County’s right-of-way. Construction of the proposed bridge will not require acquisition of any additional right-of-way and will not result in the relocation of any residences or businesses. Accordingly, the impact determination for this category is “None”.

A.4 COMMUNITY SERVICES

Community services, including those providing emergency services located within approximately 1.5 miles of the project include two fire stations, one police station, one hospital, five religious institutions, and five schools. In addition, the Pinellas County Health Department operates a health center within the City of Tarpon Springs, located approximately 1.2 miles from the Beckett Bridge.

Replacement of the existing bridge will have a positive impact on access to community resources. The existing bridge is currently load posted. School busses and large emergency vehicles are prohibited from crossing the bridge. Six public schools are located within three miles of the Beckett Bridge. According to the Route and Safety Auditor for the Pinellas County School Board, if the bridge were rehabilitated or replaced, school bus traffic would be re-routed to travel along Spring Boulevard/Riverside Drive and cross the Beckett Bridge. Approximately 15 to 20 school busses per day could potentially use the bridge. The detour results in additional costs for busses that service schools in the vicinity of the project. The proposed replacement bridge would result in a cost savings for operation of school busses in the community.

Traffic will be detoured during construction of a replacement bridge. Two detour routes are proposed, the longest is approximately 2.75 miles. Emergency response times could be affected for some areas in the immediate vicinity of the bridge while the detour is in effect. Accordingly, the impact determination for this category is **“Not Significant”**.

A.5 NONDISCRIMINATION CONSIDERATIONS

There are no census blockgroups with a median income of less than \$25,000, and no census blockgroups with a minority population greater than 40% located within the 100-foot buffer distance. There are no minority communities within the project limits or in the immediate vicinity of the existing bridge. To solicit input from communities potentially affected by the proposed project, property owners located within a minimum of 1,000 feet of the project area were notified and invited to an Alternatives Public Workshop and will be notified of the Public Hearing. Public outreach during the study included meetings and presentations to local governments and local community organizations. Accordingly, the impact determination for this category is **“None”**.

A.6 CONTROVERSY

There are some members of the community, including the Tarpon Springs Historic Preservation Society Board, that have expressed a strong desire to preserve the existing bridge. Accordingly, three rehabilitation alternatives, rather than one, have been considered and evaluated in detail to date. To date the evaluations have indicated that replacement of the existing bridge is not feasible or prudent. Accordingly, the impact determination for this category is “Not Significant”.

B.1 Section 4(f)

The ETDM metadata and its use in generating what resources are "found" within the EST GIS buffers indicate that there are statewide (typically land based) Ecological Greenways Critical Linkages and Greenways Ecological Priority Linkages that could be associated with the proposed project. These FDEP designations contain all of the largest areas of ecological and natural resource significance and the landscape linkages necessary to link these areas together in one functional statewide network. This data was created as part of the Florida Statewide Greenways Planning Process. The Florida Ecological Greenways Network identifies the opportunities to protect large, intact landscapes important for conserving Florida's biodiversity and ecosystem services.

The ETDM Programming Screening Summary Report stated that a review of the GIS analysis data indicates that the following are located within the 100 foot buffer:

- Priority 6 and Unknown Description Ecological Greenways Critical Linkages and Prioritization Results
- One Low Greenways Ecological Priority Linkages
- Two High Office of Greenways and Trails (OGT) Multi-Use Trail Priorities
- One Low OGT Multi-Use Trail Priorities
- One Low OGT Paddling Trails Priorities

FDEP noted that further review of GIS data and Google Street View revealed that most of these facilities do not currently exist. A review of the OGT Map did not identify any existing resources within the project area. There are no FDEP designated Ecological Greenways Critical Linkages and Greenways Ecological Priority Linkages that are officially designated, marked or signed as such either within, along or perpendicular (intersecting) to the project's study limits.

The Pinellas County Trailways Plan, included in the Pinellas County MPO 2035 Long Range Transportation Plan, identifies three *future* recreational bicycle/pedestrian trails that will connect to the Pinellas Trail and continue west. These trails are not currently funded, but are included in the

Planned Cost Feasible Trailways Projects. One of these trails, the proposed Howard Park Trail, will provide access to Howard Park from the Pinellas Trail via Riverside Drive/North Spring Boulevard, crossing the Beckett Bridge. The Bicycle and Pedestrian Planner at Pinellas County stated that there has been no engineering or other evaluation of these planned cost feasible trailways projects. The MPO is anticipating that improved facilities along these existing routes will be constructed as part of future roadway resurfacing or widening projects. Existing sidewalks on the Beckett Bridge are only 2'2" wide and there are no bicycle lanes or shoulders on the bridge. The proposed project will provide improved pedestrian and bicycle facilities on the Beckett Bridge which will enhance recreational opportunities associated with planned future recreational trails.

Marked and unmarked paddle trails are identified in the "Guide to Pinellas County Blueways," published by the Pinellas County Planning Department in April 2010. One unmarked trail begins in Spring Bayou at Craig Park, just south of the Beckett Bridge. The trail continues north through Whitcomb Bayou, passing under the Beckett Bridge continuing to the Anclote River and eventually to the Gulf of Mexico. Access to navigational opportunities will be maintained to the greatest extent possible during construction. No impacts to this unmarked trail will result by replacement of the Beckett Bridge with the proposed new movable bridge.

FHWA noted that Whitcomb Bayou is located within the Pinellas County Aquatic Preserve. The proposed project will be constructed within the existing Pinellas County transportation right-of-way which is designated for transportation. An Environmental Resource Permit, a USCG bridge permit and a Section 10/Section 404 permit will be required from the USACE. Compliance with all requirements and conditions of these permits will ensure that potential impacts to water quality, fish and wildlife are avoided or minimized. The proposed project will not cause any proximity impacts that would permanently impair or diminish the Pinellas County Aquatic Preserve resources' attributes which qualify the preserve for protection under the provisions of Section 4(f).

FHWA also noted that if Beckett Bridge is determined to be National Register of Historic Places (NRHP) eligible, and the bridge is demolished a Section 4(f) DOA will be required. The Beckett Bridge was determined to be eligible for the NRHP. Accordingly, Section 4(f) is applicable to the project.

FHWA concurred with the conclusions and findings of the Draft Programmatic Section 4(f) Evaluation prepared for this project. The Final Programmatic Section 4(f) Evaluation will be submitted concurrently with this environmental document.

The impact determination for Section 4(f) resources is "**Not Significant**".

B.2 HISTORIC SITES/DISTRICTS

A review of the Geographic Information Systems (GIS) analysis data indicates that three Florida Site File (FSF) Historic Standing Structures are located within the 200-foot buffer distance and four additional FSF Historic Standing Structures and the National Register of Historic Places (NRHP)-listed Tarpon Springs Historic District and E.R. Meres Sponge Packing House are located within the 500-foot buffer distance.

During the ETDM screening process, SHPO, the Miccosukee Tribe, and the FHWA recommended that a Cultural Resource Assessment Survey (CRAS) be conducted to identify and evaluate any resources that may be eligible for listing in the NRHP. The SHPO also noted that the bridge must be documented using historic bridge forms and evaluated by a professional. FHWA noted that it is not clear whether this bridge is eligible for listing in the NRHP.

Determination of Eligibility (DOE) forms were prepared for the Beckett Bridge (8PI12017) and submitted to the Federal Highway Administration (FHWA) in August 2012. The purpose of this early coordination, prior to submitting the CRAS, was to obtain early input from FHWA and the State Historic Preservation Officer (SHPO) on the potential eligibility of the bridge for the NRHP. The DOE concluded that the Beckett Bridge was eligible for listing in the NRHP. Both FHWA and SHPO concurred with this determination in September and October 2012, respectively. The concurrence letter is included in Appendix B. CRAS was conducted for this study; the results are documented in the CRAS report, published separately. The recommendations in the CRAS were approved by FHWA on March 13, 2013. SHPO concurred with the findings of the CRAS on April 11, 2013, included in Appendix B. This survey resulted in the identification of 16 newly recorded historic resources within the APE including one bridge (8PI12017) and 15 buildings (8PI12043-8PI12055, 8PI12068, 8PI12069). One of these newly recorded historic resources, Beckett Bridge (8PI12017), was determined to be eligible for listing in the NRHP by FHWA and SHPO. The remaining resources (8PI12043-8PI12055, 8PI12068, 8PI12069) are considered ineligible for listing in the NRHP as individual historic resources or as contributing resources to a historic district.

A Cultural Resource Committee (CRC) was established to address Section 106 issues and conduct good faith consultation with affected parties. The rehabilitation alternative originally evaluated and presented at the Alternatives Public Workshop did not propose changing the geometry of the existing bridge. Accordingly, the 2'2" wide sidewalks would remain. Some members of the CRC, including SHPO recognized the need for improved pedestrian facilities on the bridge. At the request of the CRC and SHPO, two additional rehabilitation alternatives that provided improved pedestrian facilities were evaluated.

One alternative involved widening the bridge to provide wider sidewalks on both sides of the bridge. The second rehabilitation alternative consisted of reconfiguring the existing bridge without widening to provide a wider sidewalk on one side of the bridge. The engineering evaluation determined that both of these alternatives would require removal of the existing bascule leaf and the bascule pier, the only two structural elements of the existing bridge that were part of the original 1924 bridge. The evaluation of these alternatives is discussed below. Additional details about the evaluation are included in Draft Preliminary Engineering Report, prepared for this study.

Evaluation of the Rehabilitation with Widening Alternative

Pinellas County, in coordination with FDOT District 7 staff, determined that widening the existing bridge would require compliance with the Florida Green Book to bring the bridge up to acceptable minimum current safety standards. Accordingly, a minimum acceptable typical section was developed based on these criteria. This typical section consists of two 11-foot travel lanes, one in each direction, 3-foot wide shoulders on both sides and 5.5 foot wide sidewalks on both sides of the bridge. The total width of the bridge would be 42 feet. The total width of the existing bridge is only 28 feet.

Detailed engineering analysis indicates that the additional weight of the wider roadway and the proposed sidewalks cannot be accommodated by the existing bascule span or bascule pier. Major modifications would be required to the approach spans to accommodate the wider typical section. The existing bascule span and bascule pier would need to be removed and replaced. These modifications would result in substantial alteration to the look of the bridge. The final structure will no longer resemble the original historic bridge.

Evaluation of Rehabilitation Alternative which Provides a Single Code Compliant Sidewalk without Widening, or with Minimal Widening of the Existing Bridge

At the June 11, 2013 meeting in Tallahassee, attended by Pinellas County and its consultants, FDOT, FHWA and SHPO, representatives from the SHPO requested consideration of an additional concept

that would modify the existing bridge cross section to accommodate a single, code compliant, sidewalk, rather than two sidewalks that had been previously proposed. This section summarizes the technical evaluation of concepts with a sidewalk on one side only.

Reconfiguration of the Existing Bridge without Widening

The most desirable concept from a historic preservation perspective would be to avoid widening of the bridge and simply rework the arrangement of lanes and sidewalk(s) within the width of the existing bridge (28'-0½"). A modified section of the narrowest practical width would include minimum shoulders, a traffic railing (barrier) on the south side, two travel lanes, a sidewalk on a raised curb on the north side, and a traffic railing at the back of sidewalk. The minimum bridge width that would accommodate this section is 32'-1", 4'-0½" wider than the existing bridge. Therefore, the existing bridge width is not sufficient to support two lanes and a single sidewalk without widening.

Reconfiguration of the Existing Bridge with Minimal Widening

The next most desirable concept from a historic preservation perspective would be one that limits bridge widening and the associated impacts such that the existing bascule pier foundations can be saved. As discussed in the June 11 meeting, if the bridge is widened, the new bridge section must meet minimum standards. The clear roadway width of this minimum section is 28 feet; the overall width of is 36'-1". To accommodate this section the bridge would need to be widened by 8'-0½". The technical issues associated with widening the bridge by 8'-0½" were examined. The evaluation included calculating live load distribution factors (as an indicator of the increase in live load on a main girder due to widening) and approximating dead and live load changes associated with the proposed modifications. The analysis also included determining approximate span balance conditions and corresponding density of the counterweight needed to balance the bridge.

Based on this analysis, it was concluded that widening the bridge to include a single sidewalk that meets current design criteria is not technically feasible unless the bascule pier is replaced as well. The increased dead load and live loads are beyond what the existing foundations can handle without extensive strengthening. The physical size of the existing bascule pier footing precludes increasing the size of the counterweight and the density required of the existing size counterweight is well in excess of that recommended by AASHTO.

Conclusion

The existing bridge width is not sufficient to support two lanes and a single sidewalk without widening. In comparison to the widening concepts originally developed with two sidewalks, a single sidewalk concept does not offer any significant improvements or reductions in impacts to the scope of bridge rehabilitation. Both require complete replacement of the bascule span and bascule piers. The engineering evaluation determined that both of these alternatives would require removal of the existing bascule leaf and the bascule pier, the only two structural elements of the existing bridge that were part of the original 1924 bridge.

After consideration of the detailed evaluation of all rehabilitation alternatives, the SHPO stated that ample evidence had been provided to support that a new movable bridge would be preferable to rehabilitation. Mitigation will be required.

A third CRC meeting was held on April 24, 2014, following confirmation of the Preferred Alternative as the Recommended Alternative by the Pinellas County Commission at the Commission's April 15, 2014 meeting. Minimization and mitigation options were discussed at this meeting. Based on input from CRC members, including SHPO, a Memorandum of Agreement (MOA) among the FHWA, FDOT and SHPO was prepared. A signed copy of this MOA is included in Appendix B. This MOA includes

the Historic American Engineering Record (HAER) documentation of the bridge, which includes large-format photography, printing historic plans on archival paper, and preparing a written narrative. In addition, the following mitigation measures, recommended by the CRC are included:

- The replacement bridge will be a single-leaf, rolling-lift bridge of similar design. However, other aesthetic elements of the bridge will be determined by an aesthetics committee that will be assembled during the design phase. This committee will include representatives of the community and local governments, including the Tarpon Springs Historical Society.
- Elements of the old bridge will be salvaged and incorporated into the design of the new bridge or displayed in a location in the vicinity of the new bridge. The specifics of the design will be determined by Pinellas County in coordination with the aesthetics committee during the design phase.
- There is an existing historic marker or plaque on the current bridge which includes the date the bridge was erected and names of Pinellas County Commissioners at that time. This historic plaque will be incorporated into the new control house so that it will be visible by pedestrians crossing the bridge.
- Information regarding the Beckett Bridge, which is suitable for inclusion in a “public-facing website for project information and educational purposes” and/or suitable for use on a mobile device, such as “What Was There” or “Next Exit History”, is developed. This information will provide a historic account of the bridge to educate the public on its history.

FHWA concurred with the recommendations and findings of the Section 106 Case Study Report on July 17, 2014. SHPO concurred with the report on August 13, 2014. (The concurrence letter is included in Appendix B of this document.) Accordingly, the impact determination for this category is **“Not Significant”**.

B.3 ARCHAEOLOGICAL SITES

During the ETDM screening process, SHPO, the Miccosukee Tribe, and the FHWA recommended that a CRAS be conducted to identify and evaluate any resources that may be eligible for listing in the NRHP. The Miccosukee Tribe of Indians of Florida commented that there are no recorded archaeological sites, including burial mounds, reported near this project. The Tribe also recommended that a CRAS be conducted to ascertain if there are any archaeological sites within the project boundaries. The Tribe stated that if no impacts were found, then no further consultation was necessary. No comments were received from the Seminole Tribe of Florida.

A CRAS was conducted for this study. The results are documented in the CRAS report, published separately. The recommendations in the CRAS were approved by FHWA on March 13, 2013. SHPO concurred with the findings of the CRAS on April 11, 2013 (Appendix B). No archaeological sites were newly identified within or adjacent to the project corridor during the current survey and no previously recorded archaeological sites were located within the archaeological APE. Accordingly, the impact determination for this category is **“None”**.

B.4 RECREATION AREAS

The ETDM metadata and its use in generating what resources are “found” within the EST GIS buffers indicate that there are statewide (typically land based) Ecological Greenways Critical Linkages and Greenways Ecological Priority Linkages that could be associated with the proposed project. These FDEP designations contain all of the largest areas of ecological and natural resource significance and the landscape linkages necessary to link these areas together in one functional statewide network. This data was created as part of the Florida Statewide Greenways Planning Process. The Florida Ecological Greenways Network identifies the opportunities to protect large, intact landscapes important for conserving Florida's biodiversity and ecosystem services.

A review of the GIS analysis data indicates that the following are located within the 100 foot buffer:

- Priority 6 and Unknown Description Ecological Greenways Critical Linkages and Prioritization Results
- One Low Greenways Ecological Priority Linkages
- Two High Office of Greenways and Trails (OGT) Multi-Use Trail Priorities
- One Low OGT Multi-Use Trail Priorities
- One Low OGT Paddling Trails Priorities

FDEP noted that further review of GIS data and Google Street View revealed that most of these facilities do not currently exist. A review of the OGT Map did not identify any existing resources within the project area. There are no FDEP designated Ecological Greenways Critical Linkages and Greenways Ecological Priority Linkages that are officially designated, marked or signed as such either within, along or perpendicular (intersecting) to the project's study limits.

The Pinellas County Trailways Plan, included in the Pinellas County MPO 2035 Long Range Transportation Plan, identifies three *future* recreational bicycle/pedestrian trails that will connect to the Pinellas Trail and continue west. These trails are not currently funded, but are included in the Planned Cost Feasible Trailways Projects. One of these trails, the proposed Howard Park Trail, will provide access to Howard Park from the Pinellas Trail via Riverside Drive/North Spring Boulevard, crossing the Beckett Bridge. The Bicycle and Pedestrian Planner at Pinellas County stated that there has been no engineering or other evaluation of these planned cost feasible trailways projects.

The MPO is anticipating that improved facilities along these existing routes will be constructed as part of future roadway resurfacing or widening projects. Existing sidewalks on the Beckett Bridge are only 2'2" wide. There are no bicycle lanes or shoulders on the bridge. The proposed project will provide improved pedestrian and bicycle facilities on the Beckett Bridge. This will enhance recreational opportunities associated with planned future recreational trails. Accordingly, the impact determination for this category is "**Not Significant**".

C.1 WETLANDS

A review of the Geographic Information Systems (GIS) analysis data indicates that the National Wetlands Inventory (NWI) lists 1.5 acres (19.01%) of estuarine wetlands within the 100-foot buffer distance, 3.7 acres (20.7%) of estuarine wetlands within the 200-foot buffer distance, and 10.0 acres (18.21%) of estuarine wetlands within the 500-foot buffer distance. SWFWMD noted that there are wetlands consisting of red mangrove (*Rhizophora mangle*) and black mangrove (*Avicennia germinans*) at the following locations: at the bridge crossing; both upstream and downstream of the bridge crossing on the west shore of the bayou; and on the south side of Riverside Drive within the east approach cross section across from Pampas Avenue. In addition, seagrass beds are present in the Bayou both upstream and downstream of the bridge crossing except in the deepest parts of the Bayou.

The USEPA noted that any studies for this project should focus on identifying the wetland areas and other natural resources (mangroves) to be potentially impacted and what type of additional analysis, if any, will be needed. Additional analyses may be needed such as delineation of wetlands and functional analysis of wetlands to determine their value and function, an evaluation of stormwater pond sites, avoidance and minimization strategies, and mitigation plans to compensate for adverse impacts.

A detailed site review was conducted by project team biologists. Based on collected field data and in-house reviews, one tidally influenced, estuarine surface water known as Whitcomb Bayou occurs

within the project area. Two wetland habitat types, mangrove swamps and oyster bars are included within the Whitcomb Bayou boundaries of the project study area. Additional description of wetlands found in the vicinity of the bridge are described below:

Surface Water 1 (Whitcomb Bayou)

FLUCFCS: 540 (*Bays and Estuaries*)

FWS: E2UB3 (*Estuarine, Intertidal, Unconsolidated Bottom, Mud*)

Bays and estuaries are tidally influenced inlets or large bodies of water that extend from the ocean into the land mass of Florida. Within the project study area, this category includes 10.38 acres of Whitcomb Bayou.

Whitcomb Bayou is part of the Anclote River Bayou complex. The Anclote River Bayou complex is a Class III Outstanding Florida Water in the Pinellas County Aquatic Preserve. Within the project area, the west and east shorelines of the bayou are hardened with vertical seawalls. Bottom sediments within the project study area consist of unconsolidated mud. According to the Florida Fish and Wildlife Conservation Commission (FWC) (2010), the nearest documented seagrass beds are located approximately 200 feet north of the project study area. However, no seagrass or attached macro-algae were observed within the project study area during the June 2012 field review. No seagrass blades or macro algae branchlets were present within the rack line in or adjacent to the project study area.

Mangrove Swamps

FLUCFCS: 612

FWS: E2SS3 (*Estuarine, Intertidal, Scrub-Shrub, Broad-Leaved Evergreen*) Mangrove swamps are typically coastal hardwood swamps where red mangrove and/or black mangroves are pure or predominant. White mangroves (*Laguncularia racemosa*) are also typically found within these swamps. Within the project study area, mangrove stands are dominated by black mangrove, white mangrove, red mangrove, saltweed (*Philoxerus vermicularis*), and marsh elder (*Iva frutescens*). Mangroves were observed on the west end of Beckett Bridge, north and south of the existing roadway. In addition, mangroves and associated species were observed along Whitcomb Bayou on the south side of North Spring Boulevard. The mangroves in this area are trimmed and maintained. Mangrove swamps comprise 0.12 acre of the total project study area. During the field review, no bird nests or wading birds were observed within the mangrove swamps.

Oyster Bars

FLUCFCS: 654

FWS: E2RF2 (*Estuarine, Intertidal, Reef, Mollusk*)

Barnacles (*Balanus* sp.) and oysters (*Crassostrea virginica*) were observed in the intertidal zone attached to the bridge pilings, seawall face, and pieces of debris on the bottom of the bayou. A dense accumulation of live oysters was observed under the east and west ends of Beckett Bridge. Oyster bars comprise 0.17 acre of the total project study area.

Most wetland impacts that may occur as a result of construction of any of the three build alternatives are limited to shading as a result of the widened structure. Vegetated wetland habitats were considered to be impacted if located under the drip line of the proposed structure. Bridge piling impacts are unknown at this time since detailed design is not available. However, it is assumed that the removal of old pilings and replacement of new pilings will result in less or similar open water impacts; therefore, fill impacts to open water habitat underneath the drip line are assumed to be *de minimus*.

The proposed project will impact approximately 0.01 acre of Mangrove Swamp and 0.02 acre of Oyster Bars. The wetlands within the project study area impacted by the proposed improvements were assessed using the Uniform Mitigation Assessment Methodology (UMAM) per Chapter 62-345, FAC. The results are provided below.

Umam Summary for Wetland Impacts and Functional Loss

Proposed Project	FLUCFCS Code	FWS Classification	Delta	Wetland Impacts	
				Impact Acres	Functional Loss ¹
Movable Bridge	612	E2SS3	0.17	0.01	0.002
	654	E2RF2	0.13	0.02	0.001

¹Total Functional Loss rounded to the nearest hundredth.

Based on meetings with SWFWMD staff, it is anticipated that the project will qualify for the 62.330-443 General Permit to the Florida Department of Transportation, Counties, and Municipalities for Minor Bridge Alteration, Placement, Replacement, Removal, Maintenance, and Operation (previously Noticed General Permit 40D-400.443). If the project qualifies, no mitigation will be required since the wetland impacts will be less than 0.5 acre.

If the project does not qualify for this General permit, or if mitigation is required by other agencies, a mitigation plan will be developed during the design phase. Mitigation through Chapter 373.4137, F.S. (i.e., Senate Bill, 1986) is not available for this project because FDOT is not the applicant. A review of the available data from FDEP and the water management districts indicates that the proposed project currently is not located within the service area of any permitted mitigation banks. For the reasons listed above, any unavoidable wetland impacts will have to be mitigated (if required) by creating, restoring, enhancing, or preserving wetlands on-site or off-site within the same drainage basin if there are no mitigation opportunities at the project site.

No seagrass beds will be impacted. If mitigation is required by one of the reviewing agencies, “in-kind” mitigation at the project site may not be a feasible option due to the limited ROW and surrounding developments. Therefore, an “out-of-kind” mitigation option, such as water quality improvements, may be requested during the design and permitting phase of this project. Any proposed mitigation will be coordinated with the NMFS, FWS, and the SWFWMD. Accordingly, the impact determination for this category is **“Not Significant”**.

C.2 AQUATIC PRESERVES

A review of the GIS analysis from the EST indicates that the project is located in and adjacent to the Pinellas County Aquatic Preserve which is an Outstanding Florida Water. The County will implement appropriate best management practices during construction to prevent violations to water quality standards. The project will be located within the existing County right-of-way.

An Environmental Resource Permit will be required for construction of the proposed project. Permit requirements and conditions related to water quality will be complied with. Because the proposed new bridge does not provide any additional capacity, it is not anticipated that this project will have a substantial impact on water quality. Accordingly, the impact determination for this category is **“Not Significant”**.

C.3 WATER QUALITY

The proposed new movable bridge will be constructed on approximately the same alignment as the existing bridge. The new bridge will only provide two travel lanes, the same as on the existing bridge.

No additional capacity will be added. However, the proposed new movable bridge will be wider than the existing to provide travel lanes, shoulders and sidewalks that meet current design standards. There are no shoulders on the existing bridge, and the sidewalks are substandard (only 2'2" wide).

As stated in the ETDM Summary Report, the entire project is located in the Anclote River Bayou Complex (WBID 1440A) watershed which is a major embayment (bayou) of the tidal segment of the Anclote River (WBID 1440). The river, which heads 1.3 miles west of US 41 in Pasco County, discharges to the Gulf of Mexico (WBID8045C) at the Pasco-Pinellas County Line just north of St Joseph's Sound (WBID 8045D). Beckett Bridge carries Riverside Drive over Minetta and Whitcomb Bayous, both of which are included in the Pinellas County Aquatic Preserve and are designated Outstanding Florida Waters (OFWs).

The FDEP Verified List of Impaired Waters, dated May 19, 2009, included information regarding total maximum daily levels (TMDLs) for various constituents in the OFWs located in the vicinity of the project area. The following conclusions related to TMDLs were included in that list:

1. Nutrients: The Anclote River Bayou Complex (WBID 1440A) is impaired for nutrients
2. Dissolved oxygen: The Anclote River Bayou Complex (WBID 1440A) is impaired for dissolved oxygen.
3. Mercury in fish: The Anclote River Tidal watershed (WBID 1440) is impaired for mercury in fish.

Additionally, information from DRASTIC analyses indicates that the surficial aquifer and the Floridan Aquifer within the 100-foot to 500-foot buffers to the project limits have high potentials for contamination. The surficial aquifer is used for landscape irrigation and it contributes flows to canals, ditches and streams in the area. The Stamas Yacht facility, located within 420 feet of the east terminus of the project, may have produced contaminated soils or groundwater plumes within 100-200 feet of the project. Therefore, the FDEP recommended in the ETDM report that an assessment of the areas to be excavated for the project be done to ensure that no pollution from contaminated soils or waters results from project activities.

A Water Quality Impact Evaluation (WQIE) was conducted for this project to comply with the Clean Water Act (surface waters) and the Safe Drinking Water Act (groundwater impacts). The WQIE Checklist is included in the project files.

A Contamination Survey Evaluation Report was prepared for this project. Only one site within the project study area was assigned a "Medium" risk. This site, Stamas Yacht, Inc., presents a contamination potential based on current and historical environmental records, however, it is not anticipated that this facility will be impacted as part of the current project design.

The county will implement appropriate best management practices during construction to prevent water quality violations. An Environmental Resource Permit will be required for construction of the proposed project. The contractor will comply with all permit requirements and conditions related to water quality. Because the proposed new bridge does not provide any additional capacity, it is not anticipated that this project will have a substantial impact on water quality. Accordingly, the impact determination for this category is **"Not Significant"**.

C.4 OUTSTANDING FLORIDA WATERS

A review of the GIS analysis from the EST indicates that the project is located in and adjacent to the Pinellas County Aquatic Preserve which is an Outstanding Florida Waters. The project will be located within the existing County right-of-way. The County will implement appropriate best management practices during construction to prevent water quality violations. An Environmental Resource Permit

will be required for construction of the proposed project. Permit requirements and conditions related to water quality will be complied with. Because the proposed new bridge does not provide any additional capacity, it is not anticipated that this project will have a substantial impact on water quality. Accordingly, the impact determination for this category is **“Not Significant”**.

C.6 FLOODPLAINS

In accordance with the requirements set forth in 23 CFR 650A, the project corridor was evaluated to determine the effects, if any, of the proposed alternatives on the hydrology and hydraulics of the area. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), Panel 19 of Map Number 12103C00196 (September 2003), the Beckett Bridge and immediate vicinity are located within the 100 year floodplain in designated Zone AE. The Base Flood Elevation established for Minnetta Bayou/ Spring Bayou is elevation 10 feet which is associated with coastal tidal surge conditions.

The proposed replacement bridge will be constructed in approximately the same location as the existing bridge to minimize impacts. There are no existing or proposed cross drains within the project limits. The proposed structure (replacement bridge) will be hydraulically equivalent to or greater than the existing structure, and backwater surface elevations are not expected to increase. Within the project corridor, the improvements to the existing Riverside Drive and Beckett Bridge represent transverse encroachments on the floodplain. This encroachment should remain at existing levels. As a result, the project will not affect existing flood heights or floodplain limits.

Cut and fill activities required as part of the roadway improvements are not expected to significantly impact the fauna, flora, and open space environments along the corridor. The project will not result in substantial adverse environmental impacts. The proposed project will not significantly change the risks or damages associated with roadway flooding. There will not be significant change in the potential for interruption or termination of emergency services or emergency evacuation routes. Therefore it has been determined that this encroachment is not significant.

The encroachments for the bridge will mainly involve modifications at the approaches to the bridges as well as incidental encroachments due to bridge modification or replacement activities, where applicable. Since the existing flood zones are associated with coastal surge, compensation for the floodplain impacts is not anticipated to be required by the regulatory agencies. Accordingly, the impact determination for this resource category is **“Not Significant”**.

C.7 COASTAL ZONE CONSISTENCY

According to the ETDM Program Screening Tool Track Clearinghouse Projects Report for this project, the State of Florida has determined that this project is consistent with the Florida Coastal Zone Management Plan (FCMP). The State's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting process in accordance with Section 373.428, Florida Statutes. Therefore, the impact determination for this category is **“None”**.

C.9 WILDLIFE AND HABITAT

Review of GIS data indicates that the project is located within the Springs Coast Ecosystem Management Area, the West Indian Manatee Consultation Area and Important Manatee Area (IMA); the Consultation Areas for both the scrub jay and piping plover; and the core foraging area for the woodstork. No designated Critical Habitat was identified within the project study area.

A Biological Assessment was prepared for the project and coordinated with the US Fish and Wildlife Service (USFWS) and the Florida Fish and Wildlife Conservation Commission (FWC). Project biologists made a finding of "no effect" for the Southeastern American kestrel and Florida sandhill crane, and a finding of "not likely to adversely affect" for the wood stork and eastern indigo snake. For all the other evaluated species, a determination that the project "may affect, but is not likely to adversely affect" these species was concluded in the report. The FWC, by letter dated April 22, 2013 (included in Appendix C) concurred with these determinations and supported the protected species commitments identified in the report which include the following:

1. Compliance with the USFWS "Standard Protection Protocols for the Eastern Indigo Snake" and paragraph E of the U.S. Army Corps of Engineers Eastern Indigo Snake Programmatic Key.
2. Compliance with the USFWS and FWC approved "Standard Manatee Construction Conditions" during all in-water construction phases of the project, and coordination with the USFWS and FWC during the design and permitting phases of the project for additional site-specific manatee protection measures to be implemented during construction.
3. Submission of a blasting plan (if blasting occurs), which includes the use of qualified observers and an aerial survey, to USFWS and FWC for review and approval prior to construction.
4. Coordination of wetland impacts with the appropriate resource agencies and propose mitigation to offset any adverse impacts to listed species habitat, if determined to be warranted.
5. If an active bald eagle nest is identified within the 660-foot buffer zone around the construction area, mitigation measures will be implemented to avoid disturbing the species, which may include control of the timing and location of construction activities and establishment of a buffer zone around active nesting sites.
6. Coordination with FWC for the removal of the osprey nests on a utility pole within the construction area during the design and permitting phase of the project.

By letter dated June 12, 2013 (included in Appendix C), the USFWS concurred with the Biological Assessment's determination that the project may affect, but is not likely to adversely affect the piping plover, is not likely to adversely affect the wood stork or eastern indigo snake and will have no effect on federally listed plants. The USFWS further noted that there is no appropriate habitat for the piping plover, no suitable foraging habitat for the woodstork, and no undisturbed upland habitat near the project that might support the eastern indigo snake or listed plants. Accordingly, the USFWS will not require implementation of the "Standard Construction Measures for the Eastern Indigo Snake".

USFWS also stated that they will not be able to make an impact determination for the Florida manatee, gulf sturgeon or sea turtles until more specific information is available concerning construction. The timing and duration of construction, as well as construction methods, will determine the appropriate conditions to safeguard manatees and other aquatic species. Accordingly, Pinellas County has committed to continued coordination with the USFWS during the design phase concerning potential impacts to these species.

Because of the constrained project location, it is not anticipated that blasting will be employed for demolition of the existing bridge. However, if blasting is proposed, the selected contractor will be

required to submit a blasting plan which includes the use of qualified observers and an aerial survey, to USFWS and FWC for review and approval prior to construction.

The project study area is located within a designated USFWS consultation area for the Florida scrub jay (*Aphelocoma coerulescens*). Based on a review of available data and field reviews, no scrub jay habitat is available within the project study area and no populations have been reported or observed. Therefore, no further scrub jay consultation with FWS should be required for this project.

Based on the Biological Assessment and agency coordination, the impact determination for this category is “**Not Significant**”.

C.10 ESSENTIAL FISH HABITAT

The GIS analysis data completed during the ETDM process indicates that two Environmentally Sensitive Shorelines are located within the 100-foot project buffer. National Marine Fisheries Service (NMFS) staff conducted a site inspection of the project area in November 2010. NMFS staff noted that mangroves occur immediately adjacent to the bridge. In addition, NMFS staff noted that certain estuarine habitats within the project area are designated as Essential Fish Habitat (EFH) and requested that an EFH Assessment be conducted.

In accordance with the Magnuson-Stevens Fishery Conservation and Management Act, an EFH evaluation was conducted for the project. The Gulf of Mexico Fishery Management Council (GMFMC) manages 55 species of fish for the Gulf of Mexico area. Of these, the GMFMC has identified and described EFH for 26 representative managed species. Species accounts of each of the 26 representative managed species were reviewed to assess the potential occurrence of these species within the project study area during any stage of their life cycle. Of the 26 representative fish, shrimp, and crab species listed by the GMFMC, only the gray snapper (*Lutjanus griseus*) is considered to have a high potential to occur within the project limits. The remaining 25 representative species and the coral complex are considered to have a low to no potential to occur within the project limits.

Construction of the proposed project will not result in the loss of open water area designated as EFH. However, approximately 0.02 acre of oyster beds and 0.01 acre of mangroves will be impacted. Impacts to oyster beds will likely be temporary; live oysters can be relocated prior to construction and oysters may recolonize the area following construction. If required by conditions of the environmental permits or the US Coast Guard Bridge Permit, all permanent and temporary loss of these habitats will be mitigated. Accordingly, no populations of any of the 26 representative fish, shrimp, and crab species and the coral complex listed by the GMFMC are expected to be adversely affected by the proposed project.

By email dated, April 15, 2013 (Appendix C), the NMFS stated that the essential fish habitat effect determinations presented in the Wetland Evaluation/Essential Fish Habitat technical memorandum appear to accurately reflect potential impacts to NMFS trust resources for the proposed bridge replacement. Given the relatively low quantity of impacts to fish habitats estimated for all the alternatives, NMFS also stated that they would be generally more inclined to accept appropriate off-site (but within the same drainage basin) “in-kind” mitigation, rather than “out-of-kind” mitigation for unavoidable project impacts. NMFS also requested continued coordination at the conclusion of the PD&E Study and during the Design phase when more detailed compensatory mitigation proposals are developed.

Accordingly, based on the conclusions of the Wetland Evaluation Report/Essential Fish Habitat Technical Memorandum and agency comments, the impact determination for this category is “**Not Significant**”.

D.1 NOISE

A noise study analysis was performed for this project following FDOT procedures that comply with Title 23 Code of Federal Regulations (CFR), Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise*. The evaluation used methodologies established by the FDOT and documented in the PD&E Manual, Part 2, Chapter 17 (May 2011). The prediction of traffic noise levels, with and without the proposed improvements (replacement of the Beckett Bridge), was performed using the FHWA's Traffic Noise Model (TNM-Version 2.5).

Twenty-seven noise sensitive sites, including 26 residential sites and one meeting room (Tarpon Springs Yacht Club) were identified. The existing (2012) traffic noise levels are predicted to range from 54.6 to 63.2 decibels on the "A" weighted scale (dB(A)), which are traffic noise levels that would not approach, meet, or exceed the Noise Abatement Criteria (NAC) at any of the evaluated noise sensitive sites. In the future without the proposed improvements (no-build), traffic noise levels were predicted to range from 55.8 to 64.4 dB(A), which are also levels that would not approach, meet, or exceed the NAC at any of the evaluated sites. In the future with the proposed improvements (build), traffic noise levels were predicted to range from 56.9 to 64.7 dB(A), which are also levels that would not approach, meet, or exceed the NAC at any of the evaluated sites. Additionally, when compared to the existing condition, traffic noise levels with the improvements are not predicted to increase more than 2.8 dB(A). As such, the project would not substantially increase traffic noise (i.e., an increase in traffic noise of 15 dB(A) or more).

Since future traffic noise levels with the proposed improvements are not predicted to approach, meet, or exceed the NAC at any of the noise sensitive sites or substantially increase, noise abatement measures were not considered. However, Pinellas County commits to review the project for any changes in land use during the Design Phase of the project to ensure that all noise sensitive sites that received a building permit prior to the project's Date of Public Knowledge (i.e., the date the environmental documentation is approved) have been evaluated. No construction or posted building permits were observed within the project limits during a land use survey that was performed on November 13, 2012.

Construction of the proposed project would result in temporary construction-related noise and vibration. It is anticipated that the application of the *FDOT Standard Specifications for Road and Bridge Construction* will minimize or eliminate this noise and/or vibration. Should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the Contractor, will investigate additional methods of controlling these impacts.

Land uses such as residential, offices, and parks are considered incompatible with highway noise levels exceeding the NAC. In order to reduce the possibility of new noise-related impacts, noise level contours were developed for the future improved roadway facility (see Section 6 of this NSR). These noise contours delineate the distance from the improved roadway's edge-of-travel lane to where 56, 66, and 71 dB(A) (the FDOT's NAC for Activity Categories A, B/C, and E, respectively) is expected to occur in the year 2038 with the proposed improvements. Local officials will be provided a copy of the Final NSR to promote compatibility between land development in the area and the project.

Accordingly, the impact determination for this category is **"Minimal"**.

D.2 AIR QUALITY

The US Environmental Protection Agency does not anticipate any negative air quality impacts relating specifically to the project. Pinellas County is currently designated to be an attainment area for all of the National Ambient Air Quality Standards (NAAQS). Accordingly, the transportation conformity

requirements of the Clean Air Act are not applicable to the project. The proposed replacement two-lane bridge is not a capacity improvement.

The project alternatives were subjected to the FDOT's screening model, CO Florida 2004 (Version 2.0.5, which employs United States Environmental Protection Agency (USEPA)-developed software (MOBILE6 and CAL3QHC). This model is a carbon monoxide (CO) screening model that makes various conservative worst-case assumptions related to site conditions, meteorology, and traffic. The results of the screening analysis indicate that the greatest one- and eight-hour CO concentrations would be 6.1 and 3.7 ppm, respectively - levels that would not meet or exceed the NAAQS for this pollutant. Accordingly, the project "passes" the screening model. An Air Quality Technical Memorandum documenting the air quality screening analysis was prepared for this project and is available at the County offices.

The impact determination for this category is **"Minimal"**.

D.3 CONSTRUCTION

Construction activities for the proposed improvements will have air, noise, water quality, traffic flow, and visual impacts for those residents and travelers within the immediate vicinity of the project. The air quality impact will be temporary and will primarily be in the form of emissions from diesel powered construction equipment and dust from embankment and haul road areas. Air pollution associated with the creation of airborne particles will likely be effectively controlled through the use of watering or the application of calcium chloride in accordance with FDOT's *Standard Specifications for Road and Bridge Construction* as directed by the County Project Manager.

Noise and vibration impacts will be from the heavy equipment movement and construction activities, such as demolition, pile driving and vibratory compaction of embankments. Noise control measures will likely include those contained in FDOT's *Standard Specifications for Road and Bridge Construction*.

Water quality impacts resulting from erosion and sedimentation will likely be controlled in accordance with FDOT's *Standard Specifications for Road and Bridge Construction* and through the use of Best Management Practices. Stormwater pollution prevention measures will likely be developed per FDOT standards and in accordance with National Pollutant Discharge Elimination System (NPDES) permit requirements.

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays throughout the project. Signs will be used as appropriate to provide notice of detours, lane closures and other pertinent information to the traveling public. The local news media will be notified in advance of detour lane closings and other construction-related activities, which could excessively inconvenience the community.

A sign providing the name, address, and a contact telephone number will be displayed on-site to assist the public in obtaining immediate answers to questions and logging complaints about project activity. In general, the objective of the maintenance of traffic plan for the project will be to detour traffic away from the construction zone. No temporary roads or temporary bridges will be required.

Construction of the roadway may require minor excavation of unsuitable material (muck). Construction of the roadway will require placement of embankments, and use of materials such as lime rock, asphaltic concrete, and Portland cement concrete. Although not anticipated, if demucking is required, it will likely be performed in accordance with Section 120 of the FDOT *Standard Specifications for Road and Bridge Construction*. The removal of structures and debris will be in accordance with local and State regulatory agencies permitting this operation. The contractor is

responsible for methods of controlling pollution on haul roads (if used), in borrow pits, other materials pits, and 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*, Section 104, will likely consist of temporary grassing, sodding, mulching, sandbagging, hay bales, slope drains, sediment basins, sediment checks, artificial coverings, and berms.

D.4 CONTAMINATED SITES

A Contamination Screening Evaluation Report (CSER) was prepared as part of the Beckett Bridge Pinellas County Study as required by FDOT's PD&E Manual, Part 2, Chapter 22 (revised January 17th, 2008) and in accordance with the Federal Highway Administration (FHWA) Technical Advisory T 6640.8a (dated October 30th, 1987). Consistent with this guidance and based on environmental records searches, land use surveys, field surveys and other screening methodologies cited within the PD&E manual, eight potential contamination sites were identified within the vicinity of the project corridor. Of the eight sites, six were identified as "No" contamination risk, one was identified as "Low" contamination risk, and one was identified as "Medium" contamination risk.

The "Low" risk site corresponds to the wooden structures (i.e., piles) immediately adjacent to the Beckett Bridge which could contain creosote and/or arsenic as preservatives. Should some or all of these piles require removal or disturbance during the construction period, they should be evaluated beforehand to verify the presence or absence of these substances. If these substances are present, precautions should be taken by the contractor to help prevent the leaching of creosote into the waterway or the generation of arsenic-containing dust.

The "Medium" risk site, Stamas Yacht, Inc., presents a contamination potential based on current and historical environmental records, however, the site is located a substantial distance from the existing Riverside Drive right-of-way and will not be impacted as part of the current project design. Accordingly, no further evaluation of these sites is recommended during the design phase of the project unless changes are made to the project design that could potentially change the location or alignment of the bridge.

An asbestos survey of the Beckett Bridge structure was conducted as part of the PD&E Study. The purpose of this survey was to identify and sample suspect asbestos-containing materials (ACM) and heavy metals based protective coatings to provide information regarding the identity, location, condition and approximate quantities of these materials so that proper remediation and disposal methods can be evaluated.

The survey was conducted on April 29, 2012 by an Asbestos Hazard Emergency Response Act (AHERA) accredited inspector in general accordance with the sampling protocols established in Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763. Thirteen bulk samples were collected from four homogeneous areas of suspect ACM. No Asbestos Containing Materials were identified as a result of the survey.

Three painted surfaces, suspected of containing heavy metal based paints, were observed during the survey and sampled. None of the sample results indicated that the paints were Lead Based Paint (LBP).

Accordingly, the impact determination for this resource category is "**None**".

D.5 AESTHETIC EFFECTS

Computer generated representations were developed which simulated the views from five vantage points within the vicinity of the bridge for both the movable and fixed bridge alternatives. In addition,

an animated “drive-through” view of both alternatives was prepared. These computer generated representations were designed to help the community visualize what a replacement bridge might look like. These renderings were shown to the public at the Alternatives Public Workshop and stakeholder presentations. These renderings will also be available at the upcoming Public Hearing.

Perceptions of visual impacts are very subjective and some concerns about impacts to the viewshed have been raised by the community. A preference for a bridge which is compatible with the scale and historic nature of the local community was expressed. Some concerns about potential impacts to waterfront view were raised by waterfront residents adjacent to the bridge. The proposed bridge will be constructed on approximately the same alignment as the existing bridge; however, it is approximately 19 feet wider than the existing bridge.

The vertical profile of the proposed replacement bridge will be similar to the existing bridge, but there will be a slight increase in the vertical clearance over the navigable channel at the fenders. The proposed roadway profile will be approximately two feet higher than the existing roadway at the west end of the replacement bridge. At the east end, the new roadway profile will be about four feet higher than the existing grade. A low gravity wall will change the views from some vantage points.

The County has proposed a budget of ten percent of the construction cost for aesthetics for the replacement bridge. Decisions related to the aesthetics of the bridge will not be made during the PD&E study. An aesthetics committee will be established during the design phase to address bridge aesthetics. Members of the community and local government will be included on the committee.

The impact determination for this resource category is “**Minimal**”.

D.6 BICYCLES AND PEDESTRIANS

Screening for potential impacts to “Mobility” includes effects to bicycles and pedestrians. Both FDOT and the Department of Community Affairs stated that improved bicycle and pedestrian facilities on a replacement bridge would enhance mobility.

Narrow sidewalks, approximately 2’2” in width (between the brush curb and the bridge railing), occur on both sides of the existing bridge. The sidewalks on the bridge are set behind a 9-inch wide, 9-inch tall brush curb, but are not separated from the travel lanes by a traffic barrier. Bicycle lanes are not currently provided on the roadway or bridge within the project limits. The existing lanes are a substandard 10-foot wide and there are no shoulders. Bicyclists have been observed using the travel lanes and the narrow sidewalks.

Sidewalks, approximately four to five-foot wide, are present on portions of the approach roadway within the project limits. West of the bridge, sidewalks are continuous on the north side of Riverside drive from the bridge extending west of Chesapeake Drive. No sidewalks occur on the south side of the roadway in this area. East of the bridge, continuous five-foot wide sidewalks are present on the north side of Riverside Drive between Pampas and Forest Avenue. A few sections of discontinuous sidewalk do occur on the south side of the roadway between the bridge and Pampas Avenue, and for a short distance just west of Forest Avenue.

The proposed replacement bridge will provide six foot wide sidewalks and 5.5 feet wide shoulders on both sides of the bridge. The shoulders will function as undesignated bicycle lanes for experienced cyclists. These facilities will be continued on the approach roadways east of the existing bridge.

West of the proposed bridge, the six foot sidewalk on the south side will be eliminated because of right of way constraints. Construction of a sidewalk in this area would require acquisition of property from the Bayshore Mobile Home Park. It is anticipated that if the existing mobile home park is redeveloped in the future, sidewalks could be added. These improvements will provide safer bicycle and pedestrian facilities on the bridge and approach roadways. The proposed sidewalk approaching the western terminus of the bridge will be tapered to transition to the narrower roadway section. Signs will be installed which clearly indicate that the sidewalk will end.

No officially designated county or regional pedestrian or bicycle trails cross the Beckett Bridge. However, the Pinellas Trail, a 37 mile long regional trail, extending from St. Petersburg to Tarpon Springs is located just east of the project. The Pinellas County Trailways Plan, included in the Pinellas County MPO 2035 Long Range Transportation Plan, identifies three future recreational bicycle/pedestrian trails that will connect to the Pinellas Trail and continue west. These trails are not currently funded, but are included in the Planned Cost Feasible Trailways Projects. The proposed Howard Park Trail will provide access to Howard Park from the Pinellas Trail via Riverside Drive/North Spring Boulevard, crossing the Beckett Bridge.

The impact determination for this resource category is **“None”**.

D.7 UTILITIES AND RAILROADS

No railroads occur in the vicinity of the proposed project.

Knology Broadband of Florida, Bright House Networks, Progress Energy Florida, Verizon, and the City of Tarpon Springs operate utilities within the project area. Knology Broadband has aerial coaxial cables entering the project area along Spring Boulevard on the east side of the bridge and along Riverside Drive on the west side of the bridge. These Knology cables are co-located on Progress Energy utility poles. Spurs of the aerial coaxial cables extend along Chesapeake Drive from Doric Court to the Bayshore Cove Mobile Park, and along Forest Avenue from North Spring Boulevard to High Street. In addition, a Knology broadband underground coaxial cable is located adjacent to the Tarpon Springs Yacht Club along the north side of Spring Boulevard.

City of Tarpon Springs wastewater force mains are located along Riverside Drive. A six inch force main is located on the south side of the bridge and a 12 inch force main is located on the north side of the bridge; however, these mains are located outside of the bridge fender system. A pump station is located on the north side of Riverside Drive at Chesapeake Drive. No other City utilities occur within the project limits.

Utilities will be located more precisely during the Design phase of the project and coordination with utility owners will continue. Depending on the location and depth of the utilities, construction of the proposed project may require adjustment of some of these facilities. Since no construction will occur outside of existing right-of-way, relocation or adjustment of most utilities located outside the existing County right-of-way is not anticipated. Cost for relocation or adjustment of activities is not included in the cost estimates prepared for the project and reported in Section 6.0 of the Preliminary Engineering Report prepared for the project, since most are anticipated to be incurred by the utility owner. It is not anticipated that the proposed project will impact the existing City of Tarpon Springs Force Main.

The impact determination for this category is **“Not Significant”**.

D.8 NAVIGATION

The existing bridge crosses a narrow channel of Whitcomb Bayou. The bridge provides approximately six feet of vertical clearance at the fenders, and approximately 25 feet of horizontal clearance between the fenders. A US Coast Guard (USCG) bridge permit will be required for construction of the proposed replacement single-leaf low-level movable bridge. The USCG is a cooperating agency for this project; coordination concerning navigational issues has been ongoing throughout the PD&E Study.

The proposed replacement bridge will be constructed on approximately the same alignment as the existing bridge and provide approximately 7.8 feet of vertical clearance at the fenders, slightly more than the existing bridge. The proposed horizontal clearance is the same as the existing bridge. Construction of the replacement bridge will not adversely impact navigation in the channel.

When the existing bridge opens, the leaf rolls away from the channel and rotates to a 49 degree angle. The angle of opening is limited by physical constraints present in the geometric configuration of the counterweight, bascule pier, and approach span. It is not known if these limitations are the result of original construction or subsequent reconstruction and/or repair. However, in this position the bridge provides unlimited vertical clearance only between the west fender and the tip of the span of approximately 14 feet. The rest of the channel is obstructed by the bascule span. The proposed replacement bridge will provide unlimited clearance for the width of the channel between the fenders, approximately 25 feet. This will improve navigation conditions for vessels passing under the bridge. The channel will remain open to marine vessels during construction.

The impact determination for navigation is “**Minimal**”.